69th Annual International Congress
Of the
Egyptian Orthopaedic Association

11-14, DECEMBER, 2017

Intercontinental- City Stars Hotel,
Cairo - Egypt

PROGRAM

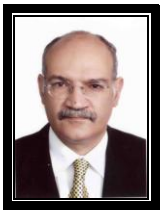
2017

Congress Board

EOA & Congress President
Prof. Anis Shiha

EOA & Congress Treasurer
Prof. Hani El Mowafi

Head of Scientific Committee



Prof. Gamal A. Hosny

Congress General Secretaries

Prof. Mohamed Bahy El Shafie

Prof. Ahmed Kholeif

Dear EOA Congress participants,

It's our honour to invite you to the 69th annual international congress of the Egyptian Orthopaedic Association held in Cairo from 11-14, DECEMBER, 2017.

The EOA Congress has been known worldwide as a rich, productive and true international gathering of the most well known names in the world of orthopaedic surgery throughout its long & successful history.

The most efficient & effective way to acquire knowledge is through exchange of knowledge and experience among different Orthopaedic experts.

I wish you enjoy with us every single moment of learning, teaching & sharing thoughts & happy time from the opening till the closing ceremonies.

And enjoy beyond that staying in Cairo where the glory and history of the ancient Egypt merges with the beauty and wonders of the modern state.

We look forward to welcoming you in the EOA Congress.

EGYPTIAN ORTHOPAEDIC ASSOCIATION BOARD

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EGYPTIAN ORTHOPAEDIC ASSOCIATION
PREVIOUS PRESIDENTS

Prof. Mohamed Kamel Hussein	**1948 - 1967**
Prof. Gawad Hamada	**1968 - 1969**
Prof. Abdel-Hay El-Sharkawy	**1970 - 1971**
Prof. Hussein K. Hassab	**1972 - 1973**
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Prof. Mohamed Abdalla	**1980 - 1981**
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Prof. Amin Reda	**1984 - 1985**
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Prof. Hussein Abdel-Fattah	**1988 – 1989**
Prof. Abdel-Hay Mashhour	**1989 – 1990**
Prof. El-Sayed Wahb	**1990 – 1991**
Prof. Fawzy Moustafa	**1991 – 1992**
Prof. Wael Mansour	**1992 – 1993**
Prof. Abdel-Salam Goumaa	**1993 – 1994**
Prof. Galal Zaki	**1994 – 1995**
Prof. Hassan El-Zaher	**1995 – 1997**
Prof. Farouk Youssef	**1997 – 1998**
Prof. Raafat H. Badawi	**1998 – 2001**
Prof. Mamdouh Zaki	**2001 – 2003**
Prof. Abdel-Rahaman Amer	**2003 – 2004**
Prof. Nabil Khalifa	**2004 - 2005**
Prof. Mohamed Shafik	**2005 - 2006**
Prof. M. Osama Hegazy	**2006 - 2007**
Prof. Hazem Abdel Azeem	**2007 - 2008**
Prof. Khamis El Deeb	**2008 - 2009**
Prof. Samir Zaki Kotb	**2009 - 2010**
Prof. Abdel Mohsen Arafa	**2010 - 2011**
Prof. Gamal Ahmed Hosny	**2011 - 2013**
Prof. Adel Adawy	**2013 - 2015**
Prof. Alaa El Zoheiry	**2015 - 2016**

Scientific Committee

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Prof. Amin Abdcel Razik

Dr. Mohamed Abdel Aal Hussein

SOCIAL PROGRAM

MONDAY 11/12/2017

06:00 pm	***Cocktail Reception at the Congress Venue*** For Participants and Accompanying Guests.

THURSDAY 14/12/2017

09:00 pm	***Gala Dinner & Official Closing Ceremony*** For Participants and Accompanying Guests. ***الحفل الختامي للمؤتمر.***

عفواً: هذا البرنامج يشمل حاملي الدعوات فقط من المشتركين و مرافقيهم

MONDAY 11/12/2017

- ***06:00 Opening Ceremony & welcome words.***

  Prof. Anis Shiha ***(15min)***

- ***Lecture: "History of Medicine in ancient Egypt"***

  Prof. Reda Awad ***(30min)***

- ***Lecture: "AFCM...aspiration and potential."***

  Maj. Gen. Dr. Ayman Shafei ***(15min)***

  Prof. Wagih Moussa

- ***Lecture: "Implementation of Clinical imaging guidelines."***

  Maj. Gen. Dr. Hany Hafez Lotfy. ***(10min)***

- ***Lecture: " Orthopaedic Lecturing in the Future."***

  Prof. Mohamed Bahy El Shafie ***(10 min)***

Welcome Reception & Get Together Party

الجمعية العمومية لجمعية جراحة العظام المصرية

- *تعقد الجمعية العمومية العادية لجمعية جراحة العظام المصرية في تمام الساعة ١٢ صباحا يوم الثلاثاء الموافق* **٢٠١٧/١٢/١٢** *في القاعة الرئيسية للمحاضرات.*
- *حسب القانون يكون الاجتماع قانونياً بحضور الاغلبية المطلقة لأعضاء الجمعية الذين لهم حق حضور الجمعية العمومية وفي حالة عدم اكتمال العدد القانوني يؤجل الاجتماع لمدة ساعة ويعقد بعدد الحضور.*
- *حضور الجمعية العمومية حق لجميع الأعضاء العاملين الذين مضت علي عضويتهم مدة ٦ أشهر علي الأقل ومسددين لاشتراكات الجمعية حتي عام ٢٠١٧.*

جدول أعمال الجمعية العمومية العادية

١- كلمة افتتاحية للسيد أ.د رئيس الجمعية .

٢- تقرير السيد أ.د الأمين العام للجمعية عن نشاط الجمعية العام المنتهي (٢٠١٦ / ٢٠١٧).

٣- تقرير السيد أ.د أمين صندوق الجمعية للميزانية والحسابات الختامية وتقرير المراقب المالي عن العام المنتهي(٢٠١٦ / ٢٠١٧). والمتاحة بمقر الجمعية لمن يرغب الاطلاع عليها.

٤- عرض مشروع الموازنة التقديرية و خطة الجمعية للعام التالي (٢٠١٧ / ٢٠١٨).

٥- تعيين مراقب حسابات وتحديد اتعابه لعام (٢٠١٧ / ٢٠١٨).

٦- ما يستجد من اعمال.

EOA Rules and Regulation

1) Wearing badges is a must to attend all sessions and meetings.
2) Lectures materials must be delivered to the data show team two hours in advance , no personal computer allowed.
3) Speakers must observe lecture timing as PA system will be turned off automatically.

- *برجاء الالتزام بارتداء البادج الخاص بالمؤتمر ولن يسمح بدخول المؤتمر من غير البادج.*
- *برجاء تسليم المحاضرات علي فلاشة لمسئول Data Show قبل موعد القاء المحاضرة بساعتين ولن يسمح باستخدام الكمبيوتر الشخصي لعرض المحاضرات.*
- *علي السادة المحاضرين برجاء الالتزام بالوقت المحدد لكل محاضرة وسوف يتم فصل الصوت اتوماتيكيا مع نهاية المدة الزمنية المحدده كما يحدث بجميع المؤتمرات العالمية.*

MONDAY,
DECEMBER,11TH,2017
(Workshops)

MONDAY, DECEMBER,11TH,2017

	Knee Arthroscopy Workshop
HALL (1)	**10:00-03:00**
Moderator	**Prof. Adel Adawy**
10:00- 11:30	**Diagnostic Knee Arthroscopy**
11:30- 01:00	**ACL Reconstruction**
01:00- 03:00	**PCL Reconstruction**
Panel:	**Abdel Samie Halawa** **El Sayed Mahmoud** **Emad El Zoheiry** **Hazem Farouk** **Mohamed Salah**
⇒ **03:00**	**End of the Workshop**

MONDAY, DECEMBER,11TH,2017

External Fixator Workshop	
HALL (2)	**10:00-03:00**

Moderator	**Prof. Adel Khamis** **Prof. Gamal Hosny** **Prof. Hatem Kotb** **Prof. Mahmoud El Rosasy**

10:00- 12:00	- **Correction of Coronal plate Deformity by Ilizarov External Fixator**
12:30- 03:00	- **Bone Transport**

Panel	**Abdel Salam Abdel Alim** **Mohamed El kersh** **Mohamed El Gebeily** **Mohamed Laklook** **Wael Shabaan** **Abdel Khalek El Zalabany** **Ahmed Ekram** **Mohamed Azmy** **Ossam Metwally** **Saad Gaballah** **Sameh El Safty** **Gamal El Mashed**

⇒	**03:00**	**End of the Workshop**

MONDAY, DECEMBER,11TH,2017

	Hip Dual Mobility Workshop
HALL (3)	**10:00 - 03:00**
10:00- 12:00	**Primary Hip Arthroplasty**
12:30- 03:00	**Revision Hip Arthroplasty**
	Panel **Moustafa Abdel Khalek** **Tarek Al Khadrawy** **Ayman Ebied** **Ibrahim El Ganzoury**
⇒ **03:00**	**End of the Workshop**

MONDAY, DECEMBER,11TH,2017

		Foot & Ankle Workshop
HALL (4)		**10:00 - 03:00**
Moderator		**Prof. Hani El Mowafi** **Prof. Wagih Moussa**
10:00	**12:00**	**Hallux valgus** **Ahmed Kholeif** **Mohamed Mokhtar**
12:30	**03:00**	**Calcaneal Osteotomies** **Ahmed Kholeif** **Ahmed El Hawary**
⇒	**03:00**	**End of the Workshop**

MONDAY, DECEMBER,11TH,2017

	SICOT Trainee Day Program
HALL (5)	10:00-03:00
Chairmen	Prof. Anis Shiha Prof. Essam Elsherif
Moderator	Dr. Ahmed Hazem Abdel Azeem Dr. Mahmoud Badran
⇒ 03:00	End of the Course

MONDAY, DECEMBER,11TH,2017

	Hand Workshop	
HALL (6)	**10:00 - 03:00**	
Moderator	**Prof. Abdel Hakim Abdallah** **Prof. Mostafa Mahmoud**	
	Fracture Ristal Radius **Fracture Distal Humerus** ***Panel*:** **Ashraf Abdel Aziz** **Wael Abdel Aziz** **Amr Foaud**	
⇒	**03:00**	**End of the Workshop**

MONDAY, DECEMBER,11TH,2017

HALL (7)	**10:00-03:00**	**Internal Fixation Round Table Discussion**
Chairmans	**Prof. Alaa El Zoheiry Prof. Chris Van Der Werken**	
	Chenges of Concepts of Internal Fixation	
Panel:	**Dr. Amr Azzam Dr. Mohamed Zaki Dr. Ashraf Abdel Aziz Dr. Amr El-Batouty**	
03:00	**03:00**	**Closing Remarks & End of the Day**

SCIENTIFIC

PROGRAM

TUESDAY,
DECEMBER,12TH,2017

TUESDAY, DECEMBER,12TH,2017

Session 1 HALL (A)	EFFORT Knee Arthroplasty Course 09:00-10:00
Chairmen	**Prof. Ahmed Galal** **Prof. El Sayed Morsi** **Prof. Galal Kazem**

1	**09:00**	Optimised conventional technique is as accurate as navigation for distal femur resection during TKA	
		Ahmed Adel Khalifa	**Egypt**
2	**09:08**	Evaluation of the Adductor Canal Block for Postoperative Pain Control and Early Functional Recovery in Arthroscopic Knee Surgery: A systematic Review and Meta-analysis of Randomized Trials	
		Ashraf Elazab	**Egypt**
3	**09:16**	Windswept deformities – an indication to individualise valgus correction angle during total knee arthroplasty	
		Ahmed Adel Khalifa	**Egypt**
4	**09:24**	Challenges in Revision TKA	
		Raju Vaishya	**India**
5	**09:39**	Forgotten Knee- Predictive Factors in TKA	
		Dhanjay Gupta	**India**
⇒	**09:54**	**Discussion**	

TUESDAY, DECEMBER,12TH,2017

Session 2

World Spinal Column Society

HALL (B) 09:00-10:00

Chairmen	**Prof. Abdelfattah Saoud** **Prof. Abdel Mohsen Arafa** **Prof. Yasser El Mansy**

6	**09:00**	Welcome Word **Abdelfattah Saoud**	**Egypt**
7	**09:10**	Ct & MRI changes in the paraspinal muscles in patients with idiopathic scoliosis: prospective study **Khaled Zaghloul**	**Egypt**
8	**09:18**	Fenestrated pedicle screws and cement augmentation in patients with poor bone quality **Mahmoud Abousayed**	**Egypt**
9	**09:26**	Does Vesselplasty and others intervertebral procedures help in Osteoporotic Vertebral Compression Fractures? **Bambang Darwono**	**Indonesia**
10	**09:40**	Surgical options in treatment of spinal metastasis of the thoracolumbar spine. **Yasser El-Mansy**	**Germany**
⇒	**10:00**	**Change Break**	

TUESDAY, DECEMBER,12TH,2017

Session 3	Papers Upper Limb
HALL (C)	09:00-10:00

Chairmen	**Prof. El Shenawy Mostafa** **Prof. Emad El Din Esmat** **Prof. Hesham El Mowafi**

11	**09:00**	Anatomical glenoid reconstruction with autologous iliac bone graft versus latarjet procedure for recurrent anterior shoulder dislocation with large glenoid bone defect randomized controlled trial **Mohamed Ahmed Ashry**	**Egypt**
12	**09:8**	prosthetic replacement in massive proximal humeral bone loss **Mohamed Galhoum**	**UK**
13	**09:16**	Calcar support graft for comminuted four part fractures of the proximal humerus **Ahmed Elzeni**	**Egypt**
14	**09:24**	Evaluation of results of hemiarthroplasty in comminuted fracture proximal humerus (3-4 parts). **Beshoy Ebrahim Hanna**	
15	**09:32**	stemless shoulder arthroplasty using glenoid patient specific instrumentations, functional outcomes and unexpected intraoperative incidents **Mohamed Galhoum**	**Egypt**
16	**09:40**	Bicolumnar Fusion for Scaphoid Nonunion Advanced Collapse Without Bone Grafting **Mohamed Gabr**	**Egypt**
17	**09:48**	Hemi Resection of the Ulnar Head in Management of Distal Radio-ulnar Joint Arthrits. **Muhammad Quolquela**	**Egypt**
⇒	**09:56**	**Discussion**	

TUESDAY, DECEMBER,12TH,2017

Session 4	Papers Pediatric
HALL (D)	09:00-10:00

Chairmen	**Prof. Ashraf El Tabie** **Prof. Nady Saleh** **Prof. Samir Shaheen**

18	**09:00**	Outcome of arthrodiastasis in treatment of perthes' disease **Osman Abdellah Mohamed**	**Egypt**
19	**09:08**	The role of femoro-acetabular zones classification as a predictor for the success of non-surgical treatment in late presenting cases of DDH. **Osama Elghobashy**	**Egypt**
20	**09:16**	Long term follow up of triple attack surgery for DDH after walking age **Ashraf Eltabie**	**Egypt**
21	**09:24**	Severe Crouching gait in Cerebral Palsy Children **Nady Saleh**	**Egypt**
22	**09:32**	percutaneous needle quadriceps tenotomy for treatment of idiopathic congenital dislocation of the knee. **Mohamed Khaled**	**Egypt**
23	**09:40**	Early treatment of relapsed club foot following Ponseti technique after 3 years of age **Ashraf Eltabie**	**Egypt**
24	**09:48**	Abnormal vessel substituting deficient dorsalis pedis artery in clubfoot patient **Samir Shaheen**	**Sudan**
⇒	**10:00**	**Change Break**	

TUESDAY, DECEMBER,12TH,2017

Session 5 HALL (A)	EFFORT Knee Arthroplasty Course 10:00-11:00

Chairmen	**Prof. Adel Adawy** **Prof. Magdy El Dakhakhni** **Prof. Tarek Lotfy**		
25	**10:00**	Infected TKA: Early and Late **Jan Verhaar**	**Netherlands**
26	**10:15**	TKR in osteoporotic patients. **Adel Adawy**	**Egypt**
27	**10:30**	The painful TKA **Jan Verhaar**	**Netherlands**
28	**10:45**	Bearing Surfaces in Arthroplasty: Past, Present and Future. **Khaled Hamed**	**Germany**
⇒	**10:55**	**Discussion**	
⇒	**11:00**	**Coffee Break**	

TUESDAY, DECEMBER,12TH,2017

Session 6

World Spinal Column Society

HALL (B) **10:00-11:00**

Chairmen	**Prof. Abdelfattah Saoud** **Prof. Douglas Orr** **Prof. Mohamed Meziad**

29	**10:00**	Sagittal Plane Alignment: parameters for Dorso Lumbar spine Surgery **Douglas Orr**	**USA**
30	**10:35**	Sajittal imbalance associated with spinal deformities like increased dorsal kyphosis, ankylosing spondylitis **Mohamed Meziad**	**Egypt**
⇒	**10:55**	**Discussion**	
⇒	**11:00**	**Coffee Break**	

TUESDAY, DECEMBER,12TH,2017

Session 7	Symposium Polytrauma Update
HALL (C)	10:00-11:00

Moderator	Prof. Alaa El Zoheiry		
	10:00	**Panal:**	
		Hassan El Zaher Hassan	Egypt
		Alaa El Zoheiry	Egypt
		Chris Van Der Werken	Netherland
		Ahmed Kholeif	Egypt
⇒	11:00	Coffee Break	

TUESDAY, DECEMBER,12TH,2017

Session 8 HALL (D)	Averroes Symposium 10:00-11:00
Chairmen	**Prof. Hani El Mowafi** **Prof. Hany Morsy**
10:00	AVEROMILAN to achieve full satisfaction for patients with chronic pain **Mahmoud El-Lahony** **Egypt**
10:45	**Discussion**
⇒ **11:00**	**Coffee Break**

TUESDAY, DECEMBER,12TH,2017

Session 9 HALL (A)	EFFORT Knee Arthroplasty Course 11:30-12:30

Chairmen	**Prof. Mohamed Ragaei** **Prof. Mohamed Shafik** **Prof. Samir Kotb** **Prof. Yousry Emad**

31	**11:30**	Gap balancing and measured resection technique in total knee arthroplasty **Roland Becker**	**Germany**
32	**11:45**	Technical pearls in primary total knee replacement **Yousry Emad**	**Egypt**
33	**12:00**	TKR with ultra conguernt deep dish Anterior stabilized bearing technology **R K Araya**	**India**
⇒	**12:15**	**Discussion**	

TUESDAY, DECEMBER,12TH,2017

Session 10	World Spinal Column Society	
HALL (B)	11:30-12:30	
Chairmen	**Prof. Abdel Mohsen Arafa** **Prof. Andrew Wakefield** **Prof. Faisal Fahmy Adam**	
34	**11:30**	Spine Surgery in economically challenged situations **Andrew Wakefield** **USA**
35	**12:05**	Inter Transverse versus Interbody fusion: Cost effectiveness oriented **Abdelfattah Saoud** **Egypt**
⇒	**12:30**	**Change Break**

TUESDAY, DECEMBER,12TH,2017

Session 11	Lectures	
HALL (C)	11:30-12:30	
Chairmen	**Prof. Adel Shafik** **Prof. Hazem Abdel Azeem** **Prof. Hany El Mohamady**	
36	**11:30**	Emergency Management of Pelvic Fractures **Mohammad Khalid Sherwani** **India**
37	**11:45**	Tips n Tricks Surgical Management of Posterior Wall Fractures of Acetabulum **Vijay Sharma** **India**
38	**12:00**	Intramedullary Nailing in Polytrauma Patients: Good, Bad & Ugly **Mohammad Khalid Sherwani** **India**
39	**12:15**	Management of rib fractures; is it time for a change? **Chris Van Der Werken** **Netherland**
⇒	**12:30**	**Change Break**

TUESDAY, DECEMBER,12TH,2017

Session 12	Lilly Symposium	
HALL (D)	11:30-12:30	
Chairmen	Prof. Adel Adawy Prof. Alaa El Zoheiry	
	11:30	FORTEO- When and Why???
		Gamal Hosny — Egypt
		Bassel El Zorkany — Egypt
⇒	12:30	Change Break

TUESDAY, DECEMBER,12TH,2017

Session 13 HALL (A)	EFFORT Knee Arthroplasty Course 12:30-01:30
Chairmen	**Prof. Akram Hammad** **Prof. Amr Khairy** **Prof. Mahmoud Hadhoud**

40	**12:30**	Effects of posterior condylar offset on post-Operative flexion of TKR	
		R K Araya	**India**
41	**12:40**	Cemented or cementless TKR :comparative study of 200 cases at a minimum follow-up of 11 years	
		Prudhon Jean Louis	**France**
42	**12:50**	Correction of flexion deformity in TKR	
		Sandeep Garg	**India**
43	**01:00**	Technical analysis of TKA in cases of multiple deformities	
		Harish Bhende	**India**
44	**01:10**	Alternative to Total knee arthroplasty	
		Mohamed Elsawy Habib	**Egypt**
45	**01:20**	Correction of severe varus in TKR	
		Sandeep Garg	**India**
⇒	**01:30**	**General Assembly of E.O.A**	
⇒	**02:30**	**Lunch**	

TUESDAY, DECEMBER,12TH,2017

Session 14

World Spinal Column Society

HALL (B) **12:30-01:30**

Chairmen	**Prof. Bahaa Kornah** **Prof. Hussein Abo El Ghait**

46	**12:30**	Spinal Infections **Abdel Mohsen Arafa**	**Egypt**
47	**12:50**	Imaging Spinal Infection **Hussein Abo El Ghait**	**Egypt**
48	**01:10**	Non Spinal causes of Sciatica **Bahaa Kornah**	**Egypt**
⇒	**01:30**	**General Assembly of E.O.A**	
⇒	**02:30**	**Lunch**	

TUESDAY, DECEMBER,12TH,2017

Session 15 HALL (C)	Symposium Egyptian Certification of Orthopedic Surgery 12:30-01:30
Chairmen	Prof. Hassan El Zaher Prof. Makram Radwan Prof. Mamdoh Zaki

	12:30	**Panel:** Hassan El Zaher Mamdoh Zaki Osama Hegazy Adel Adawy Makram Radwan Yasser Soliman
⇒	01:15	Discussion
⇒	01:30	General Assembly of E.O.A
⇒	02:30	Lunch

TUESDAY, DECEMBER,12TH,2017

Session 16	Liptis Symposium	
HALL (D)	12:30-01:30	
Chairmen	**Prof. Abdel Rahman Amer** **Prof. Adel Adawy** **Prof. Gamal Hosny** **Prof. Hani El-Mowafi**	
	12:30	"Vaxato®, a Trusted Name in DVT Prevention" "Dorofen®, Overcoming Osteoarthritis Disability"
		Sharif Omar **USA**
⇒	**01:15**	**Discussion**
⇒	**01:30**	**General Assembly of E.O.A**
⇒	**02:30**	**Lunch**

TUESDAY, DECEMBER,12TH,2017

Session 17 HALL (A)	EFFORT Knee Arthroplasty Course 03:30-04:45

Chairmen	**Prof. Ahmed F. Saker** **Prof. Essam El Abbasi** **Prof. Raouf El Abbasy**

49	**03:30**	How to deal with the stiff knee after total knee arthroplasty **Roland Becker**	**Germany**
50	**03:50**	Basic steps in revision knee arthroplasty **Jan Verhaar**	**Netherlands**
51	**04:10**	Optimal alignment of the femoral and tibial components in TKA **R k Araya**	**India**
⇒	**04:30**	**Discussion**	

TUESDAY, DECEMBER,12TH,2017

Session 18	World Spinal Column Society Panel Discussion &
HALL (B)	03:30-06:00

Moderator	Prof. Abdelfattah Saoud		
	03:30	Dealing with Junctions in D L deformity surgery	
		Panel:	
		Douglas Orr	USA
		Yasser El Mansy	Germany
		Hisham Farhoud	Egypt
		Fady Michael	Egypt
⇒	06:00	End of the Day	

TUESDAY, DECEMBER,12TH,2017

Session 19	Symposium Fractures Around The knee
HALL (C)	03:30-04:45

Chairmen	**Prof. Alaa El Zoheiry** **Prof. Essam El Sharif** **Prof. Mohamed Bahy El Shafie**	
	03:30	Tibia plateau fracture classification based on the three collumn concept. **Chris van der Werken** **Netherland**
	03:50	Tibial plateau fracture & Fracture dislocation **Mohamed Bahy El Shafie** **Egypt**
	04:10	Supracondylar fractures. **Essam El Sharif** **Egypt**
	04:30	Pauwel's osteotomy spreading the indications with a variety of implants. **Essam El Sharif** **Egypt**
⇒	**04:45**	**Change Break**

TUESDAY, DECEMBER,12TH,2017

Session 20	EVA Symposium OA, from Pathogenesis to Pain Manifestation
HALL (D)	03:30-04:45

Chairmen		**Prof. Adel Adawy** **Prof. Gamal A. Hosny**
	03:30	Role of DMOADS in management of osteoarthritis **Timour El Husseini** **Egypt**
	04:00	A Novel Approach for Management of OA Pain **Ezzat El Hawy** **Egypt**
⇒	**04:30**	**Discussion**

TUESDAY, DECEMBER,12TH,2017

Session 21 HALL (A)	EFFORT Knee Arthroplasty Round Table Discussion 04:45-06:00
Moderator	**Prof. El Sayed Morsi**
	04:45	**Controversy in TKA.** **Stemmed or non stemmed.** **Cemented or uncemented arthroplasty.** **Constrained or non constrained.** **Mobile bearing or fixed bearing TKR.**
		<u>Panel:</u> **R.K. Arya** **P. J. Louis** **S. Gary** **Ahmed Hassaan**
⇒	**05:45**	**Discussion**
⇒	**06:00**	**End of the Day**

TUESDAY, DECEMBER,12TH,2017

Session 22

Papers

HALL (C) 04:45-06:00

Chairmen		**Prof. Ahmed Allam** **Prof. Ebrahim El Hawary** **Prof. Khaled Al Adwer** **Prof. Sherin Khalil**
52	**04:45**	The Induced Membrane Technique in the Pediatric Forearm. **Ahmed Allam** **Egypt**
53	**04:55**	Stabilization Techniques for Scaphoid Instability in Advanced Kienbock Disease. **Muhammad Quolquela** **Egypt**
54	**05:03**	Vascularized Medial Femoral Condyle Corticoperiosteal Flaps for Treatment of resistant Humerus Non-Union **Omar Nasser** **Egypt**
55	**05:11**	Management of fracture os calcis by ilizarov fixator with or without minimal surgical intervention **Mostafa Mohamed Mahmoud** **Egypt**
56	**05:19**	Use of circular external fixation in management of gustilo open fracture type 3 **Ibrahim Abuomira** **Egypt**
57	**05:27**	induced membrane osteogenesis for reconstruction of large bone defects after tumor resection **Mohamed Thabet** **Egypt**
58	**05:35**	Treatment of distal femur closed fractures with severe metaphyseal comminution: a new application of the ilizarov concept of compression-distraction. **Ahmed Eltantawy** **Egypt**
59	**05:43**	Treatment of infected diaphyseal femoral nonunion in adults by ilizarov **Saad Gaballah** **Egypt**
60	**05:51**	Four corner fusion in the management of scaphoid fractures and nonunion **yasser youssef abe`d** **Egypt**
⇒	**06:00**	**End of the Day**

TUESDAY, DECEMBER,12TH,2017

Session 23 HALL (D)	Round Table Discussion Orthopedic Consultation (Case Presentation) 04:45-06:00
Moderator	Prof. Abdel Salam Eid Prof. Ali Zin El Abddin Prof. Khamis El Deeb Prof. Mohamed Shafik

	04:45	
⇒	05:45	Discussion
⇒	06:00	End of the Day

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Session 24	Papers Hip Arthroplasty
HALL (A)	09:00-10:00

Chairmen	**Prof. Bahir Edouard Elias** **Prof. Prudhon Jean Louis** **Prof. Ahmed Hashim**

61	**09:00**	Incidence of early surgical site infection after hip hemiarthroplasty in assiut university trauma unit **Kerollos Gamal Habeb**	**Eygpt**
62	**09:08**	Early results of dual mobility total hip arthroplasty in acute trochanteric fractures **Sameh Marei**	**Eygpt**
63	**09:16**	Simultaneous open reduction and internal fixation and total hip arthroplasty for the treatment of acute acetabular fractures **Wael Adel Salama**	**Eygpt**
64	**09:24**	The Dual Mobility Acetabular Cup. French Solution to Prevent Dislocations of Total Hip Prosthesis. **Bahir-Edouard ELIAS**	**France**
65	**09:39**	Is Dual mobility cup in THR associated with an increased risk of revision for infection, Matched cohort of 231 Dual mobility cups with 231 fixed cups **Prudhon Jean Louis**	**France**
⇒	**09:54**	**Discussion**	

WEDNESDAY, DECEMBER 13TH , 2017

Session 25

World Spinal Column Society

HALL (B) **09:00-10:00**

Chairmen	**Prof. Bambang Darwono** **Prof. Bahaa Kornah** **Prof. Mohamed El Meshtawy**

66	**09:00**	one lung ventilation in thoracoscopic assisted surgery to thoracic and thoracolumbar spine in prone position :report on 7 cases	
		Mohamed Eltaybe Osman	**Egypt**
67	**09:08**	Is there a role for bone cement in reconstruction of anterior column defects resulting from spondylodiscitis?	
		Walid El Nawawy	**Egypt**
68	**09:16**	Posttraumatic kyphosis of the cervical: Case presentation	
		Mohammed Mahmood Faramawy	**Egypt**
69	**09:24**	Degenerative scoliosis tips and tricks	
		Mohamed Fawzy	**Egypt**
70	**09:39**	The Concept of MISS with Dynamic Stabilization in Late Degenerative Cascade of Lumbar Spine	
		Bambang Darwono	**Indonesia**
⇒	**09:54**	**Discussion**	

WEDNESDAY, DECEMBER 13TH , 2017

Session 26	Papers Foot & Ankle
HALL (C)	09:00-10:00

Chairmen		**Prof. Ali Zin Abddin** **Prof. Mahmoud Azz El Din** **Prof. Mohamed Reda**
71	09:00	Reconstruction of chronic tear tendoachilis with free semitendenosis graft **Ahmed M Hany** **Egypt**
72	09:08	Less invasive techniques in management of intra-articular calcaneus fractures **Mohamed Alahmady Abdel Reheem Ali** **Egypt**
73	09:16	Operative treatment of calcaneal fractures: improved outcomes and low complications rates with a strict management protocol **Mohammed Atef Diab** **Egypt**
74	09:24	direction of screw in subtalar arthrodesis **Amr Mohamed Mohamed Soliman** **Egypt**
75	09:32	Surgical Method for correction of toe deformities in Stroke Patients with Foot Disorder **Ahmed Nady Saleh** **Egypt**
76	09:40	Tibialis posterior tendon transfer for correction of drop-foot in common peroneal nerve palsy **Ashraf M Abdelaziz** **Egypt**
77	09:48	Mid-sole release of the plantar fascia combined with percutaneous drilling of the calcaneus for treatment of resistant heel pain **Ahmed Shawkat Rizk** **Egypt**
⇒	09:56	**Discussion**

WEDNESDAY, DECEMBER 13TH , 2017

Session 27	Papers	
HALL (D)	09:00-10:00	
Chairmen	**Prof. Abdel-Azim Hassan Wahsh** **Prof. Mohamed Fadel** **Prof. Mohamed Shabana** **Prof. Sherif Naseef Bishay**	
78	**09:00**	Osteoclasis by percutaneous drilling for correction of angular and rotational deformities in children and adolescents **Abdel-Azim Hassan Wahsh** **Egypt**
79	**09:08**	Combined use of external and internal fixation in limb reconstruction **Khaled Emara** **Egypt**
80	**09:18**	Periacetabular osteotomies are technically demanding surgical procedures **Khaled Zaghlol** **Egypt**
81	**09:26**	rate of correction of angular deformities of the knee in skeletally immature patients by eight-plate temporary hemiepiphysiodesis **Mohamed Khaled** **Egypt**
82	**09:34**	Lengthening and then nailing in height increase surgery (results and surgical technique) **Khaled Emara** **Egypt**
83	**09:44**	Minimal Invasive Surgery (MIS) in Management of Flexion Knee Joint Deformity **Mohamed Fadel** **Egypt**
⇒	**09:54**	**Discussion**

WEDNESDAY, DECEMBER 13TH , 2017

Session 28

Knee Arthroplasty

HALL (A) **10:00-11:00**

Chairmen	**Prof. Roland Becker** **Prof. Mahmoud Hafez** **Prof. Tarek El Khadrawy**

84	**10:00**	Computer Assisted Arthroplasty: An update **Mahmoud Hafez**	**Egypt**
85	**10:15**	Innovation in total knee arthroplasty - Computer assisted surgery and patients specific instrumentation **Roland Becker**	**Germany**
86	**10:30**	Clinical application of custom made guides in Egypt **Ahmed Tamer**	**Egypt**
87	**10:40**	Bilateral simultaneous TKA using patient specific instruments and Robotics blocks and implants **Ahmed Hashim**	**Egypt**
⇒	**10:50**	**Discussion**	
⇒	**11:00**	**Coffee Break**	

WEDNESDAY, DECEMBER 13TH , 2017

Session 29 — World Spinal Column Society

HALL (B) — **10:00-11:00**

Chairmen		**Prof. Douglas Orr** **Prof. Ezzat El Hawy** **Prof. Yasien El Ghoul**
88	**10:00**	Sagittal Plane Alignment: parameters for Cervical Dorsal spine Surgery **Douglas Orr** **USA**
89	**10:35**	Three Columns Theory of Lumbar Degenerative Cascade **Bambang Darwono** **Indonesia**
	10:55	**Discussion**
⇒	**11:00**	**Coffee Break**

WEDNESDAY, DECEMBER 13TH , 2017

Session 30	Foot & Ankle	
HALL (C)	10:00-11:00	
Chairmen	**Prof. Ahmed Kholeif** **Prof. Hani El Mowafi** **Prof. Wagih Moussa**	
90	**10:00**	Lisfranc joint injuries **Hani El Mowafi** — **Egypt**
91	**10:10**	Fracture calcaneus **Wagih Moussa** — **UK**
92	**10:20**	Ankle Fracture **Ahmed Kholeif** — **Egypt**
93	**10:30**	The Posterolateral Surgical Approach for Distal Leg and talus fractures. **Bahir Elias** — **France**
94	**10:40**	Fractures of the Talus: Management Protocols **Mohammad Khalid Sherwani** — **India**
⇒	**10:50**	**Discussion**
⇒	**11:00**	**Coffee Break**

WEDNESDAY, DECEMBER 13TH , 2017

Session 31	OCTOBER PHARMA Symposium	
HALL (D)	10:00-11:00	
Chairmen	Prof. Alaa El Zoheiry Prof. Hani El Mowafi	
	10:00	Osteoporosis (Future not yet come) BASE-BONE Gamal Hosny — Egypt
⇒	10:45	Discussion
⇒	11:00	Coffee Break

WEDNESDAY, DECEMBER 13TH , 2017

Session 32

Hip Arthroplasty

HALL (A) **11:30-12:30**

Chairmen	**Prof. El Sayed Morsi** **Prof. Hani Basioni** **Prof. Hassan El Husseini** **Prof. Ibrahim El Ganzory**

95	**11:30**	Does Hip Arthroplasty Registries Report True Performance?	
		Kjaersgaard Andersen	**Denmark**
96	**11:50**	Revision THR with bone graft	
		Elsayed Morsi	**Egypt**
97	**12:10**	Revision THR with metal augmentation ?	
		Ibrahim El Ganzory	**Egypt**
⇒	**12:30**	**Change Break**	

WEDNESDAY, DECEMBER 13TH , 2017

Session 33 — World Spinal Column Society

HALL (B) — **11:30-12:30**

Chairmen	**Prof. Andrew Wakefield** **Prof. Gad Ragheb** **Prof. Yasser El Mansy**

98	**11:30**	Complications of Spinal Surgery: More for less solutions **Andrew Wakefield**	**USA**
99	**12:05**	Complications of surgical management of degenerative Scoliosis. **Yasser El-Mansy**	**Germany**
⇒	**12:25**	**Discussion**	

WEDNESDAY, DECEMBER 13TH , 2017

Session 34	Upper Limb	
HALL (C)	11:30-12:30	
Chairmen	**Prof. Chris Van Der Werken** **Prof. Moheb Moneim** **Prof. Mohamed Gamal El Ashhab**	
100	11:30	Elbow stiffness/ Heterotopic ossification **Moheb Moneim** **USA**
101	11:45	Shoulder rotator cuff reconstruction – current concep **Mladen Miškulin** **Croatia**
102	12:00	Nonunion proximal humerus **Chris van der Werken** **Netherland**
103	12:15	Radial nerve injuries following Humerus Shaft Fractures **Moheb Moneim** **USA**
⇒	12:30	**Change Break**

WEDNESDAY, DECEMBER 13TH , 2017

Session 35	SANDOZ Symposium
HALL (D)	11:30-12:30

Chairmen	**Prof. Abdel Rahman Amer** **Prof. Adel Adawy** **Prof. Alaa El Zoheiry**	
	11:30	Low back pain with neuropathic component **Gamal Hosny** **Egypt**
⇒	**12:30**	**Discussion**

WEDNESDAY, DECEMBER 13TH , 2017

Session 36

Hip Arthroplasty

HALL (A) **12:30-01:30**

Chairmen	**Prof. Emad Halawa** **Prof. Hassan Hussein** **Prof. Mamdouh Zaki**

104	**12:30**	Low and high dislocation hips treated with total hip arthroplasty: the femoral side **Theofilos Karachalios**	**Greece**
105	**12:50**	Dual mobility cup in total hip revision surgery. A prospective study of 79 cases. Dislocation risk and cup fixation at two years follow-up. **Prudhon Jean Louis**	**France**
106	**01:10**	Low and high dislocation hips treated with total hip arthroplasty: the acetabular site. **Theofilos Karachalios**	**Greece**
⇒	**01:30**	**Change Break**	

WEDNESDAY, DECEMBER 13TH , 2017

Session 37	Lectures Spine
HALL (B)	12:30-01:30

Chairmen	**Prof. Douglas Orr** **Prof. Hesham Shaker** **Prof. Wael Koptan**

107	**12:30**	MIS : More for less?!!!!	
		Douglas Orr	**USA**
108	**01:05**	Early evaluation of uni-literal MIS TLIF in management of recurrent lumbar disc prolapse	
		Hesham Shaker	**Egypt**
⇒	**01:25**	**Discussion**	

WEDNESDAY, DECEMBER 13TH , 2017

Session 38	Wrist	
HALL (C)	12:30-01:30	
Chairmen	**Prof. Ali El Mofty** **Prof. Nash Naam** **Prof. Magdy Nabil**	
109	**12:30**	Wrist biomechanics **Nash Naam** — **USA**
110	**12:45**	Degenerative wrist arthritis **Moheb Moneim** — **USA**
111	**01:00**	DRUJ instability **Nash Naam** — **USA**
112	**01:15**	Ulnar Impaction syndrome **Nash Naam** — **USA**
⇒	**01:30**	**Change Break**

WEDNESDAY, DECEMBER 13TH , 2017

Session 39	AMRIYA Symposium
HALL (D)	12:30-01:30

Chairmen		Prof. Abdel Rahman Amer Prof. Adel Adawy Prof. Timour El Husseini
	12:30	**The integrated approach for pain management** Gamal Hosny
⇒	01:15	Discussion

WEDNESDAY, DECEMBER 13TH , 2017

Session 40

Hip Arthroplasty

HALL (A) **01:30-02:30**

Chairmen	**Prof. Bahaa El Sarwy** **Prof. Eissa Ragheb** **Prof. Khaled Fawzy**

113	**01:30**	Ambulatory total hip arthroplasty. Myth or reality?	
		Kjaersgaard-Andersen	**Denmark**
114	**01:50**	Salvage of difficult hips problems with THA	
		Harish Bhende	**India**
115	**02:10**	Fast track surgery – opportunities or threat. Experience in total hip arthroplasty.	
		Kjaersgaard-Andersen	**Denmark**
⇒	**02:30**	**Lunch**	

WEDNESDAY, DECEMBER 13TH , 2017

Session 41	Lectures Spine
HALL (B)	01:30-02:30

Chairmen	**Prof. Hesham El Saghir** **Prof. Khaled Sabry** **Prof. Yasser Allam**

116	**01:30**	Management of Cervical Spondylosis. **Hesham El Saghir**	**Egypt**
117	**01:50**	End Plate and facet changes in cervical spondlytic myelopathy. **Tarek El Faky**	**Egypt**
118	**02:10**	Navigated spinal instrumentation **Yasser Allam**	**Egypt**
⇒	**02:30**	**Lunch**	

WEDNESDAY, DECEMBER 13TH , 2017

Session 42	Symposium Limited Carpal Fusion
HALL (C)	01:30-02:30

Chairmen		**Prof. Galal Zaki Saied** **Prof. Essam El Karef** **Prof. Samy El Zahhar**
	01:30	Load transmission following limited carpal fusion **Ahmad Naeem** **Egypt**
	01:40	Methods of fixation of limited carpal fusion including memory staples and dedicated plates **Ahmad Fathy** **Egypt**
	01:50	Limited carpal fusion in management of SNAC and SLAC **Ahmad Semaia** **Egypt**
	02:00	Limited proximal carpal raw fusion **Ayman Mansour** **Egypt**
	02:10	Radiocarpal fusion **Tamer Nagy** **Egypt**
⇒	**02:20**	**Discussion**
⇒	**02:30**	**Lunch**

WEDNESDAY, DECEMBER 13TH , 2017

Session 43	SANOFI Symposium	
HALL (D)	01:30-02:30	
Chairmen	**Prof. Gamal A. Hosny** **Prof. Timour El Husseini**	
	01:30	Decisions in the dark **Gamal A. Hosny** — **Egypt**
	02:00	Pain management wrap up **Timour El Husseini** — **Egypt**
⇒	**02:30**	**Lunch**

WEDNESDAY, DECEMBER 13TH , 2017

Session 44

Hip Arthroplasty

HALL (A) **03:30-04:45**

Chairmen	**Prof. Ahmed Shama** **Prof. Adel Anwar** **Prof. Ibrahim Mostafa**

119	**03:30**	Total hip arthroplasty: failure modes **Theofilos Karachalios**	**Greece**
120	**03:50**	Fashion or Progress? The Direct Anterior Approach for Total Hip Arthroplasty. **Bahir-Edouard ELIAS**	**France**
121	**04:10**	Extended lateral femoral osteotomy in revision THA **Theofilos Karachalios**	**Greece**
⇒	**04:30**	**Discussion**	

WEDNESDAY, DECEMBER 13TH , 2017

Session 45	Spine Case Presentation
HALL (B)	03:30-06:00

Moderator	**Prof. Abdel Mohsen Arafa**

	03:30	**Panel:**	
		Hesham El Saghir	**Egypt**
		Mohamed El Meshtawy	**Egypt**
		Hesham Shaker	**Egypt**
		Bahaa Kornah	**Egypt**
		Tarek El Faky	**Egypt**
		Ahmed Morsy	**Egypt**
		Mohamed Fawzy	**Egypt**
⇒	**06:00**	**End of the Day**	

WEDNESDAY, DECEMBER 13TH , 2017

Session 46	Round Table Discussion SINGLE BONE FOREARM
HALL (C)	03:30-04:45

Chairmen	Prof. Abdel Hakim Massoud Prof. Essam El Karef Prof. Mohamad Al Mahy

	03:30	**Panel:**	
		Essam El Karef	Egypt
		Nash Naam	USA
		Abdel Hakim Massoud	Egypt
		Mohamad Al Mahy	Egypt
		Yasser El Safory	Egypt
		Hassaan Al Nomany	Egypt
⇒	04:30	Discussion	

WEDNESDAY, DECEMBER 13TH , 2017

Session 47	PHARCO Symposium
HALL (D)	03:30-04:45

Chairmen		Prof. Abdel Rahman Amer Prof. Alaa El Zoheiry Prof. Khamis El Deeb
	03:30	Oprasta in Osteoporosis managment
⇒	04:30	Discussion
⇒	04:45	Change Break

WEDNESDAY, DECEMBER 13TH , 2017

Session 48

Hip Arthroplasty

HALL (A) **04:45-06:00**

Chairmen	**Prof. Lotfy Younis** **Prof. Mostafa Abdel Khalik** **Prof. Samir Sliem**

122	**04:45**	Failed distal femoral fractures fixation, salvage by knee prosthesis **Harish Bhende**	**India**
123	**04:55**	A comparative and retrospective study of 320 Charnley type THR with a minimum follow-up of 10 years to assess whether Dual mobility cup has a lower dislocation risk **Prudhon Jean Louis**	**France**
124	**05:05**	TENT approach, the way to go in complex THR **Harish Bhende**	**India**
	05:15	Symposium: THR Instability **Prudhon Jean Louis** **Ayman Ebeid** **El Sayed Morsy**	**France** **Egypt** **Egypt**
⇒	**06:00**	**End of the Day**	

WEDNESDAY, DECEMBER 13TH , 2017

Session 49	Crossfire Discussion Tibial Plafond Fractures
HALL (C)	04:45-06:00

Chairmen		Prof. Alaa El Zoheiry Prof. Chris van der Werken Prof. Wagih Moussa
	04:45	**Panel:** Alaa El Zoheiry — Egypt Mohamed Bahy El Shafie — Egypt Gamal Hosny — Egypt Chris van der Werken — Netherland Hani El Mowafi — Egypt Wagih Moussa — UK
⇒	05:45	Discussion
⇒	06:00	End of the Day

WEDNESDAY, DECEMBER 13TH , 2017

Session 50	Symposium Tricks and Tips for Shoulder Arthroscopy
HALL (D)	04:45-06:00

Moderator	**Prof. Ahmed Abdel Samie**		
	04:45	**Panel:**	
		Ahmed Abdel Samie	**Egypt**
		Tarek Khalil	**Egypt**
		Ahmed Rezk	**Egypt**
⇒	**05:50**	**Discussion**	
⇒	**06:00**	**End of the Day**	

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Session 51

Papers

HALL (A) 09:00-10:00

Chairmen	**Prof. Khaled Shohayb** **Prof. Mohamed Gouda** **Prof. Safwat Shalaby**

125	**09:00**	acute acromio-clavicular dissociation in low-resources situations a cohort study of loop-protected coraco-clavicular repair versus hook-plating and tension band wiring	
		Amr Abdel-Mordy Ali Kandeel	**Egypt**
126	**09:08**	Reliability of arthroscopic assessment of glenoid bone loss in anterior shoulder instability	
		Emad Zayed	**Egypt**
127	**09:16**	Inspace balloon for massive rotator cuff tears	
		Daniel Gheorghiu	**UK**
128	**09:24**	Trans-Septal Portal in the Outside-In Anterior Cruciate Ligament Reconstruction	
		Ashraf Elazab	**Egypt**
129	**09:32**	Combined intra articular and extra articular acl reconstruction	
		Mohamed Ibrahim Abulsoud	**Egypt**
130	**09:40**	Graft healing in anterior cruciate ligament reconstruction	
		Mohamed Hamdy El Naggar	**Egypt**
131	**09:48**	Arthroscopic all inside repair for isolated medial meniscal tears in athletic adolescents	
		Mohamed Gouda	**Egypt**
⇒	**09:56**	**Discussion**	

THURSDAY, DECEMBER.14TH , 2017

Session 52	Papers Spine
HALL (B)	09:00-10:00

Chairmen	**Prof. El Moataz El Sabrout** **Prof. Mohamed Safaa Arafa** **Prof. Rafaat Kamal**

132	**09:00**	Differential diagnosis of epidural collection in cervical spine **Mahmoud Yasser Farghally**	**Egypt**
133	**09:08**	Results of multi-segmental ACDF using standalone PEEK cages **Mohamed El Masery**	**Egypt**
134	**09:16**	Combined minimal invasive approaches for correction of ankylosing spondylitis kyphosis **Mahmoud Fauad**	**Egypt**
135	**09:24**	Dynamic neutralization of the lumbar spine after microsurgical decompression in acquired lumbar spinal stenosis and segmental instability **Hesham Mohamed Safwat**	**Egypt**
136	**09:32**	Comparison between MIS versus open TLIF in treatment of spondyoisthesis **Ahmed Taha**	**Egypt**
137	**09:40**	Sacro-iliac Joint, fuse or not to fuse **Rafaat Kamal**	**Egypt**
⇒	**10:00**	**Change Break**	

THURSDAY, DECEMBER.14TH , 2017

Session 53

Papers

HALL (C) 09:00-10:00

Chairmen		**Prof. Ashraf Lotfy** **Prof. Mohamed Abdel Aal** **Prof. Talaat Azz El Din**
138	**09:00**	Use of cell phone in assessment in management of sever trauma **Mohamed El Deeb** **Egypt**
139	**09:08**	prospective study of patterns of orthopedic injuries among motorcycle accidents **Elsayed abdelhalim** **Egypt**
140	**09:16**	fixation of distal humerus fractures in pediatric population using two intramedullary kirschner wires: prospective study **Hossam Hosny** **Egypt**
141	**09:24**	Open Reduction and Internal Fixation of Apparent Capitellar Fracture Using Anterior Approach **Ibrahim Mohsen** **Egypt**
142	**09:32**	Distal ulna hook plate for fixation of distal ulnar fractures **Fareed Radwan** **Egypt**
143	**09:40**	Treatment of oblique and spiral metacarpal fractures with mini plate plus screw versus screw only **Moawed Farghly EL Adawy** **Egypt**
144	**09:48**	Skin Stretchng Device (SSD) as a new trend for treatment of complicated wounds **Gamal El Mashad** **Egypt**
⇒	**09:56**	**Discussion**
⇒	**10:00**	**Change Break**

THURSDAY, DECEMBER.14TH , 2017

Session 54 — Papers

HALL (D) — 09:00-10:00

Chairmen		**Prof. Adel Khamis** **Prof. Gamal El Adl** **Prof. Mahmoud El Rosasy** **Prof. Tarek El Tawil**
145	**09:00**	Sauve-Kapandji procedure for Madelung's Deformity **Shamel Elgohary** **Egypt**
146	**09:08**	Triple attack outcome in post-traumatic radioulnar synostosis resection, interposition and adjuvant therapy **Mokhtar Abdul Azeem** **Egypt**
147	**09:16**	Radiolucent and fracture tables in the treatment of slipped capital femoral epiphysis. Comparative study **Bassam Ali Abouelnas** **Egypt**
148	**09:24**	Extra focal screw fixation in medial wedge opening high tibial osteotomy – a new technique **Omar A. Refai** **Egypt**
149	**09:32**	Transfixing kirshner wires for fixation of intertrochanteric valgus osteotomies in management of pediatric coxa vara **Ahmed Shawkat Rizk** **Egypt**
150	**09:40**	Distal locking femoral plate for different supracondylar femoral osteotomies, a reliable implant. **Tarek Abdel Monem El Tawil** **Egypt**
151	**09:50**	Management of post-traumatic distal radius growth arrest by Illizarov distraction osteogenesis **Mahmoud Elrosasy** **Egypt**
⇒	**10:00**	**Change Break**

THURSDAY, DECEMBER.14TH , 2017

Session 55	Lectures The Meniscus	
HALL (A)	10:00-11:00	
Chairmen	**Prof. Abdel Salam Gomaa** **Prof. Mahmoud Mabrouk** **Prof. Maged Samy**	
152	**10:00**	Diagnosis of different types of meniscal injuries **Mohamed Gomaa** — **Egypt**
153	**10:15**	Meniscectomy: indications,limits and techniques **Karl Almqvist** — **Belgium**
154	**10:30**	Inside-out, outside-in and all-inside meniscal repair techniques **Maged Samy** — **Egypt**
	10:45	**Discussion**
⇒	**11:00**	**Coffee Break**

THURSDAY, DECEMBER.14TH , 2017

Session 56	Lectures Spine
HALL (B)	10:00-11:00

Chairmen	**Prof. Ahmed Hassan** **Prof. Hesham Farhoud** **Prof. Mohamed El Meshtawy**

155	**10:00**	Evidence based treatment of degenerative lumbar canal stenosis **Hesham Farhoud**	**Egypt**
156	**10:20**	Spinal Osteotomy **Mohamed El Meshtawy**	**Egypt**
157	**10:40**	Reoperations after anterior cervical fusion using standalone cages in degenerative cervical spondylosis; analysis of 2078 patient's long term follow up. **Mootaz Shousha**	**Germany**
⇒	**11:00**	**Coffee Break**	

THURSDAY, DECEMBER.14TH , 2017

Session 57	Lectures Trauma
HALL (C)	10:00-11:00

Chairmen	**Prof. Lotfy Al Adwer** **Prof. Nabil Abdel Meneem** **Prof. Pierre Journeau**

158	**10:00**	Pediatric fracture care; what is different? **Chris van der Werken**	**Netherland**
159	**10:15**	Keys points of FIN in pediatric traumatology **Pierre JOURNEAU**	**France**
160	**10:30**	Ankle tri-plane fractures; patho-anatomy and related therapy **Chris van der Werken**	**Netherland**
161	**10:45**	Natural history of ACL injuries in children **Pierre JOURNEAU**	**France**
⇒	**11:00**	**Coffee Break**	

THURSDAY, DECEMBER.14TH , 2017

Session 58	Papers Upper Limb	
HALL (D)	10:00-11:00	
Chairmen	**Prof. Ashraf Moharam** **Prof. Khalid Edris** **Prof. Maged El Shennawy**	
162	**10:00**	Wrist Denervation for Chronic Wrist Pain **Abdalah Seif** **Egypt**
163	**10:08**	flexible nailing for boxer and pseudoboxer fractures **Ahmed Fathy Sadek** **Egypt**
164	**10:16**	Fingertip Winding Suture: Pull Out Suture Technique for Flexor Tendon Repair in Zone **Abdallah Seif** **Egypt**
165	**10:24**	Pollicization in Radial Longitudinal Deficiency **Maged El Shennawy** **Egypt**
166	**10:32**	Transfer of the terminal anterior interosseous nerve to the extensor carpi radialis brevis branch of the radial nerve for restoration of wrist dorsiflexion in extensive partial brachial plexus injuries **Mahmoud Salama** **Egypt**
167	**10:40**	Triangle tilt surgery in obpi **Khalid Edris** **Egypt**
168	**10:50**	Prespinal retropharangeal contralateral c7 transfer in total or near total traumatic brachial plexus avulsions **Ashraf Moharam** **Egypt**
⇒	**11:00**	**Coffee Break**

THURSDAY, DECEMBER.14TH , 2017

Session 59	Lectures The Meniscus
HALL (A)	11:30-12:30

Chairmen	**Prof. Hossam Nagy** **Prof. Hany El Mohamady** **Prof. Salah El Khatib**

169	**11:30**	Why menisci show slightly higher healing rates when repaired during ACLR **Matteo Denti**	**Italy**
170	**11:50**	How to prevent OA in the young athletic knee-consideration of meniscal substitution **Karl Almqvist**	**Belgium**
171	**12:10**	Complications of meniscal suturing **Matteo Denti**	**Italy**
⇒	**12:30**	**Change Break**	

THURSDAY, DECEMBER.14TH , 2017

Session 60	Lectures Spine
HALL (B)	11:30-12:30

Chairmen	**Prof. Emad El Mehy** **Prof. Hani Zaki Saeid** **Prof. Mohamed El Manawy** **Prof. Mootaz Shousha**

172	**11:30**	Percutaneous Magerl Instrumentation: a novel minimally invasive treatment modality for odontoid fractures in the elderly. **Mootaz Shousha**	**Germany**
173	**11:50**	Imaging reports in Spine disorders **Yasser Allam**	**Egypt**
174	**12:10**	Surgical management of Odontoid fractures in elderly patients; comparison between odontoid screw fixation and posterior atlantoaxial fusion. A study of 133 patients. **Mootaz Shousha**	**Germany**
⇒	**12:30**	**Change Break**	

THURSDAY, DECEMBER.14TH , 2017

Session 61	Lectures Shoulder
HALL (C)	11:30-12:30

Chairmen	**Prof. Ali El Guoshy** **Prof. Ali Ibrahim** **Prof. Khamis El Deeb** **Prof. Pierre Journeau**

175	**11:30**	Shoulder instability repair current concepts **Mladen Miškulin**	**Croatia**
176	**11:50**	Shoulder reconstruction by clavicula pro humero in malignant tumors **Pierre JOURNEAU**	**France**
177	**12:10**	Management of Neglected Shoulder Injuries **Mohammad Khalid Sherwani**	**India**
⇒	**12:30**	**Change Break**	

THURSDAY, DECEMBER.14TH , 2017

Session 62	EVA Symposium
HALL (D)	11:30-12:30

Chairmen	**Prof. Alaa El Zoheiry** **Prof. Hani El Mowafi**

	11:30	Gout ….Treat to Target	
		Abdel Moneem Helal	**Egypt**
⇒	**12:00**	**Discussion**	

THURSDAY, DECEMBER.14TH , 2017

Session 63	Lectures The Meniscus
HALL (A)	12:30-01:30

Chairmen	**Prof. Adel Ghazal** **Prof. Matteo Daenti** **Prof. Moheb Fadel**	
178	**12:30**	Rehabilitation after meniscal surgery **Karl Almqvist** **Belgium**
179	**12:50**	Meniscal treatment in athletes- strategy and indications. **Matteo Daenti** **Italy**
180	**01:10**	Diagnosis and treatment of ramp lesions **Feng Hu** **China**
⇒	**01:30**	**Change Break**

THURSDAY, DECEMBER.14TH , 2017

Session 64	Spine Case Presentation	
HALL (B)	12:30-02:30	
Moderator	**Prof. Abdel Mohsen Arafa**	
12:30	**Panel:**	
	Hesham El Saghir	**Egypt**
	Yasser Allam	**Egypt**
	Mohamed El Meshtawy	**Egypt**
	Hussein Abo El Ghait	**Egypt**
	Post-traumatic kyphosis	
	Mohamed Al-Faramawy	**Egypt**
	Coccydnia	
	Abdel Mohsen Arafa	**Egypt**
	Ponte osteotomy for treatment of Kyphosis	
	Mahmoud Nafady	**Egypt**
⇒ **02:30**	**Lunch**	

THURSDAY, DECEMBER.14TH , 2017

Session 65	Symposium Sports Injuries of the Wrist Joint
HALL (C)	12:30-01:30

Chairmen	**Prof. Abdel Khalik Hafez** **Prof. Adel Ghoneem** **Prof. El Shazly S. Mousa** **Prof. Nehad El Mahboub**

	12:30	Gymnast's wrist	
		Essam ElKaref	**Egypt**
	12:40	Acute radial sided sport injuries of the wrist	
		Waleid Riad	**Egypt**
	12:50	Acute ulnar sided sport injuries of the wrist	
		Moustafa Mahmoud	**Egypt**
	01:00	Chronic radial sided sport injuries of the wrist	
		Ayman Shaheen	**Egypt**
	01:10	Chronic ulnar sided sport injuries of the wrist	
		Ashraf Moharam	**Egypt**
⇒	**01:20**	**Discussion**	

THURSDAY, DECEMBER.14TH , 2017

Session 66	EVA Symposium
HALL (D)	12:30-01:30

Chairmen	**Prof. Alaa El Zoheiry** **Prof. Hani El Mowafi**

	12:30	Contemporary approaches for VTE prevention after total hip & total knee replacement" **Hani El Mowafi**	**Egypt**
⇒	**01:15**	**Discussion**	

THURSDAY, DECEMBER.14TH , 2017

Session 67	Lectures The Meniscus
HALL (A)	01:30-02:30

Chairmen	**Prof. Maher El Assal** **Prof. Feng Hua** **Prof. Hamed El Gohary**

181	**01:30**	Lateral meniscus root tears and high grade pivot shift in ACL injuries **Feng Hua**	**China**
182	**01:50**	Degenerative meniscal tears : Dilemma **Ashraf Abdelkafy**	**Egypt**
183	**02:10**	Treatment of different meniscal tears: surgical tips and pearls **Feng Hua**	**China**
⇒	**02:30**	**Lunch**	

THURSDAY, DECEMBER.14TH , 2017

Session 68	Symposium Kienbock's Disease	
HALL (C)	01:30-02:30	
Chairmen	**Prof. Abdelsalam Eid** **Prof. Essam El Karef** **Prof. Nash Naam**	
	01:30	Anatomy, aetiology, and classification.
		Mohamed Hassan — **Egypt**
	01:40	New classification.
		Nash Naam — **USA**
	01:50	Unloading procedures.
		Ashraf Moharam — **Egypt**
	02:00	Revascularization procedures.
		Essam El Karef — **Egypt**
	02:10	Intercarpal fusions.
		Maged El Shennawy — **Egypt**
	02:20	Role of Arthroscope in kienbock disease
		Abdelsalam Eid — **Egypt**
⇒	**02:30**	**Lunch**

THURSDAY, DECEMBER.14TH , 2017

Session 69	MSD Symposium	
HALL (D)	01:30-02:30	
Chairmen	Prof. Galal Zaki Prof. Adel Adawy	
	01:30	**MSD Scientific Symposium** Mohamed Zada — Egypt Timour El Husseini — Egypt
⇒	02:15	Discussion
⇒	02:30	Lunch

THURSDAY, DECEMBER.14TH , 2017

Session 70	Review course Basic knee ligament	
HALL (A)	03:30-05:30	
Chairmen	**Prof. Gamal Hosny Abdelmaksoud** **Prof. Hesham El Kady** **Prof. Hossam Nagy**	
Moderator	***Prof. Abdel Samie Halawa***	
	03:30	Anatomy of the knee ligaments — **Akram Eldawoody**
		Radiological examination of knee ligaments — **Rasha Khattab**
		Medial sided knee ligament injuries — **Waleid Reda**
		Lateral sided knee ligament injuries — **Mohammed Aboalata**
		Management of ACL injuries — **Faisal Elsharif**
		Predictors of ACL reconstruction failure — **Hesham Elkady**
		Management of PCL injuries — **Hesham Elkady**
		Extensor mechanism injuries — **Amr Ahmed**
		Multiple ligament injuries of the knee — **Ayman Ebied**
		Role of Osteotomies in MLI — **Maged Samy**
⇒	**05:15**	**Discussion**
⇒	**05:30**	**End of the Day**

THURSDAY, DECEMBER.14TH , 2017

Session 71	Review course Paediatric Fracture Fixation
HALL (B)	03:30-05:30

Chairmen	**Prof. Abdel Sabour Ghonim** **Prof. Khamis El Deeb** **Prof. Nabil Khalifa** **Prof. M. Osama Hegazy**
03:30	***Topics:***

- Current concepts of Paediatric fracture fixation
- I.M Fixation of Paediatric Fractures
- Fixation of Injuries around the elbow
- When Plate fixation is considered in paediatric fractures
- External fixation of Paediatric fractures
- Overtreatment of paediatric fractures

Panel:

Nabil Khalifa
Khamis El Deeb
M. Osama Hegazy
Gamal Hosny
Nabil Abdel Moneem
Tarek Hassan
Hatem Kotb
Mohamed Tag

⇒ **05:30** **End of the Day**

THURSDAY, DECEMBER.14TH , 2017

Session 72	Review Course Bone Tumors In Pediatric Age Group
HALL (C)	03:30-05:30

Chairmen	**Prof. Adel Refaat** **Prof. Samir Kotb** **Prof. Walied Ebeid**	
Moderator	***Prof. Adel Refaat***	
	03:30	Updates in The Pathology of Pediatric Bone Tumors **Basma El Sabee** **Egypt**
	03:50	Limb Salvage for Bone Malignancy in Skeletally Immature Patients **Samir Kotb** **Egypt**
	04:10	Cystic Bone Lesions **Mahmoud Sedik** **Egypt**
	04:30	Prosthetic Replacement for Malignant Bone Tumours **Walied Ebeid** **Egypt**
	04:50	Updating Metastatic Bone Disease **Ahmed Shahin** **Egypt**
⇒	**05:10**	**Discussion**
⇒	**05:30**	**End of the Day**

THURSDAY, DECEMBER.14TH , 2017

Session 73	Review Course Deformity Correction	
HALL (D)	03:30-05:30	
Chairmen	**Prof. Anis Shiha** **Prof. Hatem Kotb** **Prof. Kamal El Gaafary**	
Moderator	***Prof. Amin Abdel Razik***	
	03:30	Where is CORA (Preoperative planning)?	**Nabil El Moghazy**
	03:50	Osteotomy rules, types and techniques**.**	**Barakat AlAlfy**
	04:10	Acute vs gradual deformity correction**.**	**AbdelSalam Abdel Aleem**
	04:30	Acute correction and intramedullary fixation for complex diaphyseal deformities of the lower limb.	**Mahmoud El Rosasy**
	04:50	Deformity correction by guided growth**.**	**Amr Azzam**
	05:10	Gradual correction by ring fixator (hinges placement).	**Amin Abdel Razek**
⇒	**05:30**	**End of the Day**	

ABSTRACTS

001

OPTIMISED CONVENTIONAL TECHNIQUE IS AS ACCURATE AS NAVIGATION FOR DISTAL FEMUR RESECTION DURING TKA

Ahmed Adel Khalifa, Arun Mullaji-Gautum Shetty
Egypt

Introduction:

Computer navigation improves accuracy and reduces outliers for limb and component alignment after total knee arthroplasty (TKA). The aim of this study was to determine if "optimized" conventional technique is as accurate as navigation for distal femur resection and femoral component alignment in the coronal plane with respect to femur mechanical axis during primary TKA.

Methods:

We retrospectively reviewed clinical and radiographic records of 185 primary TKAs performed using the "optimized" conventional technique and 281 primary TKAs performed using computer navigation. "Optimized" conventional technique for distal femur resection involved determining the valgus cut angle or VCA [the angle between the mechanical axis of femur and the axis of the distal half of the femur (along which an intramedullary rod would traverse)] on preoperative full length, standing, hip-to-ankle radiographs and accordingly setting the distal femur resection guide for each knee and determining the accuracy of the distal femoral resection using extramedullary guide rod affixed to the distal femur cutting block with reference to markers placed preoperatively (using image intensifier) over femoral head centre. Postoperatively, femoral component mechanical alignment was determined on full-length radiographs and compared in both the groups.

Results:

The mean postoperative femoral component coronal alignment was not different between the two groups (p=0.31). The outlier rate for femoral component alignment (outside ± 3° range from a neutral alignment of 90° in the coronal plane) in conventional group (12.4%) was not significantly different (p=0.67) compared to that in the navigation group (14.2%). There was no difference in the outlier rates for femoral component alignment between the 2 groups in knees with varus < 10° (p=0.78), varus 10°-20° (p=1.00), varus > 20° (p=0.19) and valgus (p=0.48) deformities. For knees with VCA ≥8°, the mean femoral component alignment (p=0.05) and the outlier rate (p=0.42) was not different when the 2 groups were compared

Discussion & Conclusion:

Optimised conventional technique results in accurate placement of femoral component and reduced outlier rates comparable with navigation during primary TKA. Individualising femoral VCA and verifying cut accuracy using extramedullary guide rod during conventional TKA can substitute for navigation for distal femoral cut during primary TKA.

002

EVALUATION OF THE ADDUCTOR CANAL BLOCK FOR POSTOPERATIVE PAIN CONTROL AND EARLY FUNCTIONAL RECOVERY IN ARTHROSCOPIC KNEE SURGERY: A SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMIZED TRIALS

Ashraf Elazab

Egypt

Introduction:

The purpose of this study was to evaluate the adductor canal block (ACB) in arthroscopic knee surgery and to evaluate its effect on postoperative pain score, opioid consumption, and quadriceps muscle power

Methods:

Randomized controlled trials (RCTs) which compared ACB with placebo or other anesthetic techniques in arthroscopic knee surgery until 30 September2015 were identified in the databases. Ten studies were eligible according to our selection criteria. Outcomes including pain score with rest and activity, opioid consumption and quadriceps muscle power were extracted from selected studies and it were analyzed

Results:

Randomized controlled trials (RCTs) which compared ACB with placebo or other anesthetic techniques in arthroscopic knee surgery until 30 September2015 were identified in the databases. Ten studies were eligible according to our selection criteria. Outcomes including pain score with rest and activity, opioid consumption and quadriceps muscle power were extracted from selected studies and it were analyzed

Discussion & Conclusion:

The ACB in arthroscopic knee surgery could achieve the goals of postoperative pain control and quadriceps muscle power preservation which are essentials for early functional recovery. However, more RCTs may be needed to confirm the efficacy of the ACB and the possibility to replace the femoral nerve block for postoperative pain control in the arthroscopic knee procedures.

003

WINDSWEPT DEFORMITIES – AN INDICATION TO INDIVIDUALISE VALGUS CORRECTION ANGLE DURING TOTAL KNEE ARTHROPLASTY

Ahmed Adel Khalifa*, *Arun Mullaji-Gautum Shetty

Egypt

Introduction:

We aimed to determine varia□on in femoral valgus correc□on angle (VCA) betweenthe two limbs in a pa□ent with windswept deformity undergoing total knee arthroplasty(TKA) as measured in a full length standing hip to ankle radiograph, we hypothesized thatthere will be a signi□cant di+erence between the VCA of both limbs and therefore it ismandatory to individualize the distal cut angle for each limb according to the preopera□vemeasured VCA

Methods:

a retrospec□ve study where the Femoral VCA was measured on full-length, hip-to-ankle, standing radiographs and was compared between the varus and the valgus limbs in 66pa□ents with windswept deformi□es undergoing TKA.

Results:

The mean VCA in varus knees was signi□cantly higher compared to mean VCA invalgus knees (p = 0.002).

Discussion & Conclusion:

. this is considered the largest series of windswept deformity cases. Signi□cantdi+erence in VCA is present between the varus and the valgus limbs in most pa□ents with windswept deformity undergoing TKA, which support the hypothesis of individualizing thedistal femoral valgus cut angle according to the preopera□ve measured VCA in order tominimize the postopera□ve alignment error

004

CHALLENGES IN REVISION TKA

Raju Vaishya

India

005

FORGOTTEN KNEE- PREDICTIVE FACTORS IN TKA

Dhanjay Gupta

India

006

WELCOME WORD

Abdelfattah Saoud

Egypt

007

CT & MRI CHANGES IN THE PARASPINAL MUSCLES IN PATIENTS WITH IDIOPATHIC SCOLIOSIS: PROSPECTIVE STUDY

Khaled Zaghloul MD, Basem Awad MD, Donia Sobh MD

Egypt

Introduction:

Scoliosis is a three–dimentional spinal deformity characterized by lateral and rotational curvature of the spine with cobb angle of 10 or more. It is caused by different congenital, osseous, neoplastic or neuromuscular abnormalities. When scoliosis is not associated with any of these abnormalities, it is called idiopathic scoliosis. Idiopathic scoliosis is further classified according to the age into infantile, juvenile and adolescent. Idiopathic scoliosis (AIS) is usually more evident after puberty due to progressive axial growth

Previous studies revealed that idiopathic scoliosis is associated with abnormalities in fiber composition of the back muscles that result in muscle dysfunction. Histologic studies proved that these changes are more evident on the concave side of the scoliotic curve.

Methods:

. 18 patients with idiopathic scoliosis were referred to Mansoura university hospital clinics in the period from September 2015 to February 2017. This study includes patients with idiopathic scoliosis. Patients with secondary scoliosis due to other abnormalities (congenital, neurogenic or neoplastic) were not included in this study. Verbal consent was obtained from the patient's parents. We included all cases were the cobb angle is more than 10 degrees, 17 cases were AIS and only one case were an early onset scoliosis.

AIS cases were classified according to Lenke and we included only Lenke I curves.

Discussion & Conclusion:

As part of their routine work-up, these patients were referred to the radiology department for X-ray whole spine (PA, and lateral views), whole spine CT and MRI. The whole spine MRI was performed on (1.5 T) Philips scanner. The participants were scanned in the supine.

Both the CT and MRI clearly demonstrated the atrophic changes of the paraspinal muscles along the concave side and there was no significant differences between the CT and MRI as regard the grade of muscle atrophy, P-value =1
In our study. Both MRI and CT demonstrated the atrophy of the paraspinous muscles in patients with idiopathic scoliosis in the form of reduction in the size of the muscle fibers, T1 & T2 hyperintenities within the muscle fibers by MRI and low density within the muscles fibers by CT as well as widening of the fatty spaces between the muscle bundles. Assessing the paraspinal muscles along the whole spine, we found that in all patients, the atrophic changes were more pronounced at the apex of the curve. **Conclusion**
In patients with idiopathic scoliosis, CT and MRI are effective non-invasive modalities to assess the changes in the paraspinal muscles. They demonstrate atrophic changes and fatty degeneration of the paraspinal muscles, more evident at the concave side of the apex of the primary curve. The degree of fatty degeneration is proportional with the Cobb's angle.

008

FENESTRATED PEDICLE SCREWS AND CEMENT AUGMENTATION IN PATIENTS WITH POOR BONE QUALITY

Mahmoud Abousayed
Egypt

Introduction:
This study was designed to evaluate the middle-to long-term purchase of cement-augmented fenestrated pedicular screws in patients with poor bone quality due to osteoporosis, infection and/or tumours. The growing number of surgical procedures performed in the spine has highlighted the problem of screws loosening in these patients.

Methods:
From May 2015 to January 2017, 25 patients with a poor bone stock condition underwent posterior stabilisation by fenestrated pedicle screws and PMMA augmentation. Pain improvement and long-term clinical outcome were assessed by visual analogue scale (VAS) score and Oswestry low back disability questionnaire (Oswestry disability index ODI). Implant stability was evaluated by plain radiography. Complications were evaluated in all cases.

Results:
All patients were clinically and radiographically followed up for a mean of 12.84 months. VAS scores and ODI questionnaire showed a statistically significant reduction in pain and improvement in the quality of life. No radiological loosening or pulling out of screws was observed. In two cases, cement leakage occurred intraoperatively.

Discussion & Conclusion:
Fenestrated screws and cement augmentation provided effective and lasting purchase in patients with poor bone quality. The only clinical complication strictly related to PMMA screw augmentation did not require further surgery

009

DOES VESSELPLASTY AND OTHERS INTERVERTEBRAL PROCEDURES HELP IN OSTEOPOROTIC VERTEBRAL COMPRESSION FRACTURES?

Bambang Darwono

Indonesia

010

SURGICAL OPTIONS IN TREATMENT OF SPINAL METASTASIS OF THE THORACOLUMBAR SPINE

Yasser El-Mansy
Germany

011

ANATOMICAL GLENOID RECONSTRUCTION WITH AUTOLOGOUS ILIAC BONE GRAFT VERSUS LATARJET PROCEDURE FOR RECURRENT ANTERIOR SHOULDER DISLOCATION WITH LARGE GLENOID BONE DEFECT RANDOMIZED CONTROLLED TRIAL

Mohamed Ahmed Ashry
Egypt

Introduction:
Bone defects, both at the humeral as well glenoid side, are a frequent sequel after a shoulder dislocation, Now it is generally accepted, that in patients with severe bone loss a bone supplementing procedure for the glenoid defect is recommended

Methods:
This study was conducted on 55 patients with recurrent anterior shoulder instability, forty of them reached at least 6 months follow up. The 15 remaining patients were excluded due to lost follow-up, twenty of them underwent a congruent arc Latarjet procedure and the other 20 patients underwent autogenous tricortical iliac bone graft reconstruction of the glenoid defect.
There were 36 males and 4 females. With a mean age 25.9 years and the mean duration of follow up in our series was 16 month . For clinical evaluation, range of motion, and ROWE and ASES Scores were used

Results:
By comparing preoperative to postoperative values in each procedure, a significant improvements were recorded as range of motion and functional scores.
By comparing ICBG procedure to Latarjet procedure a significant improvements were recorded as range of motion with ICBG

Discussion & Conclusion:
Anatomical reconstruction with autogenous tricortical iliac bone crest graft is a reasonable alternative to congruent arc Latarjet in patients with recurrent anterior shoulder dislocation with genoid bone defect Level of evidence: II, Randomized controlled trial.

012

PROSTHETIC REPLACEMENT IN MASSIVE PROXIMAL HUMERAL BONE LOSS

Mohamed Galhoum, Amanda Wood, Simon Frostick
United Kingdom

Introduction:
Rate of total shoulder replacements has risen dramatically throughout the last decades subsequent to expanding indications and its leading outcomes in controlling

pain, improving functions and life quality. Proximal humeral bone defects are considered one of the predominant difficulties in reconstructive surgeries which may be due to primary cause such as, (Post. tumour resection, post resection of osteomyelitis and highly comminuted fractures) or prior to failed previous shoulder replacement. Controversy has still existed regarding the ideal reconstructive procedure. In our centre we prospectively report the short-term outcomes proximal humeral reconstruction with modular endoprosthesis

Methods:

23 shoulder reconstructions were performed for 21 patients in same centre by single surgeon (11 males and 10 females). The Indications for reconstruction showed great discrepancies, 10 patients presented with one of the aforementioned primary causes and 13 revised their primary prosthesis due to multi-failure factors. Prostheses were evaluated radiologically. The outcomes were assessed using DASH score, pain experience, limitations and patient satisfaction

Results:

The mean follow-up period was 41.4 months with minimum of 6 months. Minor differences have been noticed in follow-up between preoperative and postoperative scoring because of complexity of the cases. The mean DASH score has improved from 78.5±15 to 66±19. Average of pain intensity decreased from 6±3.6 to 4.3±3. Patients' satisfaction found to be in average of 6±2. Major postoperative complications included dislocation in 6 patients which has been managed by linked prosthesis, deep infection, recurrent notching in one patient. Traumatic Periprosthetic fracture occurred in 2 patients. No radiological loosening detected throughout the follow-up. Conclusion: Despite the complexity of patients, satisfactory results have been found for massive proximal humeral deficiency. Long term follow-up is required to assess survivorship of the prosthesis.

Discussion & Conclusion:

Prosthetic reconstruction in Large humeral defects yields to satisfactory results in controlling pain and Upper limb movements which is essential for activity of daily livings

013

CALCAR SUPPORT GRAFT FOR COMMINUTED FOUR PART FRACTURES OF THE PROXIMAL HUMERUS

Ahmed Elzeni

Egypt

014

EVALUATION OF RESULTS OF HEMIARTHROPLASTY IN COMMINUTED FRACTURE PROXIMAL HUMERUS (3-4 PARTS).

Beshoy Ebrahim Hanna, Amr Elsayed, Mohammed M Kotb. Waleed Riad Saleh

Egypt

Introduction:

Proximal humerus fractures are common injuries that are increasing in incidence with the aging of the population. While nonoperative treatment of some fracture patterns results in

clinical success, other, more displaced and comminuted fractures may require surgery to ensure a successful outcome. It is important to evaluate both patient and fracture characteristics in deciding upon the appropriate type of treatment. Every effort should be made to perform a humeral sparing procedure in younger patients. In the elderly, especially with more complex four-part fractures and fracture dislocations, hemiarthroplasty and reverse total shoulder arthroplasty are indicated to decrease complication rates and improve functional outcomes.It is critical to achieve proper implant height and positioning of the tuberosities. For those patients or fractures in which the tuberosities are unlikely to heal or cannot be adequately reconstructed, reverse total shoulder arthroplasty should be considered.

Methods:

The study included 10 patients with comminuted proximal humeral fractures , their age ranged from 40-70 years and the mean age of patients was 57.2±6.3 years , 4 of them were males and 6 were females

Results:

In postoperative results four of them have no stiffness(40%), two has little stiffness(20%), four have sever stiffness(40%) .

According to Quick DASH, 3 patients graded as excellent, 2 patients graded as good, 3 patients graded as satisfactory and 2 patients graded as poor.

Discussion & Conclusion:

The shoulder is an elegant piece of machinery. It has the greatest range of motion of any joint in the body. However, this large range of motion can lead to joint problems

015

STEMLESS SHOULDER ARTHROPLASTY USING GLENOID PATIENT SPECIFIC INSTRUMENTATIONS, FUNCTIONAL OUTCOMES AND UNEXPECTED INTRAOPERATIVE INCIDENTS

Mohamed Galhoum, Simon Frostick, Amanda Wood

United Kingdom

Introduction:

Stemless shoulder arthroplasty was first introduced in 2004 .The development of these prostheses allows restoration of the gleno-humeral centre of rotation without violation of the humeral shaft. Stemless prosthesis can be used to preserve humeral bone stock and to provide a solution for patients with proximal humeral deformities. Complications related to stem malalignment and periprosthetic fractures can be limited. Few studies have reviewed the outcomes of a stemless humeral replacement.

This prospective study reports the intraoperative incidents and short-term outcomes for stemless humeral replacement.

Methods:

52 patient consented for stemless shoulder arthroplasty operation; however, only 42 patients were available at final follow-up (26 anatomic, 15 reverse, and 1 hemiarthroplasty). All patients were operated in one centre by a single surgeon. Glenoid patient specific instrumentations have used for all patients. Patient's pain, stability, satisfaction, range of motion and Constant score are used for follow-up assessment 6, 12 months and then annually. Implants were evaluated radiologically.

Results:

The mean follow-up was 16 months (range: 6-40 months). Pain intensity fell from 7.3 to 2.5±3. Stability improved from 2.6 to 0.6. Overall patients' satisfaction reached 73±28 out of 100. Constant score increased from 27 preoperatively to 54 at final follow-up. Improvement in range of motion was noticed in (forward flexion increased from 85 to 112 and Lateral elevation was 78 to 110) and arm strength reached 12 pounds postoperatively instead of 3 preoperatively. Intraoperatively, it was not possible to insert a stemless prosthesis in five cases as it was too difficult to release the soft tissue. Two patients' humeral components had completely displaced immediately postoperatively and both were revised into stemmed prosthesis. One patient had a glenoid component malposition and was revised. One patient had a fall 3 months postoperatively and fractured the proximal humerus and displaced the humeral component. One patient had postoperative instability. No loosening has been detected on humeral or glenoid components.

Discussion & Conclusion:

Stemless total shoulder arthroplasty offers satisfactory results and improvement of functional outcomes. Alternative Planning for intraoperative conversion to a stemmed prosthesis is advised. Long-term follow-up is required.

016

BICOLUMNAR FUSION FOR SCAPHOID NONUNION ADVANCED COLLAPSE WITHOUT BONE GRAFTING

Mohamed Gabr

Egypt

017

HEMI RESECTION OF THE ULNAR HEAD IN MANAGEMENT OF DISTAL RADIO-ULNAR JOINT ARTHRITS

Muhammad Quolquela

Egypt

Introduction:

DRUJ (distal radio-ulnar joint) arthritis is usually a part of arthritic disease process involving the whole hand and presents with ulnar head prominence with painful limited pronosupination ane weak hand grip strength. Traditional surgical treatment entails resection of the arthritic ulnar head which ensures pain relief and improvement of prono-supination. Drawbacks of such ulnar head total resection is twofold. Firstly, loss of the ulnar head sharing of load transmission across the wrist results in weakness of hand gripping. Secondly, loss of the stabilizing effect of the triangular fibro-cartilage (TFC) results in springing and instability of the remaining ulnar stump. In an attempt to avoid complications of total ulnar head resection , partial (hemi) resection of only the articulating ulnar head was performed with preservation of the ulnar styloid together with the attached TFC to prevent springing of the ulna and preserve some ulnar sharing of load transmission across the wrist.

Methods:

21 hands in 13 patients with rheumatoid DRUJ arthritis were treated surgically after failure of non operative management. They were 11 females and 2 males with an average age of 25 years (range 20 to 44 years). 10 patients had bilateral hand involvement. Average total wrist movement arc was 40º (range 30º to 55º) with average dorsi-flexion 20º (range 15º to 25º) and average palmar flexion 25º (range 20º

to 35º). Average prono-supinaton range was 60º (range 55º to 75º). In all patients, ulnar head was prominent and painful but relatively stable. Grip strength had an average of 35 % of normal side (range 25% to 45%). Through a direct approach along the distal ulna, the extensor retinaculum was opened in a Z-plasty fashion creating two flaps; a proximal flap based radially and a distal one based ulnarly. In all patients, extensor carpi ulnars (ECU) tendon was observed to subluxate volarly permitting the ulnar head to herniat dorsally between this tendon and extensor
digiti minim one. The capsule was opened and the hypertrophied synovium together arthritic head were excised preserving the ulnar styloid with attached TFC. The ulnar head was divide obliquely so that the final cut surface would be inclined from distal to proximal and radially to be parallel to the ulnar border of the distal radius to minimize radio-ulnar impingement. Free Palmaris longus tendon graft was harvested and made as an anchovy and anchored in the void created after ulnar head resection. During closure of the wound the proximal extensor retinacular flap was reefed under ECU tendon with the latter relocated dorsally radial to the preserved ulnar styloid to stabilize the remaining distal ulna. The wrist was splinted in neutral prono-supination and slight dorsiflexion for three weeks followed by gradual mobilization

Results:

Patients were followed up for an average of 38 months (range 28 to 51). All patients were pain free. Post-operatively, 18 patients had regular jobs and 5 patients had restricted jobs. Average post-operative total wrist movement was 70º (range 55º to 80º) with average dorsi-flexion 30 (range 25º to 45º) and average palmar flexion 45 (range 30º to 50º) .Grip strength had a mean of 75 % of contr-alateral side (range 65% to 85%). Mayo modified wrist score improved from an average of 50 points (range 40 to 60) preoperatively to 70 points (range 60 to 80) postoperatively (P=0.03).

Discussion & Conclusion:

Hemi-resection of the ulnar head with free tendon graft interposition and ECU subsheath reconstruction for DRUJ arthritis results in a improved pain free prono-supination with increased hand grip strength

018

OUTCOME OF ARTHRODIASTASIS IN TREATMENT OF PERTHES' DISEASE

Osman Abdellah Mohamed

Egypt

Introduction:

The aim of of this work is to assess the effect of this treatment on the shape of the femoral head, the range of motion(ROM),radiological changes of femoral head, the occurance of complication, and the prognosis of perthes' disease.

Methods:

From 2006 to 2017, 45 patients (50 hips) Treated with articulated hinged distraction of hip . 25 hips treated by orthofix external fixator (EF) and 25 hips treated by ilizarov (EF) . The mean age at the time of surgery was 8 years. The duration of symptoms varied from a period of 6 months to 60 months. Radiographs taken during the fragmentation stage of the disease were classified by the lateral pillar method of herring, 20 were class II and 30 were class III .

Results:

The follow-up period ranged from 1 year to 8 years . An improvement of hip motion (ROM) 85% of the normal range was restored. There was marked improvement of degree

of pain and limp post operatively. The results at the end of the follow-up. (If excellent and good results are labeled as satisfactory), this will make 45 hips (90%) satisfactory results.10 patients were analyzed at skeletal maturity: Harris hip score were performed for pain, function, daily activities
, hip (ROM), and limb length discrepancy .The average 80% (range 50-90). 8patients had some limitation of hip abduction and internal rotation .X- rays of the hip joint showed some degree of coxa magna and of spherical shape with good congruency to the acetabulum.

Discussion & Conclusion:
Arthrodiastasis of the hip joint either alone or with soft tissue release proved to be a definitely good contribution to the treatment of LCPD. Its advantages are the following: Easy technique, minimal complications, doesn't disturb anatomy of either femur or acetabulum. Short hospitalization period. Correction of shortening because it adds to length of the limb, and can be applied again if collapse occurred after removal.

019

THE ROLE OF FEMORO-ACETABULAR ZONES CLASSIFICATION AS A PREDICTOR FOR THE SUCCESS OF NON-SURGICAL TREATMENT IN LATE PRESENTING CASES OF DDH.

Osama Elghobashy
Egypt

Introduction:
Developmental dysplasia of the hip (DDH) is a pediatric condition that has been recognized from the ancient times of Hippocrates. It is a relatively common condition which has remained controversial in its management despite several diagnostic and treatment advances (1).it is well accepted that the proper growth and development of the acetabulum and its growth are primarily due to the presence of the femoral head in adequate contact and without stress within it. In other words, the acetabulum needs the femoral head for its development (2).

Radiographic surveillance is vital in the assessment of developmental dysplasia of the hip in children. Used in combination with clinical examination, the anterior-posterior (AP) pelvic radiography can provide valuable information regarding both acetabular morphology and femoral head coverage, which in turn greatly assists in the planning of management (3-5

The acetabular index (AI), first described by Hilgenreiner in 1925, provides a direct measure of the angle of the acetabular roof (6). In many respects, AI is the gold standard of measurements in DDH, as it measures the severity of dislocation, acetabular remodeling (7, 8) and outcomes for the various forms of DDH treatment (9). In 1978, Tönnis (10) described a radiographic classification of DDH. It has been shown to be predictive of success or failure of the use of Pavlik harness in the treatment of DDH as well as being predictive of likelihood of achieving a successful closed reduction (11, 12). Closed reduction is the treatment of choice for almost all patients under the age of 18 months (13). For children who are 18 to 36 months old, closed reduction is still feasible; however it has a higher rate of failure needing subsequent open reduction (14). In 1941, Severin described a classification to quantify the radiographic outcome of treated developmental dysplasia of the hip (DDH) at skeletal maturity (15). There are 6 groups in the Severin classification . He described a high association between osteoarthritis and advancing Severin groups(16).

Methods:

Approval was sought from the Research and Ethics Committee before conducting this retrospective study of all late presented cases of DDH during the period from 2000 to 2016. Inclusion criteria were previously untreated patients aged between one and three years. Neurological, post-traumatic and septic dislocations were excluded. Treatment consisted of closed reduction and hip spica casting with subsequent follow up of a minimum of three years post-reduction (3-11 years) with all patients being above six years at final evaluation.

Case notes and radiographs were analyzed by three observers. The data documented included age at reduction, acetabular index pre- and post-reduction, Tonnis scoring of dislocation, the presence of ossific nucleus before reduction, the femoro acetabular zone (FAZ) score and any complications detected.

A total of 49 patients (65 hips) of which there were 44 females and 5 males were identified and their parents contacted. In the normal hip at birth, the femoral head is deeply seated in the acetabulum and held within the confines of the acetabulum as reflected on radiographic images where the center of proximal femoral metaphysis is almost on the center of the normal femoro-acetabular zone . However we hypothesis that the acetabular index immaturity and the degree of femoral head subluxation/dislocation together are the main contributors for the outcome. In other words, the lower the acetabular index and closer the femoral head to the acetabulum, the higher become the chances of success of closed reductio. It was hoped to determine the severity of dislocation within which an acceptable results with closed reduction could be obtained. The Femoro-Acetabular Zones (FAZ) are drawn on the AP view of the pelvis. The acetabular index is an angle formed by the junction of the Hilgenreiner line and a line drawn along the acetabular surface. From the lateral margin of the superior acetabular rim the Perkin's line is drawn then, from the point of meeting of the acetabular roof line of the AI and Perkin's line , at the superior acetabular rim, draw 2 perpendicular lines on the previous two lines (1st on the acetabular line and 2nd on the Perkin s line). Three zones marked I, II and III are created as seen on the left hip . If it is obvious that the head of femur is in the 1st zone, no need to continue drawing the rest of zones.

Results:

A total of 49 cases were followed up. Surprisingly, some cases had a missed follow up for a long time although some of them were symptomatic.

Six hips were found to be turned to open reduction during the course of treatment because of failure to achieve or maintain concentric reduction which was initially started.

Using Severin classification, the cases were classified at or after the age of 6 years into Severin I&II (37 hips) and Severin III (22 hips) while no cases fell into the other Severin grades.

Based on radiographic examination, 25 hips (38.5%) were classified as FAZ I, while another 25 hips were in FAZ II, and the last fifteen hips (23%) were FAZ III.

On review of the final radiographs, twenty one hips (84%) of FAZ I ranked as Severin I . The remaining 4 cases in this zone fell in Severin III and on close observation an association with a higher acetabular index angle (above 39 degrees) was found.

Cases classifieds FAZ II showed 14 hips in Severin I or II (56 %), open reduction was needed in 3 cases (12%) and 8 hips (32%) were graded as Severin III (figure 4).

Observation of cases classifieds FAZ III showed that they had the worst results as only 2 cases (13.3%) ended as Severin I,II, while 10 hips (66.7%) were graded as Severin III (figure 4) and 3 (20%) needed an open reduction.

Statistical analysis:

Nine hips (14%) showed radiographic signs of AVN with a tendency (not statistically significant due to small numbers) towards a correlation between AVN and severity of dislocation. An acetabular index angle of 39° appeared to be the maximum angle for achieving a successful outcome (Severin I, II) (p value 0.006). Cases falling under FAZ I with AI below

39° got the best functional outcome without the need for any secondary procedure during the period of follow up.

It is clear from the analysis of the results that there is a tendency towards failure of closed reduction with increasing of grade of FAZ and this was statistically significant (p value 0.001).

Examination of the cases using the Tonnis classification for severity of dislocation showed that no cases fell under grade I. The majority of cases were in grade II [33 hips (50.8%)] of which, at the end of the study, 26 hips (78.8%) were Severin I,II and 5 hips (15.2%) finished up as Severin III while 2 hips (6.1%) needed an open reduction .

Tonnis classification showed a statistically significant value as a predictor of the success of non-surgical treatment (p value 0.001) when evaluated by Severin classification. On the other hand, at the final evaluation FAZ classification showed the same accuracy (p value 0.001). As Tonnis has four grades of dislocation while FAZ has only three a direct statistical comparison could not be made.

There was no statistical significance while assessing gender (p value 0.798), side of affection (p value 0.819), the presence of the ossific nucleus prior to reduction (p value 0.368) or the drop of acetabular index after reduction (p value 0.263)

Discussion & Conclusion:

Delayed presentations of DDH are still common problem especially in the developing countries. Large poorly educated families, the painless nature of DDH amongst mainly girls are also factors in late presentation. Long distances to appropriately resourced hospital is another problem facing the local healthcare provider as many orthopedic surgeons become involved in the management of these cases and the difficulty assessing surgical treatment may limit treatment options.

Few classifications for DDH are available, in our knowledge, and they concentrate mainly on the severity of dislocation. Tonnis' classification, as an example, has some drawbacks such as the difficulty in classifying cases where the ossific nucleus has not appeared and radiographic landmarks can be difficult to identify.

The FAZ classification is novel as it looks at both sides of the pathology, i.e. the acetabular development as assessed using the acetabular index and the severity of dislocation as assessed by the location of the head within the three zones.

The study compares the outcome of various cases of DDH. Hips graded FAZ I with an AI below 39° achieved a satisfactory outcome without the need for any further procedures.

The reverse was noted in FAZ III, where even at a relatively lower AI, secondary procedures were needed in the majority of cases. Results were equivocal in cases graded as FAZ II. In other words, in a low dislocation (FAZ I), the main predictor of successful outcome was the acetabular index while in high dislocation (FAZ III), the main predictor was the severity of dislocation irrespective of the acetabular index.

Conclusion: With acknowledging the limitation in follow up time (minimal to three years or patient age is six years) and patient numbers (65), that the paper offers a useful classification system for DDH management especially for general orthopedic surgeons who can be benefit from a simple method for selection of cases for closed reduction .

In conclusion, the new classification proposed here can be reliably used to predict the outcome of closed reduction of DDH, in the selected age group, in short to mid-term. There is a propensity towards needing an open reduction in those hips who fall under FAZ II or III.

Orthopedic surgeons should understand the complications of treating patients belong to FAZ II and III with closed reduction only.

Have a Comment?:

The aim of this presentation is to help Orthopedic Surgeons especially those with limited surgical experience and who might be involved in treating cases of DDH to select cases that can be benefit from closed reduction alone and identify cases that need early referral.

020

LONG TERM FOLLOW UP OF TRIPLE ATTACK SURGERY FOR DDH AFTER WALKING AGE

Ashraf Eltabie
Egypt

Introduction:

Normal development of the hip joint is dependent mainly upon concentric reduction of the femoral head within the acetabulum. Subluxed or dislocated hip joint provides poor stimulation of the acetabulum to remodel the dysplasia towards the normal alignment. The potential for growth and remodeling of the hip joint is maximal at birth and declines thereafter.

The frequency of secondary reconstructive procedures for DDH after reduction has ranged from 38-80% in long term follow up studies.

The incidence of avascular necrosis of the hip was reduced from 25-10% if femoral and pelvis osteotomy were combined at the time of open reduction in toddler children in most of studies

Methods:

32 patient with 38 hips of DDH were treated by open reduction, femoral and pelvis osteotomy with or without femoral shortening (Tripple attack surgery) between September 2004 to October 2010. There were 20 females and 12 males, 26 patients were unilateral and 6 patients were bilateral, there average age was 2.2 years (ranged from 1.5 years to 5.5years) with average follow up period of 8 years (ranged from 7-13 years).

Pre and post operative x rays were assessed for acetabular index and concentric reduction of the hip. Through anterior approach, open reduction and femoral and pelvic osteotomy was done for all cases and femoral shortening in 75% of cases (24 patients).The Pelvic osteotomy used in all patients was salter's osteotomy.

Results:

Clinical assessment according to modifies Mckey's Crieteria, (Excellent, good fair and poor) shows 87% of patients were excellent and good (28 patients) and 13% of patients were fair and poor (4 patients). The unsatisfied resuits were 4 patients who had AVN and Redislocation in 2 of them, treated by revision. Radiological assessment according to Sovercign's Crieteria shows 81% satisfactory results.

Discussion & Conclusion:

The earlier the reduction of the hip, the better is radiographic appearance and the function. Triple attack in DDH has a good functional result in toddler children with little complications. The incidence of AVN is less than with open reduction only

021

SEVERE CROUCHING GAIT IN CEREBRAL PALSY CHILDREN

Nady Saleh
Egypt

Introduction:

Deformities and disabilities in the knee in cerebral palsy are difficult to evaluate and treat. Pelvic, hip, knee, ankle, and foot deformities are interrelated. Muscle imbalance in the pelvis or the ankle and foot can cause deformities in the knee, and muscle imbalance in the knee can cause deformities in pelvic, hip, or ankle .

Crouch gait in cerebral palsy is associated with spasticity and contracture of the hamstrings and weakness of the extensors of the hip and knee and ankle plantar flexors. Different treatment options have been described in the literature to deal with this difficult problem.

Discussion & Conclusion:

Weakening of the hamstrings, and augmenting the power of the knee and hip extension, and ankle planter flexion was undertaken in 27 cerebral palsy patients (54 knees) with severe crouch gait. This surgery entailed transfer of the semitendinous to the adductor tubercle, sartorius to the patella and semimembrenousis to medial head of gastrocnemeus. The procedure reduces the power of knee flexion and reinforces the strength of hip and knee extension and ankle plantar flexion. After a main follow-up of four years the degree of fixed knee flexion deformity, knee flexion in stance phase and the popliteal angle are improved. The power of knee and hip extension and ankle plantar flexion are augmented. The range of knee and ankle motion is improved in all patients. The GMFCS improved from level III and IV preoperative to level II at final follow up. The therapeutic ambulators and household ambulators became community ambulators after surgery

022

PERCUTANEOUS NEEDLE QUADRICEPS TENOTOMY FOR TREATMENT OF IDIOPATHIC CONGENITAL DISLOCATION OF THE KNEE.

Mohamed Khaled, Wael Eladly, Kamal Elgafary

Egypt

Introduction:

Congenital dislocation of the knee is a rare condition with incidence 1:100000. CDK can be idiopathic or syndromic. Our study evaluates percutaneous needle tenotomy for treatment of idiopathic flexible congenital dislocation of the knee.

Methods:

A prospective case series was done on 15 infants with idiopathic congenital dislocation of the knee 9 were male 6 were females. Closed reduction was tried first if failed the knee was examined if the knee can be flexed beyond 0 serial casting was done If the knee cannot be flexed beyond 0 percutaneous needle tenotomy was done.

Results:

15 infants presented with idiopathic flexible congenital dislocation of the knee. 9 were males and 6 were females. 3 cases reduced with closed reduction. 5 cases reduced with serial casting with gradual flexion. 7 cases cannot flex beyond 0 underwent percutaneous needle tenotomy. All cases can walk within normal age range with no pain and full range of motion and good quadriceps function. US was done for cases of PNT at walking age to ensure healing of the quadriceps tendon which was adequately healed.

Discussion & Conclusion:

PNT is good option for treatment of congenital dislocation of the knee .good selection of cases is mandatory.**:**

023

EARLY TREATMENT OF RELAPSED CLUB FOOT FOLLOWING PONSETI TECHNIQUE AFTER 3 YEARS OF AGE

Ashraf Eltabie

Egypt

Introduction:

The neglected club foot is the most serious cause of physical disability among congenital

musculoskeletal disorders.
The worldwide acceptance of the Ponseti technique occurs after 1995 , by first acceptance of the publication of Ponseti series after long term follow up of 2000 cases of club foot

Methods:

Causes: Relapses after Ponseti technique is about 10% of compliant families to dennis brown splint and more than 80% of non compliant families. The basic underling muscle imbalance of the foot and ligament stiffness are the causes of relapse

Results:

Diagnosis: Relapses in toddlers should be assessed well to diagnose which element is relapsed. Clinical and radiological evaluation is considered, and the most important issue is to differentiate the dynamic supination deformity from structural one. The most common relapses are varus deformity then equinus then dynamic supination deformity, simultaneous occurence of all these deformities can be present in many relapse.

Discussion & Conclusion:

Treatment: Depends mainly on the age of the child at the time of relapse, element of relapse and whether dynamic or structural deformity. Repeated casts is the protocol in all relapses following Ponseti technique to correct all elements and cord tonotomy when the foot reached 90˚ of dorsiflexion.
Dennis brown splint is advised at night only for these toddlersTibialis anterior tendon transfer should be considered only when the deformity is dynamic and not structural and no need for Dennis brown splint after surgery

024

ABNORMAL VESSEL SUBSTITUTING DEFICIENT DORSALIS PEDIS ARTERY IN CLUBFOOT PATIENT

Samir Shaheen

Egypt

Deficiency of dorsalis pedis artery in clubfoot patients has been under extensive study for quite atime,Ben-Menachem 1974, Greider TD 1982, Hootnick (1983), Kitziger(1991), Dobbs 2004, Waisbrod 2004, David RH 2004 and many other authors.
In a previous study the anterior tibial artery and dorsalis pedisdeficiency in clubfoot patients was documented and found to be prevalent in more than 30% of clubfoot patients. This was Published in the "Journal of PediatricOrthopedics B" J PediatrOrthop B. 2017Jul 12 [Epub ahead of print]Arterial tree anomalies in patients with clubfoot: an investigation carried out at Soba University Hospital. Shaheen S[1], Bahar MEH, Mohammed AHA, Elbadri SFA, Johari A.
In this study we mentioned about an abnormal vessel found in PMR operations using Turco incisions, crossing from posterior tibial artery to anterior tibial artery territory, should this be deficient. This abnormal artery was given a name "Mid-tarsal branch of the Posterior Tibial Artery". In this current study we intend to document the presence of this crossing vessel using Doppler Ultrasonography. We found that this crossing artery is detectable in about 9% of cases. The significance of this artery when found and the importance of its protection during surgery will be discussed. Keywords: Clubfoot, Arterial abnormalities, Abnormal Crossing Vessel.

025

INFECTED TKA: EARLY AND LATE

Jan Verhaar

Netherlands

026

TKR IN OSTEOPOROTIC PATIENTS, TECHNICAL PEARLS

ADEL ADAWY
Egypt

027

THE PAINFUL TKA

Jan Verhaar
Netherland

028

BEARING SURFACES IN ARTHROPLASTY: PAST, PRESENT AND FUTURE

Khaled Hamed
Germany

029

SAGITTAL PLANE ALIGNMENT: PARAMETERS FOR DORSO LUMBAR SPINE SURGERY

Douglas Orr
USA

030

SAJITTAL IMBALANCE ASSOCIATED WITH SPINAL DEFORMITIES LIKE INCREASED DORSAL KYPHOSIS, ANKYLOSING SPONDYLITIS

Mohamed Meziad
Egypt

Sajittal Imbalance associated with spinal deformities like increased dorsal kyphosis, Ankylosing spondylitis , different fpathological conditions like inflammations and spinal tuomers was not considered as major factor behind the bad quality of life of the affected persons. Un satisfactory results after surgical correction of Spinal deformities and degenerated spine are related to spinal imbalace particularly in Sajittal plane. Global assessment of the spine in different planes are very important before surgery to report the presence of Sajittal imbalance .post operative evaluation of sajittal balance restoration is very important , The quality of life of the patients could be improved markedly through spinal re alignment with particularly in Sajittal plane The presentation stress on the importance of Sajittal balance restoration for better quality of life.

031

GAP BALANCING AND MEASURED RESECTION TECHNIQUE IN

TOTAL KNEE ARTHROPLASTY

Roland Becker

Germany

032

TECHNICAL PEARLS IN PRIMARY TOTAL KNEE REPLACEMENT

Yousry Emad

Egypt

033

TKR WITH ULTRA CONGUERNT DEEP DISH ANTERIOR STABILIZED BEARING TECHNOLOGY

R K Araya

India

034

SPINE SURGERY IN ECONOMICALLY CHALLENGED SITUATIONS

Andrew Wakefield

USA

035

INTER TRANSVERSE VERSUS INTERBODY FUSION: COST EFFECTIVENESS ORIENTED

Abdelfattah Saoud

Egypt

036

EMERGENCY MANAGEMENT OF PELVIC FRACTURES

Mohammad Khalid Sherwani

India

037

TIPS N TRICKS SURGICAL MANAGEMENT OF POSTERIOR WALL FRACTURES OF ACETABULUM

Vijay Sharma

India

038

INTRAMEDULLARY NAILING IN POLYTRAUMA PATIENTS:

GOOD, BAD & UGLY

Mohammad Khalid Sherwani
India

039

MANAGEMENT OF RIB FRACTURES; IS IT TIME FOR A CHANGE?

Chris Van Der Werken
Netherland

040

EFFECTS OF POSTERIOR CONDYLAR OFFSET ON POST-OPERATIVE FLEXION OF TKR

R K Araya
India

041

CEMENTED OR CEMENTLESS TKR :COMPARATIVE STUDY OF 200 CASES AT A MINIMUM FOLLOW-UP OF 11 YEARS

Prudhon Jean Louis
France

Introduction:

Since 1996 we have been using cementless fixation with hydroxyapatite (HA) coating. The purpose of this paper is to compare survivorship of a series of 100 cemented Total Knee Arthroplasty (TKA) to a similar series of 100 cementless with a follow up of 11 to 16 years.

Methods:

Both TKA are mobile bearing total knee postero-stabilized. They can be used with cement or without cement.
Among 1030 New Wave TKATM implanted from 2002 to 2015 we have identified 100 cemented TKAs and 100 cementless TKAs. All these cases were primary replacement. Differences in survival probability were determined using log-rank test.

Results:

Survival probabilities at 11 years of follow-up were:
Cemented group: 90.2% CI95%[81.9-94.8]
Cementless group: 95.4% CI95%[88.1-98.2]
Comparison between both group was not significant, p=0.32.

Discussion & Conclusion:

The advantages of cementless TKA are bone stock preservation, cement debris protection and the potential to achieve biologic fixation. Cementless implants rely on a porous or roughened surface to facilitate bone formation. HA has been shown to accelerate bone integration and to decrease micro motion of the components and to increase fixation.
With a survival probability of 90.2% (cemented version) and 95.4% (cementless version), this total knee prosthesis performs as intended in primary total knee arthroplasty. No statistical differences could be made between cemented and cementless implants.

042

CORRECTION OF FLEXION DEFORMITY IN TKR

Sandeep Garg

India

043

TECHNICAL ANALYSIS OF TKA IN CASES OF MULTIPLE DEFORMITIES

Harish Bhende

India

044

ALTERNATIVE TO TOTAL KNEE ARTHROPLASTY

Mohamed Elsawy Habib

Egypt

045

CORRECTION OF SEVERE VARUS IN TKR

Sandeep Garg

India

046

SPINAL INFECTIONS

Abdel Mohsen Arafa

Egypt

047

IMAGING SPINAL INFECTION

Hussein Abo El Ghait

Egypt

048

NON SPINAL CAUSES OF SCIATICA

Bahaa Kornah

Egypt

049

HOW TO DEAL WITH THE STIFF KNEE AFTER TOTAL KNEE ARTHROPLASTY

Roland Becker

Germany

050

BASIC STEPS IN REVISION KNEE ARTHROPLASTY

Jan Verhaar
Netherlands

051

OPTIMAL ALIGNMENT OF THE FEMORAL AND TIBIAL COMPONENTS IN TKA

R k Araya
India

052

THE INDUCED MEMBRANE TECHNIQUE IN THE PEDIATRIC FOREARM.

Ahmed Allam
Egypt

053

STABILIZATION TECHNIQUES FOR SCAPHOID INSTABILITY IN ADVANCED KIENBOCK DISEASE

Muhammad Quolquela
Egypt

Introduction: In advanced Kienbock's disease prior to arthritis development, excessive scaphoid palmar flexion due to lunate collapse and capitate proximal migration is the main cause of pain and wrist limited movements. Treatment aims at correction of scaphoid position and its stabilization .

Methods:

Fifteen patients with Kienbock's disease stage IIIB were divided into two groups (1st group was 7 patients treated with tenodesis using extensor carpi radialis longus tendon i.e. ECRL and 2nd group of eight patients treated with scapho-tarpezio-trapezoid arthrodesis i.e. STT fusion). Average age for the 1st & 2nd groups were 26 and 22 years old respectively. Average total wrist movement arc was 55º for the 1st group and 50º for the 2nd group. Grip strength had a mean of 45 % of normal side for the 1st group with 50 % of normal side the 2nd group. In 1st group; half ECRL tendon based distally was passed through in distal scaphoid from dorsal to volar wounds and back forth to maintain the corrected scaphoid position stabilized with K wires. In the 2nd group, STT joint was decorticated , packed with bone graft and stabilized with K wires.

Results:

Average follow up period was 3 years. Average post-operative total wrist movement was 80º for the 1st group compared to 70º for the 2nd group. Grip strength had an average of 65 % of contralateral side for the 1st group compared to 75 % for the 2nd group. Two non union of the fusion sites were reported in the 2nd group. In the 1st group, Mayo wrist score improved from a mean of 38 preoperatively to 82 postoperatively. In the 2nd group, the score improved from a mean of 36 to 70. Mild radioscaphoid arthritis was noted in three patients of the 2nd group.

Discussion & Conclusion:

Tenodesis of the sacphoid yielded better total wrist movements compared to the arthrodesis group without arthritic changes in the former patients while the arthrodesis patients showed better hand grip strength compared to the tenodesis group

054

VASCULARIZED MEDIAL FEMORAL CONDYLE CORTICOPERIOSTEAL FLAPS FOR TREATMENT OF RESISTANT HUMERUS NON-UNION

Omar Nasser

Egypt

055

MANAGEMENT OF FRACTURE OS CALCIS BY ILIZAROV FIXATOR WITH OR WITHOUT MINIMAL SURGICAL INTERVENTION

Mostafa Mohamed Mahmoud

Egypt

Introduction:

Treatment of fracture calcaneus remains controversial. ORIF is the standard treatment of DIACFs. Recently, Ilizarov method have been used in management of DIACFs as an alternative for ORIF to avoid it's multiple complications.

Methods:

20 patients with 24 calcaneal fractures (Sanders types III and IV) were treated using CR and Ilizarov external fixator with mini plantar incision in some cases to improve reduction of the posterior facet. The frame consisted of one ring applied to the distal tibia, 5/8 ring applied to the metatarsal bones and a half ring applied to the calcaneus.

Results:

The average AOFAS score was 83 (ranging from 68 to 95) . The mean Bohler's angle was changed from -5 preoperatively to 27.5 postoperatively. Calcaneal length, height and width were restored to 103%, 102% and 109% of normal respectively. The most common complication was superficial pin tract infection which responded to local pin care and oral antibiotics.

Discussion & Conclusion:

By achieving the goals of restoration of calcaneal length, height, width and subtalar joint distraction, this technique is a viable alternative for the management of DIACFs.

056

USE OF CIRCULAR EXTERNAL FIXATION IN MANAGEMENT OF GUSTILO OPEN FRACTURE TYPE 3

Ibrahim Abuomira

Egypt

Introduction:

Introduction. The management of open fractures continues to provide challenges for the orthopedic surgeon. Despite the improvements in technology and surgical techniques, rates of infection and nonunion are still troublesome. Early antibiotic administration is of paramount importance in these cases, and when coupled with early and meticulous irrigation and debridement, the rates of infection can be dramatically decreased. Early skeletal stabilization is necessary, which can be accomplished easily with circular external fixation.

Methods:

Materials And Methods

Thirty fresh consecutive compound fractures (Fig. 1) of the shaft of the tibia attending Orthopaedic OPD or emergency RIMS Hospital were treated with circular external fixator after debridement for the study. The exclusion criteria were closed fracture, pathological fractures. The fractures were assessed by AP and Lateral X-ray. Fractures were classified according to Gustilo's fracture classification of open fractures. Open wounds were debrided and tension free primary closure using interrupted nylon sutures was attempted wherever appropriate. In others, either split thickess skin grafting or local gastrocnemius flaps were used.

Results:

Results

Thirty open fractures were treated with external fixator from October 2003 to October 2015. The age ranged from 18 to 65 yrs. The duration of treatment with the fixator was 12-23 weeks (average 16 weeks). Nineteen patients wore a PTB cast for an additional period of 4 weeks. They were followed up until union and for a further period of 12 months. Patients were assessed for pain and functional limitations, and examined for angular and rotational mal-alignment and range of motion. Leg lengths were measured clinically.

Discussion & Conclusion:

We recommend the usage of Use of circular external fixation in management of Gustilo open fracture type 3 to provide primary definitive fixation for high-energy tibial fractures. Early weight bearing even in severely comminuted fractures is the key factor that separates it from other methods of fixation. It promotes early functional recovery, eliminating fracture disease. Dynamisation and correction of deformities in any plane is easily accomplished. Frame constructs could be modified to facilitate wound cover and access. Therefore it lends the much-needed flexibility in complex fractures.

057

INDUCED MEMBRANE OSTEOGENESIS FOR RECONSTRUCTION OF LARGE BONE DEFECTS AFTER TUMOR RESECTION

Mohamed Thabet

Egypt

Introduction:

Reconstruction of large bone defect especially after extra-articular and intercalary tumor resection remains a difficult challenge. A prospective study was conducted to evaluate the results of using the induced biologic membrane and staged bone graft for the management of such large defects.

Methods:

16 patients (10 males & 6 females) with an average age of 24.9 years (range, 13 – 54) were managed by wide resection of osteosarcoma (n = 9), Ewing's sarcoma (n = 4), parosteal osteosarcoma (n = 2) and chondrosarcoma (n = 1) and insertion of a cement spacer followed by a secondary bone grafting. The tumor was located in distal femur in 9 patients, shaft femur in 2, proximal tibia in 3, shaft tibia in 1 and distal tibia in 1. The resection was extra-articular in 12 patients, intercalary in 3 and intra-articular in 1 with a mean defect of 19.1 cm (15 – 24 cm). Fixation was mostly performed with locked nail (n = 12) and plate and screws (n = 4). Autogenous bone graft included posterior iliac (n = 8), anterior iliac and fibular strut (n = 6) and posterior iliac augmented with fibula (n = 2). The modified Enneking scoring system was used for final functional evaluation while a sore proposed by the authors was used for final radiological assessment.

Results:

The mean operative time for the first and second procedures were 3.5 and 4.1 hours respectively. Seven patients had incomplete healing with bone defect required a second grafting procedure. The mean time to bony union was 46.4 weeks (28 – 72 weeks). Full weight bearing was possible after a mean of 37.6 weeks (24 – 52 weeks) following second operation. After a mean follow-up of 41.4 months (15 – 30 months), the mean functional score was 83.1% (67% - 93%). According to the proposed radiological scale, 9 patients were rated excellent, 6 good and 1 fair. There were no cases of local recurrence, deep infection or complete resorption of the graft. One patient had superficial infection at distal locking screw. Two patients continued with pulmonary metastases.

Discussion & Conclusion:

The induced membrane technique is a reasonable biological alternative for reconstruction of large bone defects after tumor resection.

058

TREATMENT OF DISTAL FEMUR CLOSED FRACTURES WITH SEVERE METAPHYSEAL COMMINUTION: A NEW APPLICATION OF THE ILIZAROV CONCEPT OF COMPRESSION-DISTRACTION.

Ahmed Eltantawy, Ashrf Atef
Egypt

Introduction:

The treatment of intra-articular distal femur fractures with severe metaphyseal comminution is challenging. It is important to choose a technique that provides secure fixation, minimum tissue handling, and early ambulation. The aim of this work was to evaluate the outcomes of application of Ilizarov concept as an early definitive treatment of comminuted distal femur closed fractures.

Methods:

A total of 17 male patients (mean age 28.53 ± 6.33 years) presented with comminuted distal femur fractures (10 with type C2 and 7 with type C3-2 fractures according to AO/ASIF system), were included in this prospective study. Initial fixation of the articular fragments was done by inter-fragmentary screws, percutaneously through a limited open approach, and stabilization was completed by Ilizarov fixator. The procedure included acute shortening, through the comminution, followed by gradual re-distraction to

compensate the created shortening.

Results:

The mean amount of intra-operative shortening was 3.68 ± 0.53 cm. The mean external fixation index was 37.24 ± 2.53 days/cm. The mean follow-up period was 18.18 ± 1.91 months. All fractures united primarily in an average 137.65 ± 4.12 days, with no evident angular deformity or limb length discrepancy. None of the cases required a second major procedure or bone graft. The functional results were excellent in 3 cases, good in 12, and fair in 2 patients.

Discussion & Conclusion:

The Ilizarov concept of acute compression - distraction is a valuable alternative for the treatment of distal femur fractures with severe metaphyseal comminution.

059

TREATMENT OF INFECTED DIAPHYSEAL FEMORAL NONUNION IN ADULTS BY ILIZAROV

Saad Gaballah

Egypt

Introduction:

The problems in infected nonunion include multiple sinuses, osteomyelitis, bone and soft tissue loss, osteoporosis, joint stiffness, complex deformities, limb shortening and multi drug resistant infection

Methods:

12 male adult patients with infected femoral diaphyseal nonunion were treated using Ilizarov technique. The mean age was 40.58years. All had previous surgeries with a mean 3 operations(SD 0.953 and range 2-5 previous operations). Debridement was performed in all cases. Techniques adopted were acute compression in 3 patients and acute shortening in 9 patients. A minimum of 2 years was an inclusion criterion in this study.

Results:

Bone results, functional results and complications were evaluated. The mean time between injury and application of Ilizarov was 13.67months(SD 9.82, range 4-35 months). The mean follow up period was34.58 months (SD 10.82, range 24-60 months). The mean Ilizarov duration was 8.75 months(SD 3'019, range 5-14 months). The mean limb shortening was 1.917 cm(SD 1.084, range0-3.5 cm). Union was achieved in 10 patients(83.33%).infection was eradicated in 10 patients(83.33%). The bone results were excellent in 5 patients(41.67%), good in 3 patients(25%), fair in 2 patients(16.67%) and poor in 2 patients(16.67%). The functional results were excellent in 2 patients(16.67%), good in 8 patients(66.67%) and poor in 2 patients(16.67%).

Discussion & Conclusion:

The Ilizarov technique was found to be effective in treatment of infected diaphyseal femoral nonunion in adults as it allow simultaneous treatment of bone loss, nonunion, infection, shortening and deformities.

060

FOUR CORNER FUSION IN THE MANAGEMENT OF SCAPHOID

FRACTURES AND NONUNION

yasser youssef abe`d
Egypt

Introduction:

The motion preserving four corner fusion is one of the most accepted option in the managment of degenerative wrist after scsphoid nonunion. However, it can be used as a salvage procedure in non degenerative conditions including total avascular necrosis of the scaphoid and neglected trans scaphoid perilunate dislocation.

Methods:

Results:

Discussion & Conclusion:

Four corner fusion provide a reliable managment of the most challanging scaphoid injuries with good functional outcome and preservation of useful wrist range of motion.

061

INCIDENCE OF EARLY SURGICAL SITE INFECTION AFTER HIP HEMIARTHROPLASTY IN ASSIUT UNIVERSITY TRAUMA UNIT

Kerollos Gamal Habeb
Eygpt

Introduction:

This study aims to detect the incidence of early surgical site infection (SSI) in patients who underwent hip hemiarthroplasty following a hip fracture, in Assiut university trauma unit and identifying the possible risk factors.

Methods:

All patients who underwent hip hemiarthroplasty between January 2015 and January 2016 in Assiut university hospital were included in the present study. The detection of SSI was carried out using the United States Centers for Disease Control and Prevention criteria. Demographic and clinical data were collected and analysed for potential associations with SSI.

Results:

Among the 111 patients who met the study inclusion criteria, a total 10 SSIs were documented, giving an infection rate of 9%. infection rates were higher in females(p=0.028),Patients who waited for more than 3 days for surgery (p=0.007), patients with body mass index more than 30 (p= 0.001),patients with medical

comorbidities($p<0.001$),infection rate was also higher in patients whose skin incision closed by staples ($p=0.001$),The main microorganism detected was Staphylococcus aureus and, which accounted for 77.8% of the SSIs.

Discussion & Conclusion:

We concluded that the incidence of SSI after hip hemi arthroplasty in Assiut university hospital trauma unit is high in comparison to other studies. the long preoperative hospital stay was a risk factor for the development of SSI. Steps should, therefore, be taken to prevent unnecessary delay of surgery. Presence of medical comorbidities and increased BMI, female gender, were also risk factors for SSI.

062

EARLY RESULTS OF DUAL MOBILITY TOTAL HIP ARTHROPLASTY IN ACUTE TROCHANTERIC FRACTURES

Sameh Marei MD, Ahmed Ebied MS, Nadim Elemam MBBCh, Ayman Ebied PhD, FRCS

Eygpt

Background: hip arthroplasty has been suggested as an alternative to internal fixation for treatment of comminuted trochanteric fractures in elderly population. However, there is usually a fear of postoperative instability when arthroplasty is performed for hip fractures. Early Egyptian experience with the Dual Mobility (DM) THA in highly unstable trochanteric fractures is reported.

Material and methods: Twenty one patients with an average age of 72 years (range 65 to 84) had DM THA and been prospectively evaluated. All patients had comminuted and highly unstable intertrochanteric fractures. Patients were evaluated according to the American Society of Anesthesiology (ASA) scoring system and the AO classification for trochanteric fractures was employed.

All patients received cemented DM cup (Novae stick, SERF, France) and standard or long polished cemented stem. Trochanteric re-attachment was performed using Wroblewski's cross-over double wiring technique. Postoperative partial weight bearing mobilization was commenced from the second postoperative day.

One gram of Tranexamic acid was infused with the start of epidural anesthesia. additionally, operative time and blood loss were recorded. The modified Harris Hip Score was measured postoperatively and radiological evaluation of patients at 6 and 12 weeks then annually thereafter.

Results: 21 patients with an average follow up of 16 months (range 12 to 30) were evaluated with no loss to follow up. Two patients died 6 and 18 months after surgery from causes not related to the surgical intervention. 17 patients were classified as ASA III and 4 patients as ASA IV.At the latest follow up all patients were independently mobile. 8 patients were community ambulatory and 11 were mobile indoors. No dislocation was recorded and stable greater trochanter was observed in all patients. One patient developed postoperative hematoma that needed alteration of the anticoagulant protocol and 2 weeks of oral antibiotics. Another patient had periprosthetic fracture distal to the tip of the stem 6 months postoperatively.

The average HHS at a minimum of one year was 79 +/- 6 (mean +/- STD).

Conclusion:

Unstable trochanter fractures in presence of osteoporosis represent a challenge to orthopedic surgeons. DM THA is an attractive option that allows early postoperative mobilization with minimal risk of dislocation. Attention to details of exposure and reattachment of the greater trochanter is an essential step to enhance stability and early weight bearing.

063

SIMULTANEOUS OPEN REDUCTION AND INTERNAL FIXATION AND TOTAL HIP ARTHROPLASTY FOR THE TREATMENT OF ACUTE ACETABULAR FRACTURES

Wael Adel Salama

Eygpt

Introduction:

Introduction : Surgical treatment of acetabular fractures in elderly populations is challenging. The main aim of this study is to evaluate retrospectively the indications, results and the complications of simultaneous open reduction and internal fixation (ORIF) and acute total hip replacement)THR) in the management of displaced acetabular fracture

Methods:

Methods: This study was performed in academic level I trauma center. From January 2011 to December 2014, a consecutive series of 18 patients (8 females), with average age of 66 years (range 35-81years) who had displaced acetabular fractures were included in our study. All patients underwent ORIF and simultaneous acute THR. The average duration of follow up was 21.7 months (range 12-36 months).

Results:

At the latest follow up, all patients could walk independently. Thirteen patients (72.7%) had excellent Harris hip scores HHS, 5 patients (27.7%) had good results. All fractures were healed and the acetabular autologous bone grafts were well incorporated. There were no delayed unions or non-unions. Two patients (11%) had heterotropic bone formation which did not affect the activity of the patients. There were no signs of loosening of the acetabular cups however one patient had 2mm medial migration of the cup. No vertical migration was observed .No signs of loosening around the femoral stem.

Discussion & Conclusion:

: ORIF and simultaneous THR is a good option for the treatment of certain types of acetabular fractures particularly in elderly population.

064

THE DUAL MOBILITY ACETABULAR CUP. FRENCH SOLUTION TO PREVENT DISLOCATIONS OF TOTAL

HIP PROSTHESIS.

Bahir-Edouard ELIAS
France

065

IS DUAL MOBILITY CUP IN THR ASSOCIATED WITH AN INCREASED RISK OF REVISION FOR INFECTION, MATCHED COHORT OF 231 DUAL MOBILITY CUPS WITH 231 FIXED CUPS

Prudhon Jean Louis
France

Introduction:
Based on a matched cohort of 231 cases of primary DM-THA and 231 cases FC-THAs, the purpose of this study was to assess whether 1) Revisions for infection are more frequent when using DMC-THA than FC-THA 2) Causes for revision are significantly different between DMC-THA and FC-THA.

Methods:
During two year period (2010, 2011), a prospective multi centre study (40 centres involved in France) was carried out by the French Society of Orthopaedic and Traumatology. Inclusion criteria were an exhaustive collection of first revision THA (at least one component revised, re-revision excluded). 2044 first revision cases were prospectively collected; 251 (13.5%) were revision of DMC-THA and 1793 were revision of FC-THA (87.7%). We defined a matching process (matching ratio 1:1) between the 2 cohorts. 231 DMC-THAs were eligible for comparison with to 231 FC-THAs.

Results:
Forty-seven (20.3%) FC-THAs were revised for infection and 54 (23.3%) in DM-THAs. There was no statistical difference between the 2 series (p-value 0.65.). Forty-one (17.7%) FC-THAs were revised for dislocation, compared to 11 (4.7%) DMC-THAs (p value is 0.00014).

Discussion & Conclusion:
Main finding of our study is that DM cup are not associated with an increased risk of revision for infection compared to standard THA. Revision THA for infection is not correlated to the type of cup used (DMC-THA or FC-THA).

066

ONE LUNG VENTILATION IN THORACOSCOPIC ASSISTED SURGERY TO THORACIC AND THORACOLUMBAR SPINE IN PRONE POSITION :REPORT ON 7 CASES

Prof. Hesham Elsaghir & Dr. Mohamed Eltayeb
Egypt

Introduction:

Recent literature suggests an increasing prevalence of dorsal spinal infections. The main concerns of those patients are debilitating back pain and neurological manifestation with or without systemic symptoms. When the surgery is indicated, several procedures can be done, with variable benefits and drawbacks, during the last 20 years, the development of a new monitoring system allows the conventional anterior thoracic surgery to be accomplished through minimal disruptive ways. We made use of this technique for anterior debridement and fusion on the side of deflated lung in prone position, with combination of standard posterior instrumentation, for treatment of an elderly co -morbid patients with Spondylodiscitis.

Methods:

Between Januarys to September 2017, we operated on 7 cases of spondylodiscitis. We did and open posterior instrumentation and make use of Video Assisted Thoracoscopic Surgery (VATS) in certain operating room set up for anterior debridement and fusion utilizing the side of deflated lung in prone position . We reported the applied tips in this type of surgery, the preoperative patient's conditions, co- morbidity, Operative time, blood loss, accidental complications, postoperative hospital stay, progress and the periods of complete recovery prospectively.

Results:

Our medical records of the 7 cases demonstrated that ,the series constitute 5 males and 2 females their ages were between 50-67 years old all of them are suffering from serious co-morbid medical conditions , DM,HTN and IHD in variable distribution among the patients ,the operative blood loss was ranging from 500ml 1000 ml, the operation time was b/w 45-90 minutes, the hospital stay b/w 4-6 days and the maximum period for complete recovery and retain to work b/w 45 days to 60 days. In addition to the fact that we did not experience an operative accidental complications, postoperative complication that deserve longer hospital stay , re operation or short term failure of instrumentation and recurrence of spondylodiscitis that necessitate revision . We found the use of one lung ventilation on prone position sufficient to maintain adequate exposure during all stages of surgery and was addressing all the required tasks without the need for further re-positioning during
surgery which is a time consuming and carry potential risk for infection.

Discussion & Conclusion:

Discussion:

We reported 7 case of thoracic & thoraco lumbar spondylodiscitis, in an old patients with vast co morbidities that deserve surgical intervention. Although the combination of medical treatment and surgery is best option to be offer as it associated with excellent prognosis in such like patients according to literature , the decision of appropriate type of the surgery is not an easy task as it influenced by many host factors pursuing the operation tolerance , response to medical treatment , surgeon experiences and availability of certain setup tools. Even though, no doubt that the successful outcome strategies in a patient with discitis and co morbidities are influenced by sufficient decompression

,fusion , fixation in addition to overall performance in minimal invasive fashion , as much as it could address all the required tasks , Michael et al , reported a fatal outcome after insufficient spine fixation for thoracic spondylodiscitis despite the formal thoracotomy for anterior decompression and stabilization, which performed by vertebral body replacement using expandable titanium cages and anterolateral locking plate , thus he reported a catastrophic failure and he advise the need for posterior fixation with anterior fusion. KMC Cheung et al ,conducted an articles revisions on approach- related complications of open versus thoracoscopic anterior exposures of the thoracic spine and they concluded that VAST has several advantages over open thoracotomy such as less postoperative pain, morbidity earlier mobilization leading to shorter hospital stay and small scars , and they recommend it for high- risk patients to avoid open thoracotomy. Tan et al , recommend traspadicular approach for debridement of disc space as a minimally invasive technique in patients with discitis in thoracic spine but in dorsally located pathologies rather than ventral one which deserve anterior exposure according to his recommendation. Mickael
J Mack et al conducted a study of a series of 44 patient approached to their anterior thoracic spine from T2 to L1 through VAST , and we found that their conclusions were fitting our early results, that noticed in our presented case , as they mentioned that VAST is less morbid anterior thoracic spine approach ,although it mandate a significant learning period .
The review of current status of VATS beneficial uses , and related outcomes was reported by Verdu and Beisse , as they stated that the good clinical results of VATS in spine surgery is supported by growing experience reflected in a large number of articles, and the main benefits were decreased morbidity and fast recovery, in addition to the degree of complications in thoracoscopic surgery were comparable to open surgery . According to the knowledge of the authors of this paper the use of one lung ventilation and VATS in prone position is reported for the first time in literature by us .

Conclusion:
The technique of VATS with posterior instrumentation for thoracic and thoracolumbar spine discitis using one lung ventilation and prone position is a safe in old patients with vast comorbidities, and it is performed easily in prone position through 2 minimal inscions. Moreover it is an effective procedure to achieve adequate fusion, stabilization, correction of the deformity, and indirect decompression of the neural structure.

Have a Comment?:
The PowerPoint presentation of this paper contains short videos that illustrates important surgical steps , preoperative MRI & X-rays postoperative X-rays ,and photos for surgical scars of one of our patients

067

IS THERE A ROLE FOR BONE CEMENT IN RECONSTRUCTION OF ANTERIOR COLUMN DEFECTS RESULTING FROM SPONDYLODISCITIS?

Walid El Nawawy
Egypt

068

POSTTRAUMATIC KYPHOSIS OF THE CERVICAL: CASE PRESENTATION

Mohammed Mahmood Faramawy
Egypt

069

DEGENERATIVE SCOLIOSIS TIPS AND TRICKS

Mohamed Fawzy
Egypt

070

THE CONCEPT OF MISS WITH DYNAMIC STABILIZATION IN LATE DEGENERATIVE CASCADE OF LUMBAR SPINE

Bambang Darwono
Indonesia

071

RECONSTRUCTION OF CHRONIC TEAR TENDOACHILIS WITH FREE SEMITENDENOSIS GRAFT

Ahmed M Hany
Egypt

Introduction:
chronic tear tendoachilias in poorly manged patients with a large gab is a difficult task mechanically and biologically.many methodes are described for reconstruction as V-Y advancement,turn down flaps ,local tendon transfer or autograft or synthetic graft.

Methods:
twelve cases were done by reconstruction of chronic tendoachilis tear was done using free semi tendenosis autograft through calcenan tunnel.

Results:
good results have achieved with this technique according to American Orthopedic foot and Ankle Society (AOFAS)
one case with pressure necrosis of the non absorbable suture over the sound skin and improved after suture removal.

Discussion & Conclusion:
reconstruction of tendoachilis wiyh free autogenous semi tendenosis graft has good results regarding patient satisfaction and gab reduction.

072

LESS INVASIVE TECHNIQUES IN MANAGEMENT OF INTRA-ARTICULAR CALCANEUS FRACTURES

Mohamed Alahmady Abdel Reheem Ali

Egypt

Introduction:

Intra-articular calcaneus fractures are commonly occured after high-energy trauma. Avariety of techniques exists for anatomic reduction and surgical fixation (1).The optimal management of displaced intra-articular calcaneus fractures is controversial and represents a topic of sustained interest and research for the past two decades (2).

Open reduction and internal fixation (ORIF) via an extensile L-shaped approach has gained wide popularity because this procedure can provide a good anatomic alignment of the calcaneus and congruity of the posterior subtalar joint and stable fixation which allow early mobilization. ORIF with an extensile exposure is often plagued by soft tissue complications(3).

These complications include deep and superficial infections and wound sloughs, which reportedly occur in 1.8% to 27% of patients. This high frequency of infection is likely attributed to thin soft-tissue envelope around the calcaneus especially the lateral wall, which is exposed for surgery (3).

Recently, less invasive surgical techniques for treating displaced intra-articular calcaneus fractures have been undertaken in an attempt to reduce complications and improve recovery when surgery is indicated. These early results reported reduce complication rates and promising clinical and radiographic outcomes in certain fracture patterns and patient populations (4).These recent techniques include limited-incision sinus tarsi ORIF, percutaneous stabilization with pins and /or screws, and arthroscopic assisted fracture reduction.

A thorough understanding of the clinical and radiographic anatomy of the calcaneus and its articulations is crucial when attempting less invasive procedures for intra-articular calcaneus fractures. These emerging techniques may be beneficial in patients with soft-tissue compromise, multiple comorbidities, and displaced intraarticular fractures with minimal comminution (5).

Methods:

I-Technical design:

a. Site of study :

This study done in Zagazig University Hospitals.

b. Sample size :
Sample size calculated to be (12) cases ,Taken as a comprehensive sample.All patients admitted during the study period are included
(6 monthes), as rate of intraarticular calcaneous fracture is (2casesmonth).
c. Subjects included in the study:

Inclusion Criteria
Patients with calcaneus fractures include displaced Essex-Lopresti fractures, Sanders type II fractures, Sanders type III fractures in patients with multiple co morbidities, and fracture variants with minimal posterior facet fragment comminution. Relative indications include patients with diabetes, a history of smoking, and/or obesity.

Results:
Collected data will be presented
net result of study:-
less invasive methods are more effective, more compliant and less complication rate

Discussion & Conclusion:
value of minimally invasive surgery in lowering the complication rates and improving the results of operative fixation of calcaneus fractures.

Have a Comment?:
Less Invasive Techniques in Management of Intra-articular Calcaneus Fractures are very impressive and have better results than open techniques

073

OPERATIVE TREATMENT OF CALCANEAL FRACTURES: IMPROVED OUTCOMES AND LOW COMPLICATIONS RATES WITH A STRICT MANAGEMENT PROTOCOL

Mohammed Atef Diab, N Vasukutty1, V Kumar1, M Diab2, W Moussa1
Egypt

Introduction:
Calcaneal fractures are usually high-energy injuries with a significant soft tissue component and the typical patient usually is a young active individual. In this context we are presenting the outcome of operative treatment of displaced intra articular calcaneal fractures in a major trauma centre by adhering to a strict pre, intra and postoperative protocol.

Methods:
This is a retrospective single surgeon series of 80 calcaneal fractures operated on between 2005 and 2014.The average age was 49 (17 to 73). The study was registered with our clinical effectiveness department. All patients had AP and lateral view X-rays on presentation followed up with a computerised tomography (CT) scan. We graded them with the Eastwood Atkins

Classification. Patients had postoperative scores for Foot and Ankle Disability Index, SF -36, Kerr Atkins scores and also answered a questionnaire to assess other factors like change in shoe size, scar pain and tenderness, return to normal vocation and overall satisfaction with the outcome. We measured Bohler's angle on preoperative and postoperative X-rays. Articular congruity and arthritis on posterior subtalar joint was assessed in symptomatic patients

Results:
79 out of 80 fractures had united and we had one patient with non-union who needed a revision fixation. The mean Bohler's angle improved from 6 degrees preoperatively to 26 degrees post operatively. Mean Foot and Ankle Disability index scores were 78.62 and SF 36 scores were 45.5 (physical component) and 52.6 (mental component). Mean Kerr Atkins score was 72 (36 - 100). The mean time for return to previous vocation was 5.5 months. We had one patient with wound breakdown, which healed with non-operative measures. There was one case where the screw was prominent in subtalar joint necessitating a repeat procedure, and one patient with Sural Nerve injury. In the longer term we had 12 patients with symptomatic subtalar joint arthritis out of which four had subtalar arthrodesis. Our strict selection criteria of excluding smokers, and patients with neuropathy or vasculopathy played a major role in reducing the risk of such complications. If there was a concern about skin or soft tissue we kept the patient in hospital on strict elevation and ice packs and this policy was strictly followed in our unit. Our low soft tissue complication rate assumes special significance when considering that the Warwick trial reports 19% infection rate and 11% secondary surgery.

Discussion & Conclusion:
Surgical treatment of displaced intra articular calcaneal fractures enables anatomic reduction and restores shape, height and alignment. These are complex injuries and should be managed by a specialist team. With the present trauma network system all major trauma centres should have a specialist foot and ankle trauma service who should take over the care of these complex injuries at an early stage and continue to look after them at least in the early post-operative phase. Thus we propose that operative treatment still has a major role to play on the management of these difficult fractures. The overall management should be in the hands of specialist foot and ankle teams and clear selection criteria and strict pre, intra and postoperative management protocol should be followed.

074

DIRECTION OF SCREW IN SUBTALAR ARTHRODESIS

Amr Mohamed Mohamed Soliman

Egypt

075

SURGICAL METHOD FOR CORRECTION OF TOE DEFORMITIES IN STROKE PATIENTS WITH FOOT DISORDER

Ahmed Nady Saleh

Egypt

076

TIBIALIS POSTERIOR TENDON TRANSFER FOR CORRECTION

OF DROP-FOOT IN COMMON PERONEAL NERVE PALSY

Ashraf M Abdelaziz
Egypt

Introduction:
Common peroneal nerve palsy has been reported to be the most frequent lower extremity palsy characterized by a foot drop. Dynamic tendon transposition represents the gold standard for surgical restoration of dorsiflexion. In this study the results of tibialis posterior tendon transfer for correction of drop-foot in common peroneal nerve palsy were reported.

Methods:
During 2011-2014, tibialis posterior tendon transfer was performed at our department on 20 ankles in 20 patients with common peroneal nerve paralysis (20 men), median age 24 (9-45) years. All the patients had had a drop-foot for more than 1 year. All patients had a traumatic common peroneal nerve paralysis. All patients had complete preoperative dorsiflexion motor deficit, and electromyogram (EMG) The mean time of the operation was 2 years. In all cases the tibialis posterior tendon were grade 5, one patient (9y old) the exploration of the nerve was done and direct neurophy was done.

Results:
The gait was assessed according to Hall (1977), 12 patients were extremely satisfied, sex patients were satisfied and two patients were dissatisfied. The patients who were dissatisfied had ankle arthritis with pain that affected the result. No patients reported pain related to operative intervention. All patients had active dorsiflexion. Postoperatively All patients were able to walk without assistive devices. Ten patients (50%) were able to run, and ten patients (50%) were able to walk without assistive devices.

Discussion & Conclusion:
The results of this paper indicate that Posterior tibial tendon transfer for cases of drop foot showed good results and provide improved function.

077

MID-SOLE RELEASE OF THE PLANTAR FASCIA COMBINED WITH PERCUTANEOUS DRILLING OF THE CALCANEUS FOR TREATMENT OF RESISTANT HEEL PAIN

Ahmed Shawkat Rizk, Mahmoud Ibrahim Kandil M.D., Wael Abdelaziz Kandil M.D., ESLAM ABDEL-SHAFY TABL M.D.
Egypt

Introduction:
Heel pain - with or without calcaneal spur - is a commonly faced chalenging problem. Once the conservative measures had failed, surgery is indicated; but - unfortunately - there is always debate about the best surgical procedure for treatment of such condition. The two standard surgical procedures were, either releasing the plantar fascia or removing the spur with drilling of the calcaneous.
This work aims to evaluate the results of percutaneous drilling of the calcanous combined with mid-sole release of the plantar fascia for treatment of resistant heel pain.

Methods:
This study included 20 cases with resistant heel pain after failure of the conservative measures for 6 months. Clinical, radiological evaluation and scoring patients' conditions according to the American Orthopedic Foot and Ankle Society (AOFAS) Ankle-Hind foot scale was done pre and post-operatively. Percutaneous drilling of the calcanous combined with mid-sole release of the plantar fascia was done in all cases and the functional results were evaluated through the follow-up period that extended from 9 to 16 months with a mean duration of 12 ± 2.3 months.

Results:
There was statistically significant improvement in the mean (AOFAS) Ankle-Hind foot scale score from 50.8 ± 7.5 pre-operatively to 91.6 ± 7 post-operatively in the last follow-up. There were no surgery related complications and the mean time for full recovery was 8 ± 3.7 weeks with no recurrence of pain till the last follow-up.

Discussion & Conclusion:
The results were very satisfactory and significantly in favor of using this minimally-invasive and simple technique for treatment for resistant heel pain.

078

OSTEOCLASIS BY PERCUTANEOUS DRILLING FOR CORRECTION OF ANGULAR AND ROTATIONAL DEFORMITIES IN CHILDREN AND ADOLESCENTS

Abdel-Azim Hassan Wahsh
Egypt

Introduction:
Different methods have been used for correction of knee deformities most of them by osteotmies. Also, different kinds of fixation were used whether internal or external or both. In this study we used percutaneous drilling at the site of deformity then osteoclasis follwed by fixation in a cast.

Methods:
: 125 cases are included in this study operated upon in the period from 2001 to 2016. The average age was 9 years (from 3 to 18 years). The average follow up was 2 years (from 3 months to 9 years). The deformity in thirty-two cases was genu varum, in 11 cases was Blount disease, in 25 cases was genu valgum, in 9 cases flexion deformity, in 2 cases genu recurvatum, in 6 cases anterolateral bowing of leg , in 3 cases posteromedial bowing, in 12 cases excessive femoral antiversion, in 7 cases external torsion, and in 18 cases mixed deformity. The CORA was determined on the X-Rays then percutaneous drilling at that site was done in different directions in a single transverse plane till the bone becomes weak enough to allow correction of the deformity followed in most of the cases by K-wire fixation, then high above the knee plaster cast applied till healing of the bone.

Results:
The desired correction could be achieved in 111 of the 125 cases (88.8%) and bone healing of the drilling site occurred in all the cases in an average 8 weeks(from 6 to 10 weeks)

Discussion & Conclusion:

Osteoclasis using percutaneous drilling is an easy, cheap, and cosmetic procedure and can be used in different knee deformities such as varus, valgus, flexion, recurvatum, internal torsion, external torsion and bowing of bone

079

COMBINED USE OF EXTERNAL AND INTERNAL FIXATION IN LIMB RECONSTRUCTION

Khaled Emara

Egypt

Limb reconstruction and deformity correction by external fixation is a very effective tool, but requires long duration of treatment , with many complications, including infection and joint stiffness and psychological stress ..etc

Internal lengthening devices still have limited role in long distance lengthening. up till now the average lengthening with Intramedullary devices range between 3 to 5 cm. and cant be used in children

The combined technique give the advantage of short duration for treatment and ability to correct sever deformity and shortening

This study present out come and surgical technique

080

PERIACETABULAR OSTEOTOMIES ARE TECHNICALLY DEMANDING SURGICAL PROCEDURES

Khaled Zaghlol

Egypt

081

RATE OF CORRECTION OF ANGULAR DEFORMITIES OF THE KNEE IN SKELETALLY IMMATURE PATIENTS BY EIGHT-PLATE TEMPORARY HEMIEPIPHYSIODESIS

Mohamed Khaled, Nariman Abol Oyoun, Mohamed Ragab, Abdelkhalek Hafez

Egypt

Introduction:

Angular deformities of the pediatric knees result in pain, gait disturbance, early joint degeneration, and cosmetic problems. Most of them are physiological and resolve spontaneously before the age of eight years. Persistent angular deformities must be corrected. Different methods are used to correct these deformities; Osteotomy, stapling, percutaneous drill technique and transphyseal screw. These all were reported with several complications. 8-

Plate temporary hemi-epiphysiodesis is a new idea yielding good results with less complications. The purpose of this study is to evaluate the rate of correction of angular deformities by eight-Plate hemiepiphysiodesis.

Methods:
twenty three patients (50 physes, 35 limbs) underwent treatment between January 2016 and June 2017 with average follow-up after plate implantation of 8.2 months (range, 3 – 18 months). Rate of correction of this intervention was calculated.

Results:
Average age at eight-Plate implantation was 5.7 + 3.1 years (age range, 3 years to 12 years). Mechanical tibiofemoral angle changed by an average 12.3 + 7 degrees, (range 3 – 26.67 degrees) or 1.7 + 1.1 degrees /month, (range 0.14 – 4.5 degrees /month). Mechanical lateral distal femoral angle changed by an average 8.6 + 2.8 degrees (range, 4–14 degrees) or 1.3 + 0.6 degrees/month (range, 0.6 – 2 degrees/month). Medial proximal tibial angle changed by an average 8.6 + 6.1 degrees (range, 3–20 degrees) or 1 + 0.7 degree / month (range, 0.4 – 2.6 degrees/month).

Discussion & Conclusion:
8-Plate hemiepiphysiodesis is an effective method for correcting angular deformities of the knee in skeletally immature patients.

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LENGTHENING AND THEN NAILING IN HEIGHT INCREASE SURGERY (RESULTS AND SURGICAL TECHNIQUE)

Khaled Emara

Egypt

Lengthening and then nailing is an effective technique but requires many surgical and perioperative details
this technique help to avoid long duration of external fixation and delayed deformation of the distraction callus
this study present the details of surgical technique and the out come

083

MINIMAL INVASIVE SURGERY (MIS) IN MANAGEMENT OF FLEXION KNEE JOINT DEFORMITY

Mohamed Fadel

Egypt

Introduction and aim of the work: Conventional surgical treatment of knee deformity is not always successful or easy to apply. In this study we evaluate the outcome of distraction histogenesis principles using Ilizarov

technique modification of knee motion to improve the activity of daily living in patients with limited knee motion. **Methods**: From Jan 2006 - 2012, we treated 36 cases presented with walking disability: inability to walk, inability to walk well, inability to walk without: walking aid, orthotics, or crutches due to knee deformity. Their mean age was 16 years (range 6: 65 year), with history of average 3 previous operations (range, 1-8 operations). We used preoperative apparatus assembly of the thigh construct, the leg, and kept the motors and hinges to be applied according to the condition of deformity during the procedure. Twenty patients were discharged from the hospital the same day of the operation. Close supervision follow up weekly visit started one week postoperative by gradual correction using the distraction rod/s. **Results: Inability** to walk well due to knee stiffness was the 1ry complaint in 25 patients, and 2ry to other related conditions in 11patients. The range of anesthetic time was 60 – 190 minutes (average of 70 minutes).**The range of operative time was** 60 – 140 minutes (average of 80 minutes). **Average time in the fixator was** 10 weeks (range, 8 weeks - 12 weeks). Stable stiff knee joints gained in least time, while we used the Ilizarov frame for guided knee mobilization in mobile deformed knee. After fixator removal we applied cast, removable splint for **stiff** knee joints, or hinged orthotics for **mobile** knee joints (some have limited financial support and used also removable splint). The average **follow-up period was 18** months (range, 22 - 38 months) after fixator removal. The results were stable walking limb in extension in 8 cases, and walking limb with limited range of motion in 28 cases with acceptable patient satisfaction in all. **Conclusion:** Management of limited knee motion using Ilizarov apparatus is lengthy, difficult, fraught with complications, and a technically demanding procedure. However, we believe that a minimally invasive, bloodless, distraction histogenesis principles using Ilizarov technique in limited knee ROM is an effective principle. Its use improved patient's condition during his activity of daily living.

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COMPUTER ASSISTED ARTHROPLASTY: AN UPDATE

Mahmoud Hafez

Egypt

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LOW AND HIGH DISLOCATION HIPS TREATED WITH TOTAL HIP ARTHROPLASTY: THE FEMORAL SIDE

Theofilos Karachalios
Greece

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DUAL MOBILITY CUP IN TOTAL HIP REVISION SURGERY. A PROSPECTIVE STUDY OF 79 CASES. DISLOCATION RISK AND CUP FIXATION AT TWO YEARS FOLLOW-UP.

Prudhon Jean Louis
France

Introduction:
"INTRODUCTION: dislocation is a classical complication in total hip arthroplasty (THA) revision. Mid-term cup fixation is the second concern. Since 1998 we routinely use cementless Dual-mobility cup (DMC) in revision surgery. In order to know outcomes at 2 years, we

prospectively followed a continuous series of 78 patients treated in our institution. Purpose of this study is to demonstrate that DMC used in revision THA is safe as regards to dislocation risk and bone fixation.

Methods:
MATERIAL METHODS: from January 2010 to January 2012 we have enrolled 78 consecutive patients (79 cases) in a prospective study. Mean delay between index surgery and revision was 12.9 years. Mean age at revision was 75.5 years. Two different types of cementless DMC were used. A standard DMC was used in 68 cases with low grade bone defect (Paprosky grade 1 and 2). In severe bone loss cases (Paprosky grade 3) a specific design reconstruction DMC was used in 11 cases.

Results:
RESULTS: at 2 years follow up, 68 patients have been reviewed. 4 patients were definitely lost to follow up. Six patients deceased. One (1.3%) patient dislocated her hip at 1 month. Two (2.7%) early mechanical failures occurred.

Discussion & Conclusion:
purpose of this short term follow-up study is to emphasize low risk of dislocation and trustable fixation of a cementless DMC used in revision THA. Instability is the leading cause of failure. Our results are comparable to those reported in recent publications on DMC in revision THA. Regarding fixation, cementless DMC is reliable in Paprosky grade 1 and 2. In Paprosky grade 3, regarding to our results, cementless reconstruction DMC may be proposed as well as cemented DMC associated to acetabular reinforcement as reported in the literature. CONCLUSION: considering outcomes of this series, cementless DMC can be recommended in THA revision surgery to ensure stability without mechanical early failure.

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LOW AND HIGH DISLOCATION HIPS TREATED WITH TOTAL HIP ARTHROPLASTY: THE ACETABULAR SITE.

Theofilos Karachalios

Greece

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MIS : MORE FOR LESS?!!!!

DOUGLAS ORR

USA

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EARLY EVALUATION OF UNI-LITERAL MIS TLIF IN MANAGEMENT OF RECURRENT LUMBAR DISC PROLAPSE

Hesham Shaker

Egypt

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123 **A COMPARATIVE AND RETROSPECTIVE STUDY OF 320 CHARNLEY TYPE THR WITH A MINIMUM FOLLOW-UP OF 10 YEARS TO ASSESS WHETHER DUAL MOBILITY CUP HAS A LOWER DISLOCATION RISK**

Prudhon Jean Louis
France

Introduction:
Mid and long-term follow-up of Charnley total hip arthroplasty (THA) demonstrated good functional results with 85% survivorship at 25-year follow-up. However dislocation still remains an unsolved problem. Dislocation may occur all along the patient and implant life. The aim of this study is to answer the question: does Dual Mobility Cup (DMC) decrease the dislocation risk?

Methods:
Method : We report comparative results at ten years of follow-up of 2 groups of primary cemented Charnley-type THA, one with a standard polyethylene cup (group 1, n=215) and the other one with a DMC (group 2, n=105).

Results:
Results : In group 1, twenty-six dislocations (12.9%) occurred. In group 2 only one dislocation (0.9%) occurred. This dislocation was successfully reduced by close reduction, without any recurrence. This difference was statistically significant (p=0.0018). In group 1, reason for revision was recurrent dislocation in twenty one cases. Five patients have been revised for other reasons. The global revision rate was 12.9%. In group 2, two patients needed revision surgery for aseptic loosening. The global revision rate was 2.1%.This difference was statistically significant (p=0.0054). The goal was reached for the patients of group 2 who had more risks factors of dislocation (age, aetiology, ASA and Devane scores) than those of group 1.

Discussion & Conclusion:
When using a DMC, we observed a low rate of dislocation in primary THA (0.9%). This surgical choice seems to be a secure and effective technique in Charnley-type THA, especially in a high risk population.

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TENT APPROACH, THE WAY TO GO IN COMPLEX THR

Harish Bhende
India

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ACUTE ACROMIO-CLAVICULAR DISSOCIATION IN LOW-RESOURCES SITUATIONS A COHORT STUDY OF LOOP-PROTECTED CORACO-CLAVICULAR REPAIR VERSUS HOOK-PLATING AND TENSION BAND WIRING

Amr Abdel-Mordy Ali Kandeel
Egypt

Introduction:
Background: Literature reported different operative options for management of acute

acromio-clavicular dissociation with extensively-studied comparable clinical and radiological outcomes. However, the economic implications of these options are still to be clarified.
Hypothesis: Management of acute acromio-clavicular dissociation by coraco-clavicular ligament repair which in turn is protected till healing by an anatomic sub-coracoid-clavicular non-absorbable suture loop is to yield clinical and radiological outcomes comparable to those of hook plating and tension band wiring; however, with lower complications and reoperation rates; and accordingly, with lower cost.

Methods:
This study conducted between October-2014 and April-2017; included 33 patients with acute acromio-clavicular dissociation of types-III, -IV and -V; categorized into three groups. Group-A included 7 patients who were prospectively managed by acute coraco-clavicular ligament repair protected by an anatomic sub-coracoid-clavicular non-absorbable suture loop. Postoperative results were evaluated at 1-year follow-up in clinical terms of pain, range of motion, function, UCLA scoring system, return to work and complications; radiological terms of coraco-clavicular distance, osteolysis and acromio-clavicular arthritis; and in economic terms (reoperation rate). Such results were compared to retrospectively-reviewed terms of; Group-B; including 9 patients of hook-plating; and of; Group-C including 17 patients of tension band wiring.

Results:
Statistical analysis revealed insignificant differences in clinical and radiological outcome measurements (P-value >.05) among the studied groups. However, both Group-B and Group-C had statistically-significant higher complications, reoperation rate and cost (P-value <.05)

Discussion & Conclusion:
While offering outcomes comparable to hook-plating and tension band wiring, management of acute acromio-clavicular dissociation by loop-protected coraco-clavicular ligament repair showed significantly lower complications, reoperation and economic burden.

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RELIABILITY OF ARTHROSCOPIC ASSESSMENT OF GLENOID BONE LOSS IN ANTERIOR SHOULDER INSTABILITY

Emad Zayed
Egypt

Introduction:
Assessment of the percentage of glenoid bone loss in anterior shoulder instability has an important role in decision making as regard the type of the operative procedure whether it is soft tissue stabilization or bone reconstruction. The most accurate method to measure bone loss is calculating its surface area by means of 3D CT. Arthroscopic assessment my play an

important role in measurement of the bone loss.

Methods:
: 20 cases with anterior shoulder instability with different anterior glenoid bone defect. Arthroscopic measurement of the distance between both anterior and posterior rim to the bare spot using graduated probe. Defect width is the difference between measurements. Glenoid width is double the posterior distance. Defect percentage is calculated according to the equation [Defect width (w)/Inferior glenoid diameter (D)] × 100%). The calculated defect percentage is compared to assessment of the defect percentage calculated by means of 3D CT using surface area method. Cases without bone loss or with absent bare spot is excluded.

Results:
Arthroscopic assessment of the glenoid bone loss overestimates the percentage of bone loss. Overestimation error was 5.4±3.2 %.

Discussion & Conclusion:
Arthroscopic assessment of glenoid bone loss is not a reliable method for accurate measurement and correct surgical decision.

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INSPACE BALLOON FOR MASSIVE ROTATOR CUFF TEARS

Joe Gouda, Daniel Gheorghiu
United Kingdom

Introduction:
It has been clinically challenging to treat patients suffering from massive rotator cuff tears especially if they are irreparable with or without poor tendon and/or muscle quality. While the average rate of Rotator Cuff re-tear post repair is approximately 20-40%, failure rates of massive tears can approach 100%(1). Treatment options for massive tears depend on the patient's problems, age, functional requirements and the surgeons' preferences and experience.
A recent method for treatment is inspace balloon which is implanted in the subacromial space creating a space between the acromion and head allowing for a smooth and easy gliding movement of the head of the humerus.

Methods:
13 patients suffering from massive rotator cuff tear.
All of them had arthroscopic subacromial decompression with inspace balloon implanted in the subacromial space over a period of 2 years.
They were evaluated by a preoperative oxford shoulder score and 3 months after the surgery.

Results:

Discussion & Conclusion:
encouraging results giving a new treatment option for people suffering from massive rotator cuff tears with no osteoarthritis of the shoulder joint.

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TRANS-SEPTAL PORTAL IN THE OUTSIDE-IN ANTERIOR

CRUCIATE LIGAMENT RECONSTRUCTION

Ashraf Elazab
Egypt

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COMBINED INTRA ARTICULAR AND EXTRA ARTICULAR ACL RECONSTRUCTION

Mohamed Ibrahim Abulsoud
Egypt

Introduction:

the anterolateral structures were considered secondary stabilizers to the (ACL) for controlling anterolateral rotatory movement.

concurrent anterolateral capsular injury in 93% of patients with an ACL tear. (terry et al 1993)

Recognizing the synergistic relation between the anterolateral structures and the ACL has led to renewed interest in otherwise largely discontinued lateral extra-articular tenodesis (LET) procedures.

Methods:

Results:

Discussion & Conclusion:

Combined intra articular and extra articular reconstruction maybe useful in high demand and severely injured ACL cases.

the value of this combined procedure over isolated ACL reconstruction has yet to be determined.

Further investigations needed to show the long term outcome.

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GRAFT HEALING IN ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION

Mohamed Hamdy El Naggar
Egypt

Introduction:

The basic biology of the tendon graft-bone tunnel healing remains incompletely understood. The primary site of weakness during the early postoperative period is the tendon-bone interface, particularly while the tendon attaches to the bone within the intraarticular environment. The osteointegration of the tendon grafts used for the replacement of an ACL may still be unsatisfactory and may be associated with postoperative anteroposterior laxity. The firm attachment of the tendon graft to the bone allows earlier and more aggressive rehabilitation and a quicker return to full activity.

Methods:

Results:

Discussion & Conclusion:
Current techniques of ACL graft reconstruction require healing of a tendon graft in a bone tunnel. A common cause for an unsatisfactory ACL reconstruction is a failure of the graft to-bone healing.

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ARTHROSCOPIC ALL INSIDE REPAIR FOR ISOLATED MEDIAL MENISCAL TEARS IN ATHLETIC ADOLESCENTS

Mohamed Gouda
Egypt

Introduction
a progressively increasing incidence of diagnosis of meniscal tears in adolescents led several studies to focus on its repair. This study was to evaluate the results of arthroscopic All inside technique for repair for isolated medial meniscal tears in ado-lescent athletes.
Patients and methods
a prospective study was conducted on 22 adolescent knees with isolated medial me-niscal injuries. All patients were treated by arthroscopic all-inside technique for medial meniscal repair using Fast Fix. Subjective International Knee Documentation Committee (IKDC) score and Lysholm knee scoring were used for both Pre and Postoperative objective and subjective evaluation.
Results
Satisfactory results were obtained in 20 patients (90.9%) according to IKDC sub-jective score [11 patients (50 %) normal or excellent, and 9 patients (40.9%) good or near normal]. The mean Lysholm score significantly improved from 56.5 pre-operatively to 89.8 postoperatively ($P < 0.0001$).
Conclusion
the used technique is an effective and reli-able method for treatment of meniscal tears in athletic adolescents.

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DIFFERENTIAL DIAGNOSIS OF EPIDURAL COLLECTION IN CERVICAL SPINE

Mahmoud Yasser Farghally
Egypt

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RESULTS OF MULTI-SEGMENTAL ACDF USING STANDALONE PEEK CAGES

Mohamed El Masery

Egypt

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COMBINED MINIMAL INVASIVE APPROACHES FOR CORRECTION OF ANKYLOSING SPONDYLITIS KYPHOSIS

Mahmoud Fauad

Egypt

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DYNAMIC NEUTRALIZATION OF THE LUMBAR SPINE AFTER MICROSURGICAL DECOMPRESSION IN ACQUIRED LUMBAR SPINAL STENOSIS AND SEGMENTAL INSTABILITY

Khaled Abdeen, Hesham Mohamed Safwat

Egypt

Introduction:

Dysfunctional segmental motion (DSM) and degenerative lumbar spondylolisthesis are frequent causes of spinal stenosis and still subject to controversial discussion.
These conditions are characterized by hypertrophied arthritis of the facet joint, resulting in segmental instability predominately in the sagittal plane.4Degenerative disc disease (DDD) is associated with degenerative spondylolisthesis to a varying degree causing or accentuating radiculopathy. The nonsurgical management of lumbar spondylolisthesis should be considered, specially, in patients without radicular compression signs5because fusion techniques contain major risks of adjacent segment degeneration.3 Outcome after fusion appears to be quite
inconsistent. Turner et al 6 evaluated systematically the outcome after lumbar spinal fusions and demonstrated satisfactory outcomes ranged from 16% to 95% with an
average of 68%. Decompression alone might not change the course of segmental degeneration process, but significantly improve the quality of life in terms of amelioration of radicular pain.7–10 Because the biomechanical background of stability concept is based on the spinal motion segment, new alternatives
toward a dynamic stabilization device were recently proposed.11Balan C. The CD-Horizon Legacy PEEK rod (Medtronic Sofamor Danek, Memphis, TN) is composed of polyetheretherketone and is more flexible than the titanium rods (Figure 6). This system received FDA clearance in 2005.12The PEEK rod is currently FDA approved to treat adjunct fixation for a one-level interbody fusion. Abode-Iyamah et al. reported a cadaveric study that measured intradiscal pressure differences between the PEEK rod and the titanium rod . Pressure differences were greater for the titanium rods compared with the PEEK rods. However, it has not been determined whether dynamic rods, such as DYNESYS and Accuflex or PEEK rods could be used with dynamic screws instead of using rigid titanium rods because PEEK rods are more flexible compared with titanium rods . As a result, the authors concluded that the PEEK rods decreased adjacent disc disease by maintaining a lower intradiscal

pressure.

Methods:
This study included a total of 28 consecutive patients (mean age 57 years) presenting with acquired lumbar stenosis, signs of segmental instability, and degenerative disc disease underwent lumbar microsurgical decompression and implantation of Balan C. in 1 (n _ 10),2(n_ 10), 3 (n _ 7), and 4 segments (n _ 1). One patient was lost to follow-up. Lumbar and radicular pain was present in 23 patients (85%).

Results:
Clinical evaluation included visual analogue scale (leg and back), distribution and severity of pain (%), Prolo Functional and Economic Status,
Stauffer Coventry Scale, patient's self evaluation, and radiologic assessment preoperative and postoperative at 3 and 12 months. Leg and back pain (visual analogue scale) improved at 12 months from 8.4 _ 2.1 to 3.1 _ 1.4 and from 6.7 _ 2.8 to 4 _ 2.8, respectively. Overall pain severity
improved due to reduction of radicular pain from 59.2% to 27.3% after microsurgical decompression. Meanwhile, lumbar pain deteriorated from 40.8% to 47.8%. seventeen percent (patient's self-evaluation) and 29.7% (Stauffer Coventry Scale) of the patients described a fair or poor outcome. Moreover, 51% and 54% of the patients had a Prolo Economic Status and Prolo Functional of 4 or 5, respectively. Complications included 2 broken and 1 misplaced screws from a total of 134 screws implanted, . At 1-year, a total of 2 patients (7%) required surgical revision.

Discussion & Conclusion:
The reported biomechanical principles of Balan C. do not reflect advantages in outcome compared with none or others stabilization systems after microsurgical radicular decompression reported in the literature.
No funds were received in support of this work. No benefits in any
form have been or will be received from a commercial party related
directly or indirectly to the subject of this manuscript.

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COMPARISON BETWEEN MIS VERSUS OPEN TLIF IN TREATMENT OF SPONDYOISTHESIS

Ahmed Taha
Egypt

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SACRO-ILIAC JOINT, FUSE OR NOT TO FUSE

Rafaat Kamal
Egypt

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USE OF CELL PHONE IN ASSESSMENT IN MANAGEMENT OF SEVER TRAUMA

Mohamed Eldeeb, MD, Sherif Mohamed, Msc

Egypt

INTRODUCTION.
Cell phone which is one of major advancement in technology had major impact in orthopedic surgery especially in management of trauma cases. It is one of the most ubiquitous and dynamic trends in communication and help in better management of multiple trauma cases. It help in high quality of management ,decision making, operative and post operative care and rehabilitation
AIM. . The aim of study is evaluate the role of mobile telephone with its modern advanced techniques & programmers and technology in management of multiple trauma patients after Terrorism , RTA, Industrial accidents and highlighting the ways to better assessment with high quality of care of management of patients
METHODS, ..Servay of 100 users of orthopedic , specialists and consultants of orthopedic surgery and multidisciplinary team in different governmental hospitals in Cairo , using different models of mobile telephone with or withwet internet service, rapid communication , pre operative , postoperative, role of post operative rehabilitation, and scientific researches and collecting statistical data
RESULTS....Very high encouraging results in compression of other staff not using Sam technology in other hospitals of distant fare hospitals in different area in Egypt
DISCUSSION & CONCLUSION..Mobile telephone which is best healthcare information technology has great rule in management of sever trauma after RTA, Terrorism, Industrial accidents. IT give the orthopedic surgeon high quality in rapid communication, decision making, saving life of victims , better operative techniques and results and in post operative care and rapid rehabilitation

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PROSPECTIVE STUDY OF PATTERNS OF ORTHOPEDIC INJURIES AMONG MOTORCYCLE ACCIDENTS

Elsayed abdelhalim, Khalid Lotfy, Amr abdullah
Egypt

Introduction:
Road traffic injuries contribute significantly to the burden of disease and mortality throughout the world, but particularly in developing countries.

Results:
In Egypt, particularly in Elhadra university hospital, it was found that most of the victims are between the ages of 21-40 (collectively 69 %) that is because this is the most active period were the patients move faster to increase productivity. The percentage of riders, passengers on vehicle and pedestrians (passenger on road) that were injured at “motorcycle crashes” was as follows, victims who are riders were (82.9%) followed by those passengers on the motorcycle (14.5%) then passengers on road (2.6%), Most of the accidents occur on tarmac road (75.2%) due to the increased speed on these roads while on field it was less common to experience an accident (24.8%).
As regards the anatomical location of injuries, injuries to the extremities were the commonest, followed by head injury.
The commonest musculoskeletal injury was bone fractures, lower limb injuries where the most common (81.2%) with tibia and fibula fractures being predominant (45%), followed by upper limb that were found in)41%(of case.

Discussion & Conclusion:
Non strict law implementation on motorcycle riders can be reflected by the huge percentage of patients (all patients except two) who have no license, (all patients except one) who were not wearing Helmets during the accident.

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FIXATION OF DISTAL HUMERUS FRACTURES IN PEDIATRIC POPULATION USING TWO INTRAMEDULLARY KIRSCHNER WIRES: PROSPECTIVE STUDY

Hossam Hosny
Egypt

Introduction:
Management of distal humeral fractures in pediatric population represent a challenge to pediatric trauma surgeons. Distal humeral fracture is a fracture passing above coronoid and olecranon fossa so it is difficult for Kirschner wire to pass from the medial or lateral condyle to penetrate the other cortex. The use of intramedullary flexible nails is very difficult in such fracture pattern. Intramedullary Kirschner wires is a good method of fixation for these fractures with perfect fracture reduction with less complication rate.

Methods:
This is a prospective study that was done in our university hospital and included eighteen patients who were presented to our emergency department in the last two years. Their age ranges from two years to 10 years. Two intramedullary Kirschner wires were used to fix the distal humeral fracture. All cases were followed up to six months. Fracture union and range of movement were evaluated at the last follow up.

Results:
Eighteen patients were included in this study. Eight males and ten females. At the last follow up visit. All fractures were fully united with full range of movement.

Discussion & Conclusion:
Distal humerus fractures are not uncommon in pediatric population with still deficient data in the literature for the best method for management. Despite conservative treatment (Casting) was the standard treatment for management. It did not produce adequate reduction and alignment of fracture with increased anxiousness of the parents. we believe that the use of intramedullary Kirschner wires is an excellent method for fixation of pediatric distal humerus fractures with excellent final results.

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OPEN REDUCTION AND INTERNAL FIXATION OF APPARENT CAPITELLAR FRACTURE USING ANTERIOR APPROACH

Ibrahim Mohsen
Egypt

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DISTAL ULNA HOOK PLATE FOR FIXATION OF DISTAL ULNAR FRACTURES

Fareed Radwan
Egypt

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TREATMENT OF OBLIQUE AND SPIRAL METACARPAL FRACTURES WITH MINI PLATE PLUS SCREW VERSUS SCREW ONLY

Dr. Moawed Farghly EL-Adawy, M.D, Karim Omar Mahana, M.B.B.Ch, Prof. Dr.Yassin Sakr Elghool, M.D
Egypt

Introduction:

Introduction: The human hand is a highly sophisticated tool of sensibility and apprehension. This tool can undertake an ultimate variety of prehensile tasks. If hand injury or disease occurs, it affects both the sensory input and the motor output of this marvelous tool. Fractures involving the tubular bones of the hand are the most frequent of all skeletal injuries.

Methods:

Methods: During the period from September 2015 to April 2017 this randomized clinical trial design was done in order to evaluate the functional outcomes after fixation of oblique and spiral metacarpal fractures by using either comparative group were included in this study enrolling 28 patients divided equally. Our patients presented with oblique and spiral metacarpal fractures caused by road traffic accidents, fall, or direct trauma, they were admitted to orthopedic department, Suez Canal University Hospitals. Our first group treated by miniplate while the other group treated by mini screws only. Follow up period was 6 months.
The mean age of patients in mini plate group was 34.5±5.54 while in screw only group was 36.4±9.39, the gender of patients in mini plate group was 8 males and 6 females while in the mini screw group was 9 males and 5 females. The occupation of these patients was 11 employee non workers and 3 hand workers in the miniplate group while in the screw only group there were 12 patients' employee non workers and 2 patients were hand workers. Scoring systems applied on all patients on 4th , 12th and 24th weeks post-operative, Quick-DASH and total active motion scoring systems used to evaluate, also we used the x-ray antero-posterior and oblique views with clinical correlation on the affected hand in the follow up to assess the bone union.

Results:

Results: The mini plate group patients returned to work after 32 – 40 days while in screw only group the patients returned to work after 41- 50 days.
The TAM score evaluation applicated on the mini plate patients at 24 weeks was 247 - 260, and the final grade of TAM at 24 weaks was excellent in 2 patients and good in 12 patients, while in screw only group the TAM score evaluation applicated on the screw only patients at 24 weaks was 245-260, and the final grade of TAM at 24 weaks was excellent in 1 patients and good in 13 patients.

The quick dash score was applicated in mini plate group at 24 weaks shows range 0.95-1.50 while in screw only group at 24 weaks shows range 1.05 - 1.40

The mini plate group patients had no complications post-operative like nonunion, displacement, loss of sense and rapture of extensor tendon, but there was one patient had wound soiling and treated by antibiotics parenterally and it was completely eradicated after one weak , one patient developed delayed bone union and the patient healed at 4th month post operative. While in screw only group the rate of infection was higher by 3patients were also eradicated completely by parenteral antibiotics for one weak, 2 patients developed delayed union the first one healed at the 3rd month and the second healed at the 4th month, but there was no complications like nonunion, displacement, loss of sense or rapture of extensor tendons, the total number of complicated patients in mini plate group was 2 patients (14%) while it was 5 patients (35.7%) in the screw only group,

Discussion &Conclusion:
Surgical Dissection is crucial in the management of metacarpal fractures. The more surgical traumas to the soft tissues during dissection probably lead to more separation of the periosteum, and consequently poor outcomes. The skin incision was done in low-profile mini plate surgical fixation to place the plate to the dorsal aspect of the metacarpal bone is longer in comparison to the skin incision of fixation with screws only; and also during dissection soft tissue trauma and even periosteal separation is more than fixation with screws only.
Based on the results we could conclude that group exposed to oblique and spiral metacarpal fractures and operated with miniplate and screws revealed matched functional outcomes to those operated with screws only and both methods give good results as treatment options for oblique and spiral metacarpals fractures with little complications.

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SKIN STRETCHNG DEVICE (SSD) AS A NEW TREND FOR TREATMENT OF COMPLICATED WOUNDS

Gamal El Mashad
Egypt

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SAUVE-KAPANDJI PROCEDURE FOR MADELUNG'S DEFORMITY

Abdelsalam Eid , Shamel Elgohary
Egypt

Madelung's deformity (MD) of the wrist is a rare developmental abnormality characterized by volar and ulnar tilt of articular surface of the distal radius that makes the hand and wrist translate volarly and the ulna becomes subluxed and prominent dorsally.
Sauve-Kapandji procedure gives support to the ulnar carpus and

the pseudoarthrosis maintains the pronation and supination of the forearm.
The purpose of this study is to report the outcomes of patients with idiopathic Madelung's deformity who underwent Sauve-Kapandji.
10 patients (13 wrists) with idiopathic Madelung's deformity were managed by Sauve-Kapandji procedure. The mean age at the time of operation was 21.8 years old.
The mean follow up was 16.2 months.
The ulnar head united successfully to the distal radius in all cases. The mean time of union was 10.3 weeks. At the final follow up, all wrists were painless. The mean VAS of pain during stressful conditions improved from 6.2 to 2.3. The grip strength improved from 6.7 to 13.2. The mean DASH score improved from 41.9 to 13.2.
Conclusion: Sauve-Kapandji procedure decreases pain, improves strength and function of wrists with Madelung's deformity.

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TRIPLE ATTACK OUTCOME IN POST-TRAUMATIC RADIOULNAR SYNOSTOSIS RESECTION, INTERPOSITION AND ADJUVANT THERAPY

Mokhtar Abdul Azeem
Egypt

Background:
Post-traumatic radioulnar synostosis is a rare complication that can lead to considerable functional disability, including loss of elbow flexion and forearm rotation. A wide variety of surgical techniques and adjuvant therapy were suggested for treatment of this condition with varying degrees of success in flexion arc improvement, but less success in restoration of the forearm rotation. Early resection between 6 and 12 months after the initial injury can be performed safely in patients with radiographic evidence of bony maturation. The purpose of this study is to report our experience of using this technique in treatment of post-traumatic radioulnar synostosis.

Methods:
From 2015- 2017, 13 patients with post-traumatic radioulnar synostosis, 9 patients type 3C (proximal radioulnar and ulnohummeral synostosis) treated by pre operative low dose radiation, synostosis resection, anconeus myofacial

flap interposition and oral Indomethacin 75mg for 2 weeks. 4 patients type 2 (mid forearm synostosis) treated by synostosis resection, free fat graft interposition and oral Indomethacin 75mg for 2 weeks.

Results:

A mean follow-up of 15 months (range: 12-24 mo), 89% of the patients were satisfied with the treatment and resumed their pre injury activities. The mean preoperative pronation was 10° and the mean postoperative pronation was 60°. The mean preoperative supination was 5° and the mean postoperative supination was 65°.

Conclusions:

We concluded that, adjuvant therapy, synostosis resection, biologic graft interposition and post operative indomethacin is an effective technique to reduce recurrence rate of posttraumatic radioulnar synostosis.

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RADIOLUCENT AND FRACTURE TABLES IN THE TREATMENT OF SLIPPED CAPITAL FEMORAL EPIPHYSIS. COMPARATIVE STUDY

Bassam Ali Abouelnas
Egypt

INTRODUCTION:

The aim of treatment of SCFE is to stabilize the physis by epiphysiodesis and to prevent complications by using a single centrally placed screw.

The procedure can be done using either a radiolucent table or fracture table.

The aim of this study is to analyse if there is significant difference in the time of surgery, anesthesia and number of fluoroscopic images during in situ pinning on either radiolucent or fracture table.

METHODS:

A retrospective study of 22 patients with mild stable SCFE who undergo pinnig insitu with a single screw using a radiolucent table or fracture table was conducted.

The patients were matched for age and size in each group. 11 patents were treated on a radiolucent table and 11 patients were treated on a fracture table.

RESULTS:

The surgery time ranged from (20-38) minutes. The mean time was greater for fracture table than radiolucent table.

The anesthesia time ranged from (45-65) minutes .the mean anesthesia time was greater for fracture table than radiolucent table.

DISCUSSION AND CONCLUSION:

The use of radiolucent table is more useful alternative to the fracture table for pinning of slipped capital femoral epiphysis

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EXTRA FOCAL SCREW FIXATION IN MEDIAL WEDGE OPENING HIGH TIBIAL OSTEOTOMY – A NEW TECHNIQUE

Omar A. Refai, ***Ahmed A. Khalifa - Amr A. Fadle - Muhamed E. Elsherif-Muhamed A. Alzohiry***
Egypt

Introduction:

High tibial osteotomy(HTO) is effective for managing a variety of knee conditions, including knee osteoarthitis with varus or valgus malalignment, or even to correct proximal tibial deformity without presence of arthritic changes

The fundamental goals of the procedure are to unload diseased articular surfaces and to correct angular deformity at the tibiofemoral articulation. Although with the clinical success of total knee, the procedure remains useful in appropriately selected patients with unicompartmental knee disease

at this study, we aim at describing results of our new technique of using an extra focal screw fixation while performing a medial wedge opening(MWO)HTO.

Methods:

a prospective study started on Feb 2016 for one year of 50 patients scheduled for MWOHTO with a minimal follow up for 6 months. 32 females and 18 males, mean age was 48 yrs. old, 44 patients with medial OA with varus deformity and 6 patients with tibial vara, in all patients,osteotomy was fixed using a T locked titanium plate supplemented by extra focal screw.

Results:

medial proximal tibial angle (MPTA) improved significantly from 75.5 ± 8.4 (mean ± SD) to 90.2 ± 2.7. the average time for the osteotomy to unite was 7.9 weeks ± 2.8. The average time for full weight bearing was 8.9 weeks ± 3.5. only 2 patients had delayed union at 20 weeks

Discussion & Conclusion:

adding an extra focal screw fixation in MWOHTO may add to the stability of the osteotomy which may affect time to union, decrease incidence of non-union and improve early recovery.

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TRANSFIXING KIRSHNER WIRES FOR FIXATION OF INTERTROCHANTERIC VALGUS OSTEOTOMIES IN MANAGEMENT OF PEDIATRIC COXA VARA

Ahmed Shawkat Rizk
Egypt

Introduction:

Coxa vara is a radiological term describing a decrease in the neck–shaft angle to 120 or less. Coxa vara is associated with pathomechanical changes that can manifest clinically. If left untreated, coxa vara can affect the normal development of the pediatric hip. Valgus osteotomy is the standard surgical treatment for coxa vara, but there is no consensus regarding the optimal osteotomy technique and fixation method. The work reported here aimed to highlight transfixing wires as a fixation method for valgus osteotomy applied as treatment for various

types of pediatric coxa vara.

Methods:
This study included 16 cases of pediatric coxa vara with different etiologies in 9 patients with a mean age of 39.9 ± 15.2 months. Radiological and clinical evaluations and scoring of the condition of each patient according to the Iowa Hip Score were performed pre- and postoperatively. Transfixing wires and a protective spica were used for the fixation of a V-shaped, laterally based, closing-wedge valgus osteotomy in all cases. The postoperative follow-up period ranged from 14 to 102 months, with a mean duration of 33.3 ± 27.7 months

Results:
The mean Hilgenreiner epiphyseal angle (HEA) was corrected from 81.7 ± 2.2 to 24.3 ± 3.5 and the mean femoral neck–shaft angle (FNSA) was improved from 86.9 ± 4.2 to 138.6 ± 3.5 . No recurrence of the deformity was observed during the follow-up periods considered here. The osteotomy site united after an average of 11.7 ± 2.2 weeks with no secondary displacement, and in cases of developmental coxa vara there was progressive ossification of the neck defect with no surgery-related complications. Clinical results were markedly improved by
the osteotomy, with a mean postoperative Iowa Hip Score at last follow-up of 95.06 ± 2.6, compared to a mean preoperative score of 57.4 ± 3.6.

Discussion & Conclusion:
Transfixing wires protected in a hip spica cast represent a simple, easy, and reliable fixation method for valgus osteotomies performed to correct pediatic coxa vara. It assures stable fixation and rapid healing of the osteotomy without loss of the achieved correction, it completely
avoids the femoral neck affording marked protection to the growth plate.

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DISTAL LOCKING FEMORAL PLATE FOR DIFFERENT SUPRACONDYLAR FEMORAL OSTEOTOMIES, A RELIABLE IMPLANT.

Tarek Abdel Monem El Tawil
Egypt

Introduction: Supracondylar femoral osteotomy has been used for correction of different deformities affecting the femur or the knee. Many implants and even external fixators have been used for fixation of these osteotomies. Recently, the locking plate was used with special designs that fit the distal femur. We present hear our experience with the distal femoral locking plate as a rigid fixation for different types of supracondylar femoral osteotomy.
Methods: Distal femoral locking plate was used for fixation of supracondylar osteotomy in 23 patients. The indication for the osteotomy was corrective derotation for excessive femoral anteversion in CP pts. (12), flection deformity in chronic polio patients (6), and for correction of malunion of old fractures or osteotomies (5).
Results: All osteotomies united in 10-16 weeks. There was no infection, failure of metal work, or neurovascular injury.
Discussion & Conclusion: Distal femoral locking plate is a reliable implant and can give rigid fixation for supracondylar osteotomies even in the weak bones of polio patients.

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MANAGEMENT OF POST-TRAUMATIC DISTAL RADIUS GROWTH ARREST BY ILLIZAROV DISTRACTION OSTEOGENESIS

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FLEXIBLE NAILING FOR BOXER AND PSEUDOBOXER FRACTURES

Ahmed Fathy Sadek
Egypt

Introduction:

Boxer's fractures are among the most common hand fractures representing almost 50% of all metacarpal fractures.

Methods:

33 patients [25 male and 8 female] were presented to Minia Hand and Microsurgery Unit [MHMU] sustaining either boxer's [12] or pseudoboxer's [20] fractures. They were all managed

in the period from May 2015 till January 2017 using a simple minimal invasive technique of closed reduction and percutaneous fixation by pre-bent 2mm Nancy nails.

Results:
the operative time averaged 7 minutes all patients achieved solid bony union with an average period of 5.2 weeks. The average 5th MCPJ and 2nd MCPJ ROM was 122° and 109° respectively and average power grip of almost 100 % of the sound side.

Discussion & Conclusion:
the use of flexible nails for either boxer or pseudo boxer fractures represents an appealing option for treatment with short operative time, less invasive pattern and no need for immobilization thus allowing maximal return of initial ROM.

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FINGERTIP WINDING SUTURE: PULL OUT SUTURE TECHNIQUE FOR FLEXOR TENDON REPAIR IN ZONE

Abdallah Seif
Egypt

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POLLICIZATION IN RADIAL LONGITUDINAL DEFICIENCY

Maged El Shennawy
Egypt

Background: Pollicization is the method of choice for managing thumb deficiencies and dramatically improves hand function and appearance, but in radial longitudinal deficiency result in less rewarding outcome which is greatly influenced by variable factors.
Methods: This study presents the outcome of 12 pollicization procedures in 12 RLD patients. Eight of them required a prior wrist centralization by an average interval of 9 months, with an average age of 3.39 ± 2.18 years at the time of pollicization, and a mean follow-up time of 4 years.
Results: All children at the latest follow-up had the capability for tip pinch, 83% were capable for key pinch and opposition of the new thumb to the remaining three fingers. all of the cases gained the ability to do a reasonable grasp and showed good sensation of the new-thumb. Mobility were positive in all cases with different ranges for the new-thumb joints, 75% of parents were satisfied with both the esthetic and functional outcomes of their kids, non-significant differences were recognized as regard the new thumb width, length, and nail width among the cases.
Conclusion: Recreation of a thumb in RLD cases as a step of correction procedures for each case would provide the child with functionally and esthetically acceptable hand, having new skills that were not available pre-operatively despite being less rewarding outcome and of lowered quality than normal, but progressively improved with time.

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TRANSFER OF THE TERMINAL ANTERIOR INTEROSSEOUS NERVE TO THE EXTENSOR CARPI RADIALIS BREVIS BRANCH OF THE RADIAL NERVE FOR RESTORATION OF WRIST DORSIFLEXION IN EXTENSIVE PARTIAL BRACHIAL PLEXUS INJURIES

Mahmoud Salama
Egypt

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TRIANGLE TILT SURGERY IN OBPI

Khaled Edris Abdelrahman
Egypt

Introduction:

The strategy of the triangle tilt procedure is to solve the impingement of the anteriorly tilted distal acromioclavicular triangle (ACT) against the humeral head by releasing it from the medial spine of the scapula, and the abnormal twisting of the clavicle by releasing the medial clavicle through osteotomy of the clavicle

Discussion & Conclusion:

Depend on the age of the patient and the status of the glenohumeral joint:

3-9 months primary repair of the plexus.
12-24 months (without SHEAR or PHHS) anterior release with or without muscle transfer.
12-24 months (with SHEAR or PHHS)
24m-17y
>17y humeral osteotomy (cosmetic improvement)

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PRESPINAL RETROPHARANGEAL CONTRALATERAL C7 TRANSFER IN TOTAL OR NEAR TOTAL TRAUMATIC BRACHIAL PLEXUS AVULSIONS

Ashraf Moharram , M AbdelWahed, M Ezzat, A Affifi & M AbdelHamid
Egypt

Total Brachail Plexus Palsy is a challenging situation due to scarcity of donor nerves. Our series of 23 patients with posttraumatic total or near total brachial plexus palsy in Cairo Uni Hospitals between 2012-2014. All patients had now evidence of recovery (clinical or EMG) at 3 to 4 months with negative or minimal supraclavicular tinnel sign. All were males with an average age of 23.3 years. All had surgical exploration at

an average of 15.2 weeks (ranging from 9 to 22 weeks) from injury. 15 patients had total avulsions while while 7 patient had T1 +/C8 rupture and C5-C7 avulsion and 1 patients had C5 rupture and C6-T1 avulsion. Follow up Duration averaged 44 (36 to 58) months while 2 patients were lost to follow up. All patients had a contralateral C7 root transfer to the upper trunk through a Pre-spinal retro-esophageal route as well as a Spinal accessory nerve to suprascapular nerve. Five to 7 strands of sural nerve graft cut to sufficient length averaging 8.1cm (6.2 to 12 cm). There were no complications related to creation of the prespinal route and some temporary donor site morbidity mainly in the form of sensory disturbance and weakness in triceps and wrist extensors. Results showed 17 patients regained a grade 3 or more shoulder abduction and 14 patient with elbow flexion grade 3 at final follow up.

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