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ETHIOPIAN SOCIETY OF ORTHOPEDICS & TRAUMATOLOGY



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ESOT's Year book- VII

2017/18

EOJ Vol. 7

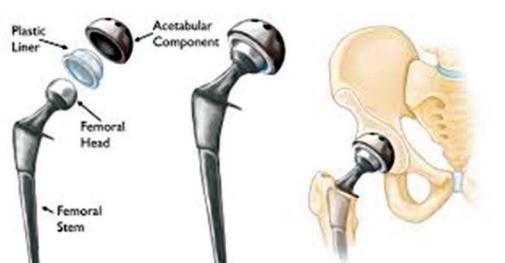
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## 13<sup>th</sup> ANNUAL GENERAL MEETING

# Scientific Conference and Medical Exhibition



SHERATON ADDIS





**AFEI**

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**Tel:** **0913573346/48, 0911425296**



## ዘግቷት ክፍል

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፩/፪ በሩክ ለምስክ

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ethiopianorthopaedics-esot.org

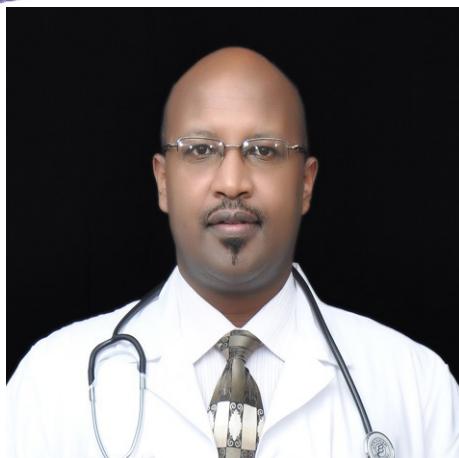
P.O.Box: 17403, Addis-Ababa,

ETHIOPIA.

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## Presidential Welcoming Address

Guest of honor H.E. Dr. Amir Aman, Minister of Health, FDRE,

Dear ESOT member surgeons, conference speakers, Residents, Med students, Sponsors and invited guests;

I humbly welcome you all to this wonderfully prepared 13th national annual general Orthopaedic meeting, Scientific conference and Medical exhibition of the Ethiopian society of orthopedics and traumatology (ESOT).

Welcome! This year is very special in many ways!

Following our last meeting, the ESOT-EC and the organizing committee has been looking for a better conference content. All is now well prepared and I thank my friends, colleagues, staff, residents and my family.

The main theme this year focuses on treating the injured. Modern, timely and quality treatment of the injured is the center of our conference. ESOT-EC selected this timely topic of importance and handling mass casualties is a recent experience we had. We will also thoroughly and scientifically explore wide areas of musculoskeletal diseases as usual.

This year, we have very renowned international speakers as well. They will share us their deep expertise during state-of-the-art lectures. Participate and exchange knowledge attentively.

Excellency, this year we have received so many articles and scientific work for presentation and we are forced to prepare a two days conference.

Added to this, the EC has underlined the importance of professionalism and practice at highest levels of medical ethics.

Orthopaedic surgeon is wanted both during peace and war. Traffic injuries still kill and hurt our citizens. We must be prepared to decrease fatalities and disabilities, by adapting latest good practices and technology.

Dear Excellency, ESOT, through its members has been, is and will be working with the Ministry of Health in giving Emergency treatment to the injured-be in the Capital, in the regions, rural Ethiopia or the boarders. We also have embarked upon the agenda of reducing waiting list for surgery initiative launched by MoH. Curriculum harmonization is also the area we are heavily engaged at MoH.

Dear Colleagues, Partners and Guests;

This year's shining event is made possible thanks to our respected main Partners:

You can see how ESOT is getting well connected to the Industry, Manufacturers, Importers and suppliers. We all share a common social responsibility.

Dear Members;

As usual we will have audit report and some discussion. Lunch and special break meal is well prepared and will be served here at this five star international hotel. Please socialize. Meet old friends and get new friends. Take time and talk to exhibitors, look into products and markets. ESOT is yours!

This is your Society and it is our professional time! Once again, I thank you all for coming and participating at the conference.

I hereby invite his Excellency Dr. Amir Aman , Minister of health,to address the surgeons and officially open our scientific conference.

GOD BLESS US AND OUR COUNTRY!

Biruk L. Wamisho, M.D, FCS;  
Head, Department of Orthopaedics, AAU;  
President, ESOT



## Opening Message by Minister of Health, FDRE

እንደሚታወቁው አገልግሎት አትዮጵያ ቅዱወቅኩ ወደ በመናቁው የአጥንት ሁከምና ተጠቃሚነት እያተስጠገድ ይገኘል ::በለንም ቅጥረቃው ከከመት ወደ አመት እያተስጠገድ በመጣው የአጥንት ሁከምና ስጋስልስት ሁከምቻችን ሁከምና እና አጥራስዎች እያተስና ነው :: ይህ በጥ ሂደትና ባለቤት ስሆን አለም የደረሰበትን የአጥንት ሁከምና ተከናወችና ወደ ባለቤቶች በአገልግሎት ለሁሉም ህዝብ ለመጠቀም ጉና ሰራ ሰራ ይቀረናል::

የቁና ምርታማ ጠኑና ከዚ ለመፍጠር እነዚህም አካልዎችን ለማንቃቅዎች የሚንቀሳቀስ የዚህ ወቅና ነው፡፡  
በዚህ ሌገድ በስለምም ሆነ በለለም ቤት የአጥንትና የደረሰ እንዲሆም ተያያዥ አከላት ሁኔታና አስፈላጊ መሆኑ  
እጠቃቃቁ እድልም የለም፡፡

ቀጥራቻሁ እያደን መጥቶ ባለኝ መረጃ መሰረት 130 ስԵስላስተኞችና ለለ 130 ደንብ ልንደንቶች እንዲለ እነዚህለሁ::ዋናው በኋ እ.የ ትዕር እንበደ ሆ/ሮ የሚገኘው እናት ይጋጋት::መንትና በቅርቡ የተከራቸት ማስቱ እያወስለ ይጋጋት::መንቶች (አው-ለአ::መቀሌ እና ማህርያር) በተቀናዣ መልክ እየሰራተኞና ለእተራስለያን በመጠበቅ ገዢ ያለ-ት-ን በርካታ ሁመ-ማን እኩለ ዓመት ማረጋገጫ በፈ-ት አካማች-ታችው በጋራ በጠና እኩለ-ን ዓመት እንደጋንቀበለ እየጠየቁት እለከሁ-ን ይህ ዘመኝ በውጭታማነት እየተካሂለ መሆኑ-ን እገልግሎሁ ::ሁለተኛ-ሁንም አመሰግናለሁ ::ውደራት-ም በእኩለ አበባም በከልለው-ም ያለ-ት ተ-ልልቁ ሆነታች ወ-ሰጥ ያለው የእጥንት ሁክምና ተጠናከር አለበልለን የእገር ወ-ሰጥም ሆነ የው-ም እገር ሪፖርት እንዲቀር የምት-ሰራበትን እቃወች እያማለን እና የተለያየ ስብ-ስብ-ቴ ስለመኖች ወስቀችው ሁኔታ-ንን ከፌ ባለ ደረጃ የምታ-ገለግሎት ገዢ ፍቃ እይምንም::

Ամենաշատ սպասություն ունեցած քայլությունը հաջորդական ամսաթիվում կապահպանվի և առաջարկվի առաջարկային աշխատանքում:

13ኛው ዓመታዊ ገብዓቶች ሆኖ እግዚአብሔት በይሆኑ መከራከሪን አበላራለሁ::

መልካም ገብረ !

## Establishment of The Ethiopian Society of Orthopedics And Traumatology (ESOT)

Tezera Chaka MD, FCS(ECSA)  
Associate Professor of Orthopedic Surgery  
School of Medicine  
Addis Ababa University



With the beginning of 1995 G.C. the consensus that was made among all Orthopedic Surgeons was to be organized under the Surgical Society of Ethiopia (SSE) which was believed as it should be serve as umbrella organization for all surgical specialties until such time that each surgical specialty associations established. Thereafter SSE would be transformed to "College of Surgeons" and will mainly focus on accreditation, certification, standardization etc of the profession. (Now it is high time to establish the "College of Surgeons" of the country due to the current flourishing of Surgical Trainings at the different Universities in order to assess, standardize, accredit, etc of their activities.)

Subsequently as the department of orthopedic surgery started to produce graduates and also with arrival of specialists graduated abroad the number of orthopedic surgeons started to grow up. In 2003 an interested group met in the Tikur Ambessa hospital surgical department conference hall for a brain storming discussion on how to establish a society. At the end of the meeting a steering committee was formed with the main task to draft the constitution and to accomplish the legalization process.

In May, 2003 the first meeting was conducted at Semien Hotel. The drafted constitution, the name- Ethiopian Society of Orthopedics and Traumatology (ESOT) –and the Emblem of the society were approved and executive members were elected.

On the 2nd of January 2004 the society has been officially registered by the Ministry of Justice and following in 2004 in the presence of officials from the Ministry of Health, delegates from sister societies and associations and other invited guests from inside and out side of the country an inaugural ceremony was held at the Ghion Hotel. There has been also a guest lecture as well as scientific paper presentations. After the second annual meeting and scientific conference which was held at Global Hotel Thursday 30th March 2006 with a pre-conference workshop on Club feet organized by the Society, Cure International and World Orthopedics Concern, during the subsequent years due to unforeseen circumstances (internal and external) the activity has tremendously declined.

In 2008 extra-ordinary meeting was called and new executive committee was elected which led the society to the resurgence of its activity. There after to date there were regular annual meetings and scientific conferences with panel discussions on important and timely issues and Workshops. Starting 2010 the society has gone further to start publishing a Scientific Journal of its own and has created its web-site.

The 2012 AGM and Scientific Conference have been colorfully celebrated at Hilton Hotel in the presence of His Excellency Ato Amin Abdulkadir Minister of Culture and Tourism with the theme "Medical Tourism & Sport Injuries". At this conference members has been honored with a recognition awards for their contribution to the profession at different categories. The first Operative AO course for all Orthopedic Surgeons in Ethiopia & their Nurses was successfully conducted in Dec. 2012 in Churchill Hotel. Both surgeons and residents benefited a lot. ESOT is growing tremendously. Therefore to uphold this noble endeavor, it is the duty of every member to actively engage our self to the fulfillment of the vision, mission and goals of the society.

### List of Ethiopian, Graduate ESOT Founding Members

1991	Dr. Ahmed Taha Makki ( Yemani Citizen ) Dr. Eskinder Afework Dr. Lakew W/ Amanual	2002	Dr. Birhanu Beyer Dr. Wondaferaw Wondimu
1993	Dr. Tawfik Abdulahi Dr. Temesgen Fitru Dr. Tezera Chaka Dr. Worku Mekonnen Dr. Wondimu Wolde	2003	Dr. Biruk Zewdie Dr. Genanew Admasu Dr. Hailu Legesse
1994	Dr. Teshome Worku Dr. Woubalem Zewdie	2004	- Dr .Manyazewl Dessie
1996	Dr. Legesse Yigzaw Dr. Solomon E/ Yonas	2005	- Dr. Kinfe Araya Dr. Zelalem Tamirat
1997	Dr. Dereje Tekalign Dr. Mesfin H/ Mariam Dr. Tadesse Alemayehu	2006	- Dr. Biruk Lambisso Dr. Elias Ahmed Dr. Daniel Ayalkibet Dr. Kagnew Wubishet
1998	Dr. Asfaw Ayele Dr. Dagne Feleke	2007	- Dr. Birhanu Ayana Dr. Tesfaye Lema
2000	Dr. Hailu Shewa-amare	2008	- Dr. Abebaw F/ Sillasie Dr. Dereje Negash Dr. Fekadu Teshome Dr. Fisseha Bekele Dr. Yiheyis Feleke
2001- Dr. Gizachew Nigussie		2009	- Dr. Andargachew Workineh Dr. Demissie W/ Kidan Dr. Mekonnen Wordofa

## Graduates, continued

2010

1. Dr. Neguissie Seifu
2. Dr. Selamu Dessalegn
3. Dr. Solomon Awoke

2011

1. Dr. Tilahun Desta

2012

1. Dr. Daniel Teferi

2013

1. Dr. Alemayew Silassie
2. Dr. Bezu Chemeda
3. Dr. Mohammed Adem

2014

1. Dr. Nesredin Yusuf
2. Dr. Nigussie Hailu
3. Dr. Samuel Hailu
4. Dr. Tadesse Shimelis
5. Dr. Teshome Mosissa
6. Dr. Wondwossen Tekola
7. Dr. Sisay Birhanu

2015

1. Dr. Ebrahim Ahmed
2. Dr. Geletaw Tessema
3. Dr. Tekalign Tsegaye
4. Dr. Sham Ibrahim
5. Dr. Worku Belay
6. Dr. Solomon Goshu

2016

1. Dr. Ephrem G/Hana
2. Dr. Esubalew Abebe
3. Dr. Habtamu Bayissa
4. Dr. Mamo Dikessa
5. Dr. Tewodros Daba
6. Dr. Tinsae H/Michael
7. Dr. Yoseph Zekarias
8. Dr. Zerihun Tamirat

2017

1. Dr. Adisu Chala
2. Dr. Biruh Wubishet
3. Dr. Leul Merid
4. Dr. Yared Solomon
5. Dr. Milkeys Tsehay
6. Dr. Getnet Asnake

2018

1. Dr. Abdurrehman Ahmed
2. Dr. Abiy Worku Haile
3. Dr. Ananya Kassahun Admassu
4. Dr. Ermias Gizaw H/Meskel
5. Dr. Eskinder Kebede Tadesse
6. Dr. Getayie Temesgen Kebede
7. Dr. Zeynu Zuber
8. Dr. Mahder Eshete Yilma
9. Dr. Melesse Gardie Belete
10. Dr. Misgana Temesgen Workneh
11. Dr. Mnower Yirga Ahmed
12. Dr. Mohammed Issa Dawod
13. Dr. Nardos Worku Ketema
14. Dr. Samson Tule Sadiko
15. Dr. Seid Mohammed Yasin
16. Dr. Sintayehu Bussa Teresa
17. Dr. Sisay Belete Berga
18. Dr. Tadesse Esayas Wae
19. Dr. Yebchaye Wondafrash Gemedu

### Members Trained in Orthopaedics Abroad

1. Dr. Bahiru Bezabih
2. Dr. Berhe Gebreselassie
3. Dr. Duane Anderson
4. Dr. Geoffrey Walker
5. Dr. Lishan Assefa
6. Dr. Mesfin Etsub
7. Dr. Rick Gardner
8. Dr. Tewodros Tilahun
9. Dr. Tim Nun
10. Dr. Zegene Taye

## Residents of BLH

### R4 ,AAU

1. Dr. Abdirashid Ismael
2. Dr. Ahmed Seid
3. Dr. Ayele G/Selassie
4. Dr. Bahru Atnafu
5. Dr. Baru Legesse
6. Dr. Berhane Kassa

### R3,AAU

1. Dr. Admasu Tibelt
2. Dr. Ahmed Abdusemed
3. Dr. Eyuel Ambaye
4. Dr. Fikir Tesfaw
5. Dr. Fitsum Lakew
6. Dr. Fre Alemseged
7. Dr. Getachew Berhe
8. Dr. Getahun G/Egziabher
9. Dr. Gulilat Zerihun
10. Dr. Khalid Zeki
11. Dr. Mariamawit Baye
12. Dr. Seyoum Berihun
13. Dr. Silamlak Sisay
14. Dr. Tegenu Dinku
15. Dr. Teshale Ayyana
16. Dr. Tewodros Taye
17. Dr. Tsegaye Mamo
18. Dr. Yonas Amiga
19. Dr. Yazachew Yimenu
20. Dr. Zenaye Wude
21. Dr. Teshome Tena

## R2,AAU

1. Dr. MogesTessema Hesbeto
2. Dr. Habtamu Akalu berta
3. Dr. Melkamu Alemu Senbeta
4. Dr. Kaleab Tesfaye Reda
5. Dr. Yemane G/Yohannes G/Kiristos
6. Dr. Abiy berhanu Solomon
7. Dr. Naol Worku Moroda
8. Dr. Samuel Tesfaye Shiferaw
9. Dr. Robel Sirak Zewde
10. Dr. Tezera Tadesse Geleta
11. Dr. Aelaf Asegid Mammo
12. Dr Belete Hubena Elala
13. Dr. Jiregna Fayera Binagde
14. Dr. Henok Dagnachew Deme
15. Dr. Daniel Banksira Shikur
16. Dr. Gemechis Amano Geleto
17. Dr. Matiyas Seid Mohammed
18. Dr. Senay Mekonen Teferi
19. Dr. Fantahun Solomon Nurlign
20. Dr. Abdo Dames Shafi

## R1,AAU

1. Dr. Abdulwasi Jemal
2. Dr. Abel Jemberu
3. Dr. Addisu Deribe
4. Dr. Amanuel Iulseged
5. Dr. Asna Bersisa
6. Dr. Barnabas Wondimu
7. Dr. Beakl Bogale
8. Dr. Elleni Atnafu
9. Dr. Elsa Daniel
10. Dr. Eyob fisseha
11. Dr. Hailegebriel Degefu
12. Dr. Mehari Temsgen
13. Dr. Melkamu Tafesse
14. Dr. Mohammedamin Kelil
15. Dr. Samrawit Esayas
16. Dr. Shikuria Lema
17. Dr. Tadesse Debrya
18. Dr. Tadesse Dugasa
19. Dr. Tesahun Tekle
20. Dr. Tesfahun Tekle
21. Dr. Tewodros Fikadu

22. Dr. Yalew Tsegaye
23. Dr. Said Osman

## AAU Orthopaedic Department, Staff G.Ps

1. Dr. Alpha Seifu
2. Dr. Gemechis Regassa

## Bahir Dar University Residents

### (BDU)- R3

1. Dr. Aderaw Getie Mewahegn
2. Dr. Almaw Bitew Asres
3. Dr. Bekalu Wubshet Zewudie
4. Dr. Binyam Biresaw Netsere
5. Dr. Birhanu Beza Tegegne
6. Dr. Daniel Adane Derso
7. Dr. Solomon Kassaye Enigida
8. Dr. Tafere Wasie Fentie

### BDU - R2

1. Dr. Mulate Abie |Mesele
2. Dr. Yeab Mulat Mesfin
3. Dr. Biniam Zemedu Assefa
4. Dr. Biruk Ferede Zewdu
5. Dr. Misganaw Alemu
6. Dr. Wubshet Aderaw Workneh
7. Dr. Gashaye tagele ayele
8. Dr. Getachew Wuhib Shumye

### BDU - R1

1. Dr. Solomone Melkamu
2. Dr. Birlew Tesome
3. Dr. Nagaasaa Habetamu
4. Dr. Abiy Misganaw
5. Dr. Diress Yeshaneh
6. Dr. Zerfu Bala
7. Dr. Dawit Asmamaw
8. Dr. Milkessa Hunde
9. Dr. Workineh Mengsha
10. Dr. Abrham Amare
11. Dr. Melkamu Adamu

St.Pauls' hospital millenniu  
Medical colaeg(Sphmmc)-R3

- 1 Dr. Getasew Tessfaw
- 2 Dr. Bereket tsegaye
- 3 Dr. Teshale Lodamo
- 4 Dr. Netsanet Abebe
- 5 Dr. Aytegeb Ayehu
- 6 Dr. Samuel kebede

Sphmmc -R2

- 1 Dr. Ashenafi Ayalew Mihret
- 2 Dr. Ashenafi Udessa Biftu
- 3 Dr. Beza Gireff Tadesse
- 4 Dr. Habtewold Mulat Ayele
- 5 Dr. Idris Hassen Mussa
- 6 Dr. Kalkidan Ayalew Mulat
- 7 Dr. Meron Kelil Mohamed
- 8 Dr. Mulugeta Bekele Geneti
- 9 Dr. Sintayehu Tekle mamo
- 10 Dr. Soaleh Ebrahim Molla
- 11 Dr. Omer Mohamed Farah
- 12 Dr. Zacharia Peter Ajack

Sphmmc -R1

- 1 Dr. Alebachew Misgan
- 2 Dr. Anteneh Damena
- 3 Dr. Bekele Chimdesa
- 4 Dr. Berhanu Andarge
- 5 Dr. Bezayit Tesfaye
- 6 Dr. Cheru Beyene
- 7 Dr. Daniel Teklu
- 8 Dr. Dawit Alemayehu
- 9 Dr. Desta Girma
- 10 Dr. Endalamaw Fentie
- 11 Dr. Giday Zeru
- 12 Dr. Kirubel Girma
- 13 Dr. Leake Tirfe
- 14 Dr. Lelisa Merga
- 15 Dr. Sahle Tsegabrhan
- 16 Dr. Tolasa Dibisa
- 17 Dr. Tsegaw Tamene

Mekele University- R3

- 1 Dr Aguer Ayuel warabek
- 2 Dr G/her Mahtsun T/medhin
- 3 Dr G/Michael Aregawi Gidey
- 4 Dr Ketema Hailemariam
- 5 Dr kuot Mabior Leek
- 6 Dr Million Tareke
- 7 Dr Solomon Ayele Tilahun
- 8 Dr Tewelde Nigusse G/anania

Mekele University -R1 Data not submitted

**List Compiled by Dr. Tezera & Dr. Shikuria  
Thankyou !!!**

AO Alliance Foundation  
Pediatric Orthopedic Surgery Course  
23 April- 26 April 2018  
Black Lion Hospital, Addis Ababa University



# Danu Orthopedics, Trauma And Surgery Center

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Room

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Ambulance service



Physiotherapy



# 13<sup>th</sup> ANNUAL ESOT SCIENTIFIC CONFERENCE

*Sheraton Addis Luxury Hotel, Ethiopia*

July 10<sup>th</sup>, 2018, Morning Session

Time	Program	Presenters	Moderators
Before 08:00am	Medical Exhibitors organize at their locations/booth		ESOT-EC
08:00-08:30am	<b>REGISTRATION</b>		Secretaries
08:45-09:00am	<b>INTRODUCTION:</b> Recognition of Guests, Partners and Major Sponsors	Company Reps.	Dr. Semir
09:00 am	Guest of honor, the Minister arrives, Escorted by ESOT-EC		Dr. Zegene T
09:00-09:15am	<b>Presidential Welcoming Address</b>	Dr. Biruk L	ESOT-EC
09:15-09:30am	<b>Opening speech</b> H.E. Dr. Amir Aman. Minister, MoH		
09:30-10:00am	<b>ESOT-Merit Award Ceremony &amp; Main Conference Theme Presentation</b>		
10:00am	<b>Tour to sponsor's exhibition booths, the Minister Opens</b>		Dr. Hiwot/ Dr. Helawi
10:00-11:00 am	<b>TEA/COFFEE BREAK/ MEDICAL EXHIBITION</b>		
11:00-11:30am	<b>Double Bundle ACL Reconstruction</b>	Dr. Wu Deng Ke	Dr. Geletaw T
11:30-12:00pm	<b>Pelvic Ring Disruption management for Orthopedic surgeons</b>	Dr. Samuel H	
12:00-12:30pm	<b>Discussion</b>		
12:30-1:30pm	<b>LUNCH AND MARKETING</b>		

July 10<sup>th</sup>, 2018, Afternoon session

Time	Program	Presenters	Moderators
1:40-2:10 pm	Outcome assessment of Floating hip patient managed at Addis Ababa, Ethiopia	Dr. Mengistu	
2:10-2:30pm	Disability Rating in Ethiopia(Software and guideline development): National project on progress	Dr. Biruk L	Dr. Tezera C Col.Dr. Biruk Z
2:30-2:50pm	<b>Discussion</b>		
2:50-3:30pm	<b>TEA/COFFEE BREAK/ MEDICAL EXHIBITION</b>		
3:30-4:30pm	<b>ESOT-EC Summary Report</b> <b>External Auditor's Report</b>	Dr. Biruk L Dr. Zegene T	
4:30-5:30pm	<ul style="list-style-type: none"> <li>• AGM (ESOT EC, Curriculum, Harmonization Sub-Committees, Waiting List Reduction)</li> <li>• Closing</li> </ul>		Dr. Tilahun CSA Staff

# 13<sup>th</sup> ANNUAL ESOT SCIENTIFIC CONFERENCE

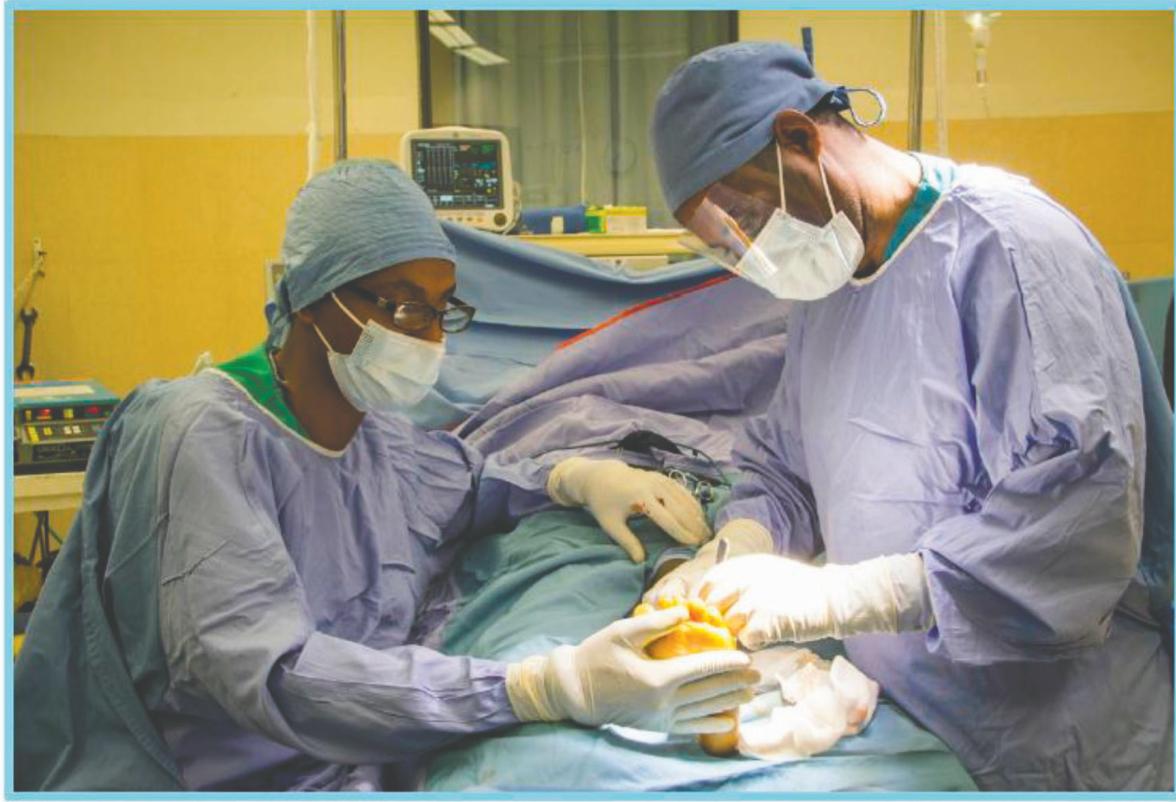
*Sheraton Addis Luxury Hotel, Ethiopia*

July 11<sup>th</sup>, 2018, Morning session

Time	Program	Presenter	Moderators
Before 08:00			
08:30am	Medical Exhibitors organize at their locations/booth		
08:40 - 09:00am	Patient and public engagement: Opinions on care and area for improvement	Dr. Fre	
09:00 - 09:20am	Assessment of Orthopedics surgery residents level of satisfaction: Multicenter study	Dr. Mengistu	
09:20-09:40am	Cost Analysis study of Patients Lost Radiologic Imaging in TASH	Dr. Eyueal	
09:40-10:00am	Discussion		Dr. Rick G
10:05-10:45am	<b>TEA/COFFEE BREAK/ MEDICAL EXHIBITION</b>		
11:00-11:20am	Volkmann ischemic contracture & Flexor slide	Dr. Rick	Dr. Wubalem Z/ Dr. Mesfin.H
11:20-11:40am	When Eight plates will Not work?	Dr. Nardos	
11:40-12:00pm	Fibrous Dysplasia & hip management challenges	Dr. Rick	
12:00-12:20pm	The SIGN nail for deformity correction in Limited resource set-up: Extending the indication.	Dr. Leul	
12:20-12:40pm	Discussion		
12:40-1:40pm	<b>LUNCH AND MARKETING</b>		

July 11<sup>th</sup>, 2018, Afternoon Session

Time	Program	Presenters	Moderator	
1:40-2:00 pm	Severe MSK pathology & foot drop in patient with primary Hyperparathyroidism	Dr. Fre	Dr. Bahiru B	
2:00-2:20pm	The Bridle Procedure for treatment of Dorsiflexion paralysis of Foot	Dr. Habtamu		
2:20-2:40pm	<b>Outcome of SIGN IMN in TASH</b>			
2:40-3:00pm	Assessment of One Year Orthopedic Trauma Burden in TASH	Dr. Eyueal		
3:00-3:25pm	Discussion			
3:30-4:00 pm	<b>TEA/COFFEE BREAK/ MEDICAL EXHIBITION</b>			
4:00-4:15pm	Assessment of basic pre-hospital ambulance care for patients transported from the scene to ED	Medina (Lecturer, Msc in Emergency)	Dr. Mesfin H Dr. Mamo D	
4:15-4:30pm	Discussion			
4:30-5:00pm	<b>Closing Remarks</b>			



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### Double Bundle ACL Reconstruction

Double bundle ACL reconstruction allows more accurate recreation of native anatomy by replicating both the anteromedial (AM) and posterolateral (PL) bundles of the ACL. Studies have suggested that double bundle ACLR can more effectively restore rotational stability of the knee and improve short and long term outcomes.



## Outcome assessment of Floating Hip patients managed at Addis Ababa, Ethiopia.

Samuel Hailu, Geletaw Tessema, Mengistu Gebreyohanes, Brett A. Shannon

**Introduction :** Floating hip is the presence of femoral fracture with ipsilateral acetabulum and/or pelvic ring injury. These are high energy injuries, and as a consequence are often associated with other major injuries and systemic complications including coagulopathy, ARDS and death. Consequently, the management approach to this type of patient is difficult and the condition is associated with a poor prognosis.

In this study we report on our experience managing a cohort of patients with floating hip, focusing on injury pattern, operative management, complications and outcome.

**Objective:** The aim of this study was to assess and describe the pattern of associated injuries, the management approach, complications and functional outcome following presentation to our center with floating hip.

**Methodology:** This was a descriptive study of patients diagnosed with floating hip injury that were treated between January 1, 2016 and February 30, 2018 with a minimum follow up of 6 months. The patient with floating hip was identified from the trauma registry logbook, pelvic and acetabulum patient data base and SIGN online data base. Every patient presenting with a diagnosis of floating hip and who were managed at our center (Tikur Anbessa specialized Hospital and Private center) were included in the study. All available medical records and radiographs were reviewed for each patient. The information recorded included age, sex, type of pelvic and acetabulum fracture, location and nature of femoral fracture, Liebergall et al injury classification, any associated injury, treatment and sequence of fixation, fixation device for each fracture and the interval between operations. All the data were collected by the use of structured data extraction checklist which was prepared by the principal investigator. Outcome data was collected at follow up, including the presence of post-operative complications such as infection, the range of movement of the hip and knee, time for squatting, and the need for re-operation. Harris Hip scores were obtained in order to assess the functional outcome of patients.

The study was undertaken after getting ethical clearance from the department research ethical committee.

**Result:** A total of 33 patients were treated with the diagnosis of floating hip between January 1, 2016 and February 30, 2018. Three of the patients (9%) had both ipsilateral floating hip and knee injuries. The mean age was 28.24 (range 3-60) years with a male to female ratio of 4.5: 1. Road traffic accident was the leading cause of injury accounting for 78.8%, followed by fall from height (15.2%) and other causes (6%). According to the Liebergall et al classification, 45.5% were purely pelvic ring injuries and 36.4% were pure acetabular fractures with 18.1% having combined acetabulum and pelvis ring injuries. Sixty percent of pelvic ring injuries were Tile C and the remaining 40% were Tile B. According to the Létournel classification, the majority (55.6%) of acetabular fracture was associated fracture and the remaining are elemental fracture. The femoral fractures included 88% in the shaft and the rest in the subtrochanteric region. The most commonly reported associated injury was blunt abdominal trauma (35%), followed by head injuries (28%), blunt chest trauma (17%) and the rest 20% was others body injury.

From presentation, 57.8% of the cases (both femur and pelvis/acetabulum fractures) were operated on the same day, whilst in 42.2% of patients the femur was stabilized initially and the other operation was postponed for 3-5 days due to intra-operative hemodynamic instabilities of patients. All femoral fractures were managed operatively using the SIGN nail. Among all the cases, 85.7% of acetabular fractures and 62.5% of pelvic ring injuries were managed operatively (Open reduction and internal fixation, external fixator and percutaneous screw).

Among 19 pelvic ring injury, 8 (42.1%) managed with ORIF, 3 (15.8%) with percutaneous screw, and 2 (10.5%) were managed with external fixator. The remaining 6 (31.6%) of patients were managed non-operatively due to acceptable displacement. From the 14 acetabular fracture, 12(85.7%) managed with ORIF and 2 (14.3%) were treated non-operatively.

There were no reported deaths, re-operation or deep surgical site infections. One patient developed a pin site infection after the pelvic external fixator was ap-

plied. This was managed with debridement and pin removal.

Twelve patients had a Harris hip score completed at 6months of follow up, with 80% reporting good to excellent functional outcome and the other reporting mild functional deficits.

**Conclusion:** Floating hip is a relatively common presentation in our center due to the high rate of major trauma. Our results suggest that intramedullary nailing is an effective option for managing the femoral fracture and allow early rehabilitation and a low risk of deep postoperative infection in our cohort. Our short term functional outcome data show many patients go on to obtain good to excellent functional outcomes after these major injuries.

**Key words:** Floating hip, femur fracture, acetabular fracture, pelvis fracture, associated injury.



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## **Patient and Public Engagement: Opinions on Healthcare and Areas for Improvement**

**A. Leulseged, S. Lemma, Luke D. Hughes, Kohila V. Sigamoney, Anthony Clayton, L. Biruk**

**Introduction:** Patient and Public involvement (PPI) ensures that patients and the public, service users and careers can influence their own care and treatment, have a say in the way services are planned and run and help bring about improvements to the way care is provided. Patients have a right to good treatment in a comfortable, caring and safe environment, delivered in a calm and reassuring way. Patients should be provided with information to enable them to make choices, to feel confident and in control. They need to be talked to and listened to as an equal and be treated with honesty, respect and dignity. To date there has been no formal patient and public involvement from the Orthopaedic department at Tikur Anbessa Specialized Hospital, Addis Abba, Ethiopia.

**Method:** A PPI questionnaire was designed with questions covering four broad areas: patient and visitor feelings/opinions, staff factors, hospital factors and health education. This questionnaire was administered to a random sample of 21 patients and relatives located on the orthopaedic ward and visiting the orthopaedic clinic at Tikur Anbessa Specialized Hospital over the course of a week.

**Results:** When asked what they felt was the most important factor in receiving treatment 38% of patients and public documented that it was the politeness of the treating clinicians; 24% documented understanding the condition; 14% reported good communication and safety whilst in hospital; and 10% reported hospital cleanliness.

When asked their feelings about attending Black Lion Hospital 25% responded very good; 35% responded good; 25% responded average; and 15% responded poor.

When asked about the quality of staff-patient communication 19% responded very good; 48% good and Speed with which they made progress with treatment 10% responded very good; 19% good. When asked about Understanding of the condition for which they are receiving treatment 33% responded very good; 24% good.

**Conclusion:** This is the first time that a PPI project has been completed at Black Lion Hospital. The findings demonstrate that overall patients and relatives attending the hospital are happy with the service they receive and yet there are clearly areas for improvement. It is clear that service users believe that staff politeness and communication are key to their satisfaction. Staff must bear this in mind when managing patients. An additional important finding was dissatisfaction with long waiting times for treatments indicating the need for resource investment. The plan is to complete a prospective project over a 6 month period to increase the power of findings with the PPI questionnaire translated into Amharic to improve satisfactory completion.

## Assessment of Orthopedics Surgery Residents level of Satisfaction with their training and associated factors in Ethiopia: National multicenter study.

Mengistu G/Yohanes<sup>1</sup>, Hiwot Hailu<sup>1</sup>, Eyueal Ambaye<sup>1</sup>, Admasu Tibelt<sup>1</sup>, Abdo Dames<sup>1</sup>,

Berhe G/sillassie<sup>2</sup>, Yosef Zekarias<sup>2</sup>, Bekalu Wubshet<sup>3</sup>, Birhanu Beza<sup>3</sup>, Bereket Tsegaye<sup>4</sup>

1. Addis Ababa University (TASH), 2. Mekelle University (ARH), 3. Bahir Dar University (FHRH), 4. St Paul Millennium Medical College (AaBET)



**Introduction:** Orthopedics surgery residency training is one of the emerging specialty in Ethiopia. Tikur Anbessa Specialized Hospital was the only teaching institution in which this specialty was given throughout the country for the last four decades. Due to the growing high demand of this specialty in the country, 3 years back 2 other institutions (St. Paul and Bahir Dar Universities) and 2 years back Mekelle University started residency which makes a total of four university Hospitals. Currently they are flooded with many orthopedics surgery interested trainees. Meanwhile, as to our knowledge, there is no study done which shows orthopedic resident's level of satisfaction and experience in their training.

**Objective:** The aim of this study was to assess the level of Orthopedics surgery resident satisfaction and associated factors throughout the country.

**Method:** A cross sectional multicenter survey was conducted in all the four National institution in which orthopedics surgery residency is given. Structured self-administered questionnaire was prepared and distributed to the program director or resident's representative at their discretion. The questions were multiple choice, free text answer and five-point Likert scale. Statistical significance was declared when P-value < 0.05 in Chi-square and logistic regression analysis.

**Result:** Ninety-eight orthopedics surgery residents responded for the questionnaires throughout the country. The average age of respondent was 28.7 (25 – 34) years. Ninety-three point nine (92/98) of respondents were Male. Among all, 64% (63/98) residents were satisfied with their residency program. Factors that shows significant association with the overall satisfaction were number of scrubbing (OR, 5.1; 95%CI, 1.5 – 10.7), anesthesia team interaction (OR, 4.5; 95%CI, 1.9- 8.9), conference and seminar (OR, 2.4; 95%CI, 1.3- 5.5) and seminar and conference (OR, 1.9; 95%CI, 1.5- 4.5)

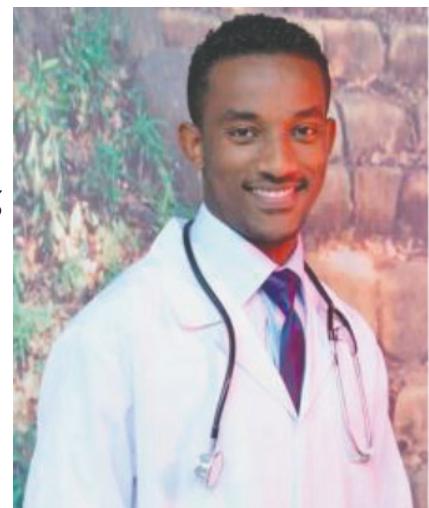
**Conclusion and Recommendation:** From this study, we can see that orthopedics surgery resident's level of satisfaction is relatively low and explained with many variables. This study gives a clue about the factors that affects resident's level of satisfaction and shows the area of focus to improve resident's satisfaction level in their training.

We recommend the department and school to work on improving interactions with anesthesia teams and increase number of scrubbing for residents.

**Key words:** Orthopedics Resident, Level of satisfaction, residency training, specialization

## Cost Analysis study of Patients' Lost radiologic imaging in the Department of Orthopedics, Addis Ababa University, Ethiopia: The Iceberg of the condition.

Mengistu G/Yohanes, Eyueal Ambaye, Biruk Lambisso



**Introduction:** The technological advancement in the radiological investigation modality is very impressive and has a great role in the management of patients. It helps a lot in the confirmation of patient's diagnosis and help to follow patients for their outcome specifically for orthopedics patients. It is one of the most commonly ordered work-up for each of the patients. In our country, Ethiopia, losing of patient's radiological investigation result after getting treatment is common.

**Objective:** The purpose of this study is to assess the potential place where orthopedics patients lose their radiologic result and to calculate the direct cost incurred for the investigation.

**Method:** It was a descriptive study of patient's radiological imaging results found lost in the department of orthopedics in Tikur Anbessa Specialized Hospital, Addis Ababa, Ethiopia in the time between 2015 to March 2018. The imaging lost were collected from outpatient clinic, operation theater room and orthopedics wards. The data was collected with data extraction checklist and entered into excel which was exported to SPSS version 23 for analysis. This study is done after getting ethical clearance from the department research committee.

**Result and discussion:** The result of the study shows that there were 1013 imaging CDs lost in the above-mentioned places from 889 patients. Among the CDs, 90.9% were X-rays and half of it was lost in the outpatient clinic followed by operation theater room and wards respectively. Of all the radiologic investigations lost, 97.9% were done in TASH. The total direct cost was 96,780 ETB (3,532 USD). We can conclude that lost radiological investigation results of patients are common in the outpatient clinic, operation theater and wards. So, it needs well organized and controlled system to remind patients not to forget their radiological results after they get treatment in the department of orthopedics.

**Key words:** cost analysis, radiological imaging, orthopedics department

## Fibrous Dysplasia and the Hip- Management Challenges

Dr. Rick Gardner, CURE Ethiopia Children's Hospital

### Introduction

Fibrous dysplasia is a benign disorder where there is a failure of maturation of woven to lamellar bone. When there are lesions in the proximal femur, pain, deformity and pathological fracture often occur. The soft bone and occasional extensive skeletal involvement present challenges to the treating surgeon. We discuss our experience in monostotic and polyostotic fibrous dysplasia.

### Objective and methods

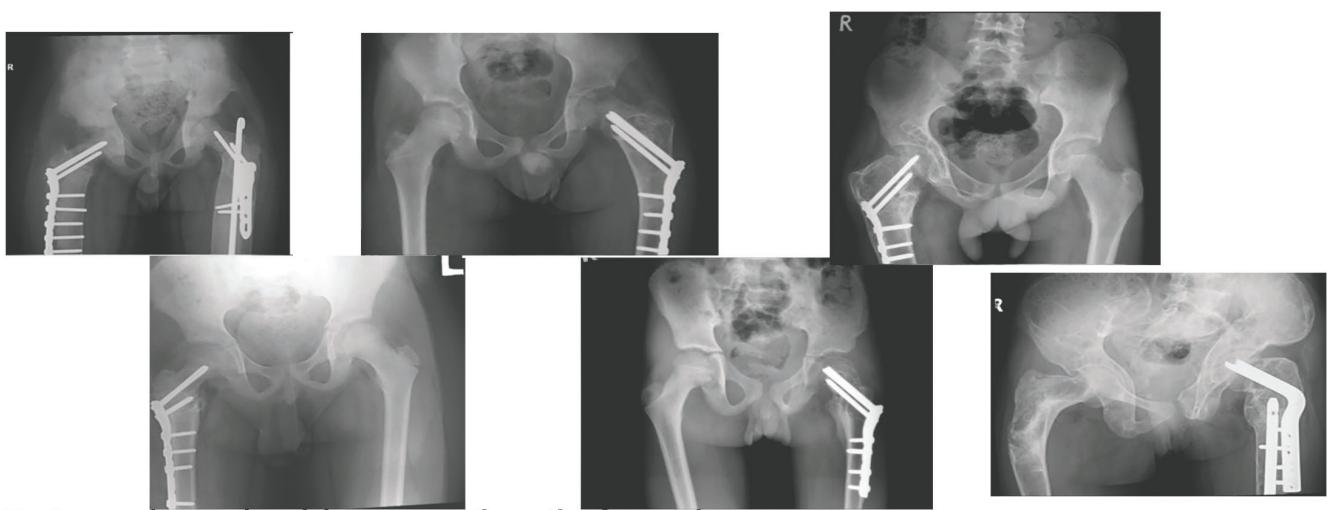
Recent patients with histological confirmation of fibrous dysplasia affecting the hip were reviewed. Six patients were identified and their charts reviewed for details of the index surgery, complications and further operative intervention.

### Results

Patients with polyostotic fibrous dysplasia presented significant challenges. The combination of soft bone, severe deformity and involvement of the entire femur required revision surgery to achieve a satisfactory outcome. Inclusion of an abductor slide as part of the operative procedure can minimise complications. Operative techniques and lessons learnt will be discussed.

### Conclusion

Fibrous dysplasia affecting the hip is a challenging condition. Appropriate internal fixation, deformity correction and soft tissue releases are required to minimise recurrence and metalwork cut-out.



Good Progress!  
But Still Only 5% of Our  
Colleagues are Females



## Why eight plates fails?

Dr Nardos, Dr Tim, Dr Mesfin, Dr Tewodros, Dr Rick

### Introduction

In pediatric orthopedics, deformities of growing bones are key problems that commonly need to be addressed. Modulation of growing bone can be performed in different ways and guided growth is a well-proven concept for correcting deformities in children. Few complications have been observed with guided growth including implant breakage, extrusion, changes in mechanical axis and physical damage.

### Method

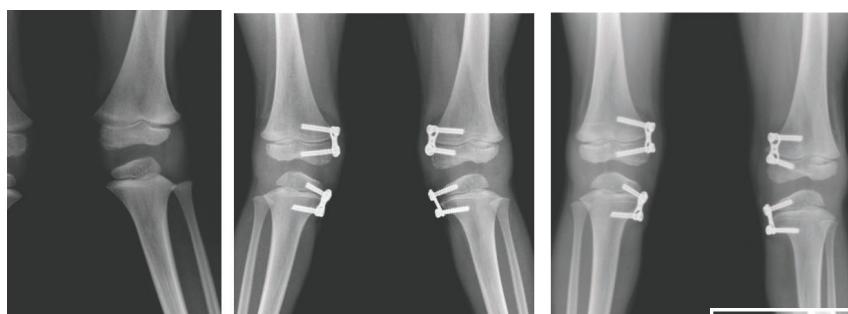
We evaluated the possible reasons why guided growth fails. The study was carried out as a retrospective single center study. Data was collected from patients with angular deformity of the knees and managed with guided growth between July 2013 and July 2017. Charts and radiographs were reviewed to assess outcome. Total number of patients with angular deformity and treated with guided growth were 89.

### Result

Nine patients (10.6%) failed to improve on radiological assessment and 4 (4.5%) were excluded because of inadequate follow up. Of the 9 patients that failed to improve, 66.7% had valgus angular deformity and in all (100%) of the patients the deformity was bilateral. The mean tibiofemoral angle in the failed group was 33°. The reasons for failure were severe deformity, moderate deformity in some forms of skeletal dysplasia and treatment too close to skeletal maturity.

### Recommendation

Consider osteotomy when there is a severe deformity (more than 30°), caution in some forms of skeletal dysplasia and assess skeletal age to confirm that sufficient growth remains in children close to maturity.



1: Successful treatment with 8-plates



Figure 3: Failed treatment with 8- plate in a patient with suspected MED

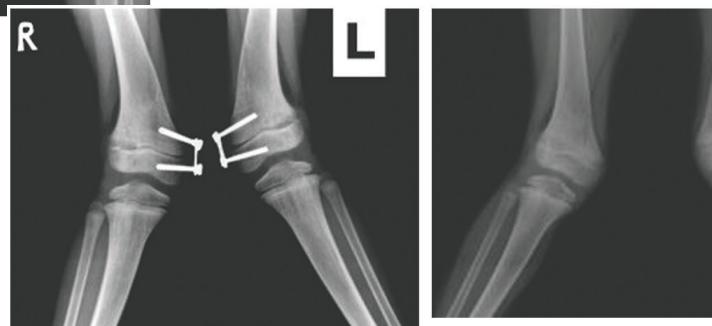


Figure 2: Failed treatment with 8- plate in a patient with sever deformity

## Volkmann's ischaemic contracture and the flexor slide

Dr. Rick Gardner, CURE Ethiopia Children's Hospital

### Introduction

Volkmann's ischaemic contracture is an unfortunately common presentation in Ethiopia. While many cases present that are beyond salvage, some have sufficient residual muscle power to consider operative intervention to improve hand function. Standard musculotendinous recession and tendon lengthening can put the fingers in a more cosmetic position but do little to improve function. The flexor slide procedure maintains the musculotendinous unit, preserving power but distalising the insertion of the anterior forearm compartment. We discuss our recent experience of this procedure that includes Volkmann's contracture, post-infection contracture and hemiplegia.

### Objective and methods

To review our recent experience of the flexor slide procedure. Seven patients were identified from our records and were invited back for assessment. Pre-op photos and videos of hand function were available for reference to assess the functional gain. All patients underwent a forearm flexor slide with ulna nerve transposition, six weeks of splintage followed by night splintage and physiotherapy.

### Results

Of the seven patients, five returned for assessment. Age range 7-17 years-old (average 11.2 years). Three had Volkmann contractures following forearm injuries and traditional/wogesha management, one had a contracture following pyomyositis (time following injury ranged from 1 to 3 years, average 24 months) and one had severe cerebral palsy hemiplegia with fixed wrist and finger flexion. All clinically and functionally improved following surgery.

### Conclusion

In the appropriate patient, the forearm flexor slide is a promising procedure that can be used in a variety of conditions that cause contracture of the forearm musculature. It is superior to the previous techniques we have used at CURE Hospital.



ESOT appreciates all its members in eight Hospitals who treated the injured by hand grenade at the our P.M support rally in Addis.

We also thank all senior leaders who visited the mother Orthopaedic Department at TASH and comforted our patients



## The SIGN nail for deformity correction in resource Limited set-up: Extending the indication.

Leul merid, Pediatric orthopedics fellow at cure children's Hospital

**Introduction:** A limb deformity is a deviation from the normal anatomy. Limb deformities can be classified according to cause (congenital, developmental, and post-traumatic), location (bone or joint contracture, extra-or intraarticular), geometry (angulation, translation, rotation, and length discrepancy), severity (magnitude), and progression (static or progressive). Limb deformities may lead to dysfunction, pain and joint degeneration

Orthopedic surgical correction must consider all of the above factors. For bone deformities the mainstay of treatment has been osteotomy, which is a complex task and requires a thorough understanding of the deformity analysis. The nomenclature, principles and planning of deformity correction has been well described by Dror paley.

The planning method has evolved from paper tracing to digital templating software and to the recent patient specific approach using 3-D printers to get a cutting guide which is used to transfer the pre-op planned osteotomy to the patient's bone.

Current hardware options to effect the deformity correction include: ILIZAROV and the Taylor Spatial Frame (TSF) which is a more recent fixator that corrects multiplanar limb deformities using computer software program.

The management of limb length discrepancies include: growth modulation, acute shortening and limb lengthening- using various methods including external fixation-ILIZAROV-have been the gold standard, internal lengthening devices which evolve from mechanically driven ALBIZZIA and intramedullary skeletal kinetic distractor(ISKD), to motorized Fit bone system and to the recent magnetically driven state-of-the art PRECICE nail and combined approach(like-LON or LATN)

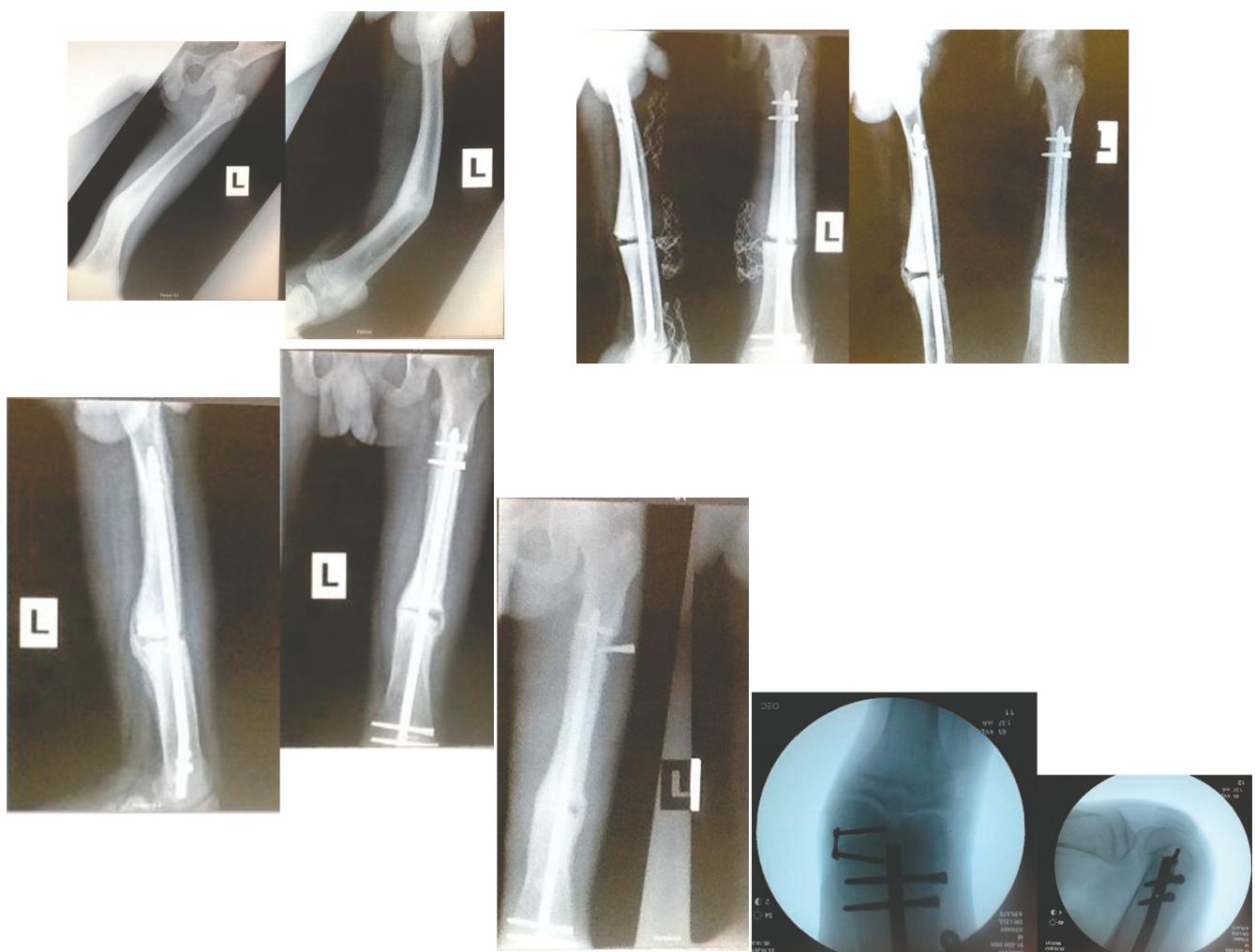
Though the above modalities are the standards of 21st century deformity correction in the developed countries, they are not available in low resource developing countries.

Contrary the SIGN nail is a simple, inexpensive implant and is available over 50 countries in many institutions in developing countries and as many surgeons providing fracture care are already familiar with the implant, it can be used to effect all the above mentioned components of a deformity correction

So we can still experience the joy of deformity correction and help our patients.

Here we present a series of cases to share our experience to address angular deformity correction (femur, tibia), LLD management- acute shortening and lengthening in (femur, tibia), and joint fusions (knee, ankle) and discuss tricks of the trade.





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Science For A Better Life

# The outcome of SIGN intramedullary nailing in Hawassa University Comprehensive Specialized Hospital (HUCSH) – a comparison of 2 studies



Talu D., Sigamoney K, Hughes L., Gebrehana E.

John Charnley Trust

## INTRODUCTION

SIGN fracture care is a humanitarian organization that is responding to the need to provide orthopaedic treatment to trauma victims in developing countries. The organisation provides the local surgeons with the training and medical implants they need to properly treat the patients that they serve. In return, data of patients needs to be uploaded for the purposes of research.

## AIM

The purpose of this study is to view the demographic and epidemiological outcomes of those patients who have had application of a SIGN nail in HUCSH

## METHODS

1. Using the SIGN surgical database, analysis is done.
2. Demographics and outcomes recorded.
3. 2 studies are conducted. The first, looking at patients

## CONCLUSIONS

- There is an increase in follow-up rate likely due to better patient education.
- Radiological union, recording of squat and smile pictures and painless weight bearing have all improved.
- Infection rate has improved but is still significant and needs improvement.
- There is a higher rate of non-unions and this has to be addressed.

## RESULTS

### Initial study

- From 03/24/2016-12/30/16
- 70 patients out of 156 attended follow - up corresponding to follow up rate of 41.64%
- Healing by x-rays=44 cases (62.85%)

### Complications

- Infection while SIGN nail insitu (3 patients) corresponding to an infection rate of 4.29%
  - 1 nail removed (deep with osteomyelitis)
  - 2 incision site infection (1 incision site with deep osteomyelitis).

### Follow-up

- Squat and smile picture taken=31 cases (42.29%)
- Painless weight bearing=43 cases (61.43%)
- No non-unions



### Second study

- 350 cases to date (26 June 2018)
- Since 12/03/2016 – 25 June 2018
- Between 1/1/2017 and 31/12/2017 = 172 cases
- 11 – 76 years old
- 146 male, 26 female
- 102 out of 172 patients attended follow – up (59.3%)
- Healing by X-rays=96 cases (94.12%)

### Complications

- Infection while SIGN nail insitu (4 patients), corresponding to an infection rate of 3.92%
  - 2 had nails removed

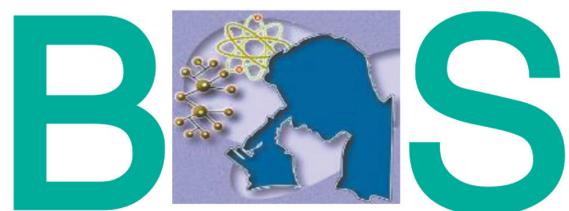


### Follow – up

- Squat and smile picture taken= 66 cases (64.71%)
- Painless weight bearing = 95 cases (93.14%)
- 5 non-unions (4.90%), 2 of which are due to infection

## DISCUSSIONS

- Patient education is necessary to continue to improve follow up rates.
- Education of junior residents is necessary to ensure robust data collection.
- To consider reasons for high infection rate, such as poor scrub technique, theatre and ward cleanliness, adequate antibiotic prophylaxis and wound care.
- To re-audit annually.



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ture treatment conference"  
ounder & President of SIGN.  
IGN CEO.

Idis Hotel, New Hall  
27, 2017



## Severe musculoskeletal pathology & “foot-drop” in a patient with Primary Hyperparathyroidism: Case Report

Fre, AH; Biruk LW, Pearce AD

**Introduction:** Primary Hyperparathyroidism is an uncontrolled increase in function of the parathyroid hormone secondary to adenoma, hyperplasia or carcinoma. In approximately 85% of cases, etiology is a single adenoma. In 15% of cases, multiple glands are involved as multiple adenomas or hyperplasia and rarely carcinoma. Primary Hyperparathyroidism has a prevalence of 1-4 in 1000 individuals, with predilection to women [3:1] and peak age of 50-60 years. This clinical syndrome can be remembered as “Bones, stones, abdominal groans and psychic moans”. Currently presentation has changed since the advent of routine blood calcium measurement. In developing countries, the scenario is different. Because of the availability of health care and lesser medical seeking behavior, the clinical picture is that of late presentation and severe symptoms and signs.

### Case report

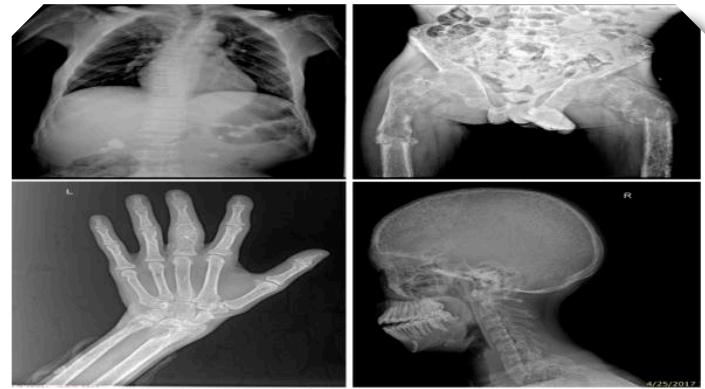
A 26 year old male police academy graduate who completed intensive physical training 6 years prior sustained a left patellar dislocation after jumping down from the back of a “pick up” truck.

PMH: Right femur fracture, 12 months prior to presenting complaint, treated with skin traction for two months. While on traction, he sustained a spontaneous left femur fracture.

O/E: General malaise with subdued affect, pale conjunctivae, anterior neck mass that moved with swallowing, compressible ribcage, kyphosis, loss of lumbar lordosis, left foot drop with ipsilateral asymmetric decreased sensation below L3 and bilateral pitting edema.

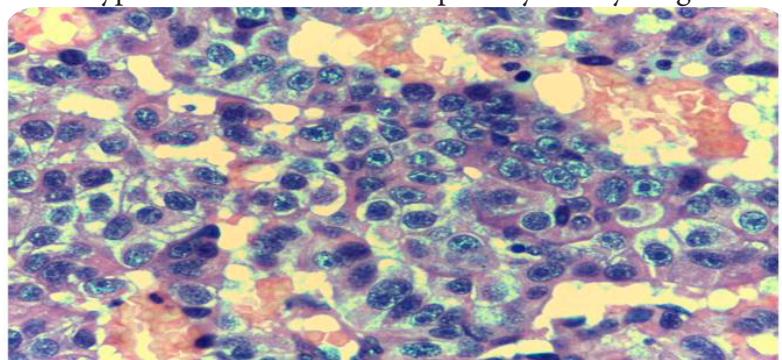
Ix: Bloods, Xrays - Skeletal Survey, USS, MRI, FNAC  
Dx: Primary Hyperparathyroidism secondary to atypical parathyroid adenoma

Mx: Admitted under Medicine for resuscitation with IV fluids and RBC transfusion and further investigation. Endocrinologist arranged surgical excision of the right thyroid lobe with abnormal parathyroid mass. The bilateral femoral fractures were treated with Thomas Splints.



**Xrays:**  
[Upper Left]: AP Thoracolumbar spine showing multiple vertebral compression fractures;  
[Upper Right]: AP Pelvis and proximal femora showing bilateral femoral fractures;  
[Lower Left]: AP Hand and wrist showing multiple brown tumours;  
[Lower Right]: LAT Head and C-spine showing 'salt and pepper' appearance.  
4/25/2017

Discussion: Primary Hyperparathyroidism caused by atypical adenoma is rare especially in a young male.



Patient's histologic slide of the parathyroid mass showing proliferation of fairly regular polyhedral cells with round nuclei and abundant cytoplasm, growth pattern consists of acinar and solid types. No clear cut vascular nor perineural invasion seen.

The onset and progression of the constellation of his signs and symptoms is rapid and severe given that he was a physically fit policeman 6 years prior. The spontaneous fracture of the left femur while on bed rest for the right femur fracture highlights the severity of the pathology. Rachitic rosaries or beads are commonly seen in the pediatric age group. This patient had these beads on the costochondral junctions and an easily compressible elastic rib cage.

Six months following his operation, he has been able to walk on bilateral axillary crutches from his previous bedridden state. The foot drop has resolved as has the power in all extremities, especially his lower limbs (2/5 to 4/5). His general complexion has returned to his pre-morbid state as described by his attendants.

## BRIEFING ON GRANTED ORTHOPAEDIC RESEARCHES AT BLACK LION HOSPITAL, ADDIS ABABA UNIVERSITY

### 1. DISABILITY RATING IN ETHIOPIA, DEVELOPMENT OF SOFTWARE AND GUIDEBOOK.

On May 10, 2017, in the 3rd round of National call for competition, our staff from AAU participated and won this grant funded by MoST.

Dr. Biruk L is the PI.

The project has accomplished more than 50% of its six thematic areas. When completed Permanent physical Disability Rating will be easy, computerized, transparent, adaptable, objective and scientific.

We thank MoST and MoH.

### 2. INternational ORthopaedic MULTicenter Study in Fracture Care (INORMUS)

Samuel Hailu1, Geletaw Tessema1, Bahiru Bezabih1, Birhanu Ayana1, Hiwot Hailu1, Samuel Tesfaye1, Samrawit Esayas1, Betelhem Zewde1, Hana Tesfaye1, Mohit Bahandari2, Philip Devereaux3.

1. Black Lion Hospital, Addis Ababa University, Ethiopia.

2. McMaster University, Canada.

3. The George Institute for Global Health University of Sydney, Australia

INternational ORthopaedic MULTicenter Study in Fracture Care (INORMUS) is a multicenter, international, prospective, observational cohort study which includes patients who are 18 and greater than 18 years old and admitted to the hospital with acute orthopedic injury (fracture, dislocation). The aim of INORMUS study is to determine the incidence of major complications (mortality, reoperation, and infection) and to identify the factors (treatment, patient, system) associated with the composite of major complications within 30 days



The screenshot shows the INORMUS website homepage. The header includes the INORMUS logo and navigation links for Home, Our Mission, About Us, Our Team, News, and Contact. Below the header is a large image of a busy city street at night. A banner at the bottom of the page states: "Globally, 2 people die and up to 95 are injured every minute on the world's roads". The footer contains information about Black Lion Hospital, Addis Ababa, Ethiopia, including the Hospital Lead (Samuel Hailu) and Total Enrollment (2). It also includes a pie chart showing the distribution of patients across 29 countries on 3 continents.

of admission.

The study seeks to enroll 40,000 orthopedic trauma patients from Low Middle Income Countries in Africa, Asia, and Latin America. We are pleased to inform you that Ethiopia has become one of the 17 countries in Africa to be enrolled.

For further information, visit our website at [www.inormus.ca](http://www.inormus.ca)

### 3. Effect Of Silver Or Bleach Solution On Prevention Of Infection Following Open Lower Extremity Fracture: Three Arm Randomized Control Trial

Samuel Hailu1, Geletaw Tessema1, Biruk Lambisso1, Geletaw Tessema1, Mnewer Yirga1, Mengistu Gebreyohannes1, Fre Alemseged1, Lewis G.

Zirkle 2, Saam Morshed3, Amy M. Cizik4, Sandra Hobson5

1. Black Lion Hospital, Addis Ababa University, Ethiopia.

2. SIGN Fracture Care International, Richland, Washington, USA

3. University of California, San Francisco, California, USA

4. University of Washington, Seattle, Washington, USA

5. Emory University, Atlanta, Georgia, USA



Adult open fractures account for more than 20% of all fractures presenting to Black Lion Hospital. Tibia and femur account for 40% of all open fractures. The aim of this study is to determine the effectiveness of ionic colloidal silver or bleach solution irrigation in the prevention of infection after open lower extremity fractures. The study will randomize 300 eligible patients into three arms (colloidal silver vs bleach solution vs normal saline), using computer-based random number generator. The eligibility criteria include the following.

#### Inclusion criteria:

- age greater than 18
- less than 7 days old fracture
- clinically uninjected femur or tibia fracture,

- Gustilo-Anderson I-IIIB

**The exclusion criteria include:**

- Patella, foot and ankle fractures
- Patients with fracture site previous wound infection or history of osteomyelitis
- Previous fracture with retained hardware
- Immunocompromised conditions (HIV, DM, immunosuppressive medication within 6 months, severe renal or hepatic impairment)
- Failure to get informed consent

- Hypersensitivity to silver jewelries

We will be happy to accept referral of patients who fulfil the above eligibility criteria.

The grant for this project was found from Orthopedic Trauma Association.

## ANNOUNCEMENTS:

- Please apply online for AAOS International Scholarship. Deadline July 22, 2018.  
[www.aaos.org/international/scholarship](http://www.aaos.org/international/scholarship)

## THANK YOU!

- ESOT-EC thanks Dr. Mesfin H/Mariam and Dr. mamo Dikessa for helping the injured in Asosa, representing ESOT.
- We also thank Dr. Melesse G for helping the injured & displaced in Dilla Hospital. Our Surgeons and residents handled well the Hawassa & Wolayita incidents, Thank You!



## OUTCOMES OF SIGN INTRAMEDULLARY NAILING AT TIKUR ANBESSA SPECIALIZED HOSPITAL, ADDIS ABBA, ETHIOPIA.

*Luke D. Hughes, Semir K. Bennecha, Kohila V. Sigamoney,  
Anthony Clayson, L. Biruk.*

**Background:** SIGN intra-medullary (IM) nail is one of the treatment option for long bone fractures in developing countries including Ethiopia. These implants are designed such that they may be used without need for image intensifier and are given to orthopaedic departments free of charge. This study reviews the epidemiology and outcomes for all admissions undergoing intra-medullary nailing between 01/06/2015 – 01/06/2017 at Tikur Anbessa Specialized Hospital, Addis Abba, Ethiopia.

**Method:** The SIGN online database was analyzed to identify all those patients admitted to Tikur Anbessa Specialized Hospital and undergoing IM nailing over two consecutive years. Data was gathered on patient demographics, mechanism of injury, fracture classification, loss to follow up, and complication rates. Complications reviewed specifically included wound infection, osteomyelitis, non-union and screw loosening as indicator of functional outcome. There was subsequent comparison between the two years to determine how use of the SIGN nail has evolved in the department.

**Results:** Between 01/06/2015 – 01/06/2016: there was a total of 63 admissions undergoing IM nailing. The age range was between 18-59 yrs with males comprising 82.5%. The mechanism of injury was: RTA in 82.5%, fall in 7.9%, gunshot in 1.6%, explosion in 1.6% and other in 6.3%. Injuries were closed in 73.4%, open type 1 in 9.5%, type 2 in 9.5% and type 3a in 4.8%. Follow up rate was 82.5%. Complication rates were: wound infection 1.6%, osteomyelitis in 3.2%, non-union in 4.8%, screw loosening in 3.2%. Squat and smile was recorded in 37.1% of relevant cases.

Between 01/06/2016 – 01/06/2017: there was a total of 204 admissions undergoing IM nailing. The age range was between 15-79 yrs with males comprising 82.8%. The mechanism of injury was: RTA in 76.0%, fall in 12.7%, gunshot in 4.4%, explosion in 0% and other in 6.9%. Injuries were closed in 72.1%, open type 1 in 11.3%, type 2 in 11.3%, type 3a in 3.9% and type 3b in 1.5%. Follow up rate was 78.9%. Complication rates were: wound infection 2.0%, osteomyelitis in 0.5%, non-union in 6.9%, screw loosening in 2.0%. Squat and smile was recorded in 34.0% of relevant cases.

**Conclusion:** This data shows that use of the SIGN IM nails in Tikur Anbessa Specialized Hospital has vastly increased. Patients being treated have a greater age range, whilst fracture types are of similar distribution. Rates of follow up are good but there is room for improvement. Rates of wound infection have remained similar, whilst the rate of osteomyelitis has decreased with time and so has the rate of screw loosening decreased. However, the rate of non union remains high and the squat and smile assessment is inadequately documented.

## Assessment of One Year Orthopedic Surgery Trauma Burden in Tikur Anbessa Specialized Hospital, Addis Ababa, Ethiopia: Retrospective study

Mengistu G/Yohanes, Eyueal Ambaye, Kaleab Tesfaye, Matiyas Seid, Abdo Dames, Biruk Lambisso, Samuel Hailu, Geletaw Tessema, , Afzal Sadia

**Introduction:** Trauma is one of the major cause of death and long term disability globally. It accounts for 9% of global mortality and 15% of global disease burden which is expected to rise to 20% by 2020. In Ethiopia trauma is a significant cause of morbidity & mortality mainly putting the young & economically productive at risk. It is also reported as trauma constitutes around half of all surgical emergencies in Tikur Anbessa Specialized Hospital (TASH).

**Objective:** The aim of this study was to present a comprehensive overview of the orthopedics trauma burden in Tikur Anbessa Specialized Hospital, Addis Ababa, Ethiopia.

**Method:** A retrospective descriptive study was conducted by reviewing emergency patient triage logbook, morning report papers and daily duty resident's power point presentation for the period of January 01, 2017 to December 31, 2017. The collected data with checklist was entered to excel, checked for completeness & exported to SPSS version 23.

**Result:** A total of 1,757 patients who needs orthopedics evaluation were presented to TASH. Among them, 1,516 (86.3%) were trauma patients followed by infection 154 (8.8%), gangrene secondary to Peripheral vascular disease 72 (4.1%) and 15 (0.8%) of tumor patients. From 1,516 trauma patients, the average age of presentation was 33 years (18 hours - 96 years) and 1,095 (72.2%) were male. Around 128 (8.5%) of patients are presented with polytrauma. Almost half of the trauma patients (49.1%) were from Addis Ababa. The most common cause of injury in this study is found to be road traffic accident with incidence of 53. 5%. The average time of presentation is 3.5 days (30 min - 75 days). The prevalence of pelvic and acetabular fracture in this study is 19.6%. More than two third (77.8%) of patients presented with closed injury. The prevalence of associated injury was 8.2% (125 patients) and the most common associated injury was head injury 38 (2.5%) patients.

**Conclusion and recommendation:** The result shows trauma is a big concern compared with orthopedics infection and other conditions. It also affects the most productive and youngest age groups. The average orthopedics trauma patients seen per day were around 4.15. From this study we can conclude that trauma is still most common reason to visit Orthopedics emergency OPD and road traffic accident is leading cause. So, as a recommendation each stake holder should focus on primary prevention and reduction of road traffic injury to minimize the high cost spent for trauma patient's especially in resource limited countries like Ethiopia.

**Key words:** Trauma burden, retrospective study, road traffic injury, falling



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## Assessment of basic pre-hospital ambulance care for patients transported from the scene to emergency department hospitals/health centers of Addis Ababa, Ethiopia

Medina Abdulkadir <sup>1</sup>, Yonas Abebe <sup>2</sup>

<sup>1</sup> Tikur Anbessa Specialized Hospital, Department of Emergency medicine

<sup>2</sup> St. Paul Millennium Medical College, department of Emergency Medicine

**Back ground:** Emergency medical services (EMS) system are a community's gateway to acute and emergency medical care for members of the public facing time sensitive condition, critical illness and injury.

**Objective:** To assess basic pre-hospital ambulance care for patients transported from scene to emergency department hospitals/health centres of Addis Ababa, Ethiopia, 2018.

**Methods:** An ambulance based cross sectional study was conducted prospectively for patients transported with emergency ambulance service from scene to emergency department from March 15-April 15, 2018 with observational check list for one month duration. The data was entered to epi data version 3.1 and analysed using SPSS version 20 software.

**Result:** one hundred twenty patients transported with ambulance from scene were included. From total assessed level of consciousness (n=118), 28(23.3%) patients were lost their consciousness out of them oral airway were applied only for 3(10.7%) patients. Circulation was assessed for 74(61.7%) patients among them 8 had cardiac arrest. CPR were done for 6(75%) of them but no adrenaline drug. From (N=120), 44(36.7%) patients had bleeding but only for 23(52.2%) of them was tried to stop bleeding and out of 41(34.2%) trauma patients 5(12.1%) patients were applied C- collar but majority 36(87.9) patients weren't. Over all 69(57.7%) patients did not receive at least one of the necessary basic pre hospital ambulance cares.

**Conclusion and recommendation:** lifesaving procedures like manual airway opening, cardiopulmonary resuscitation, vital sign measurements, emergency drug administration, and stop bleeding as well as spinal immobilization were not performed adequately. Emergency professional inside ambulance, emergency physician consultation during transportation and performing administrative inspections may improve pre-hospital care.

Key words: scene, response interval, basic pre-hospital care, Emergency, Ambulance



## Case report

### The Bridle procedure for treatment of Dorsiflexion paralysis of Foot

Habtamu T, Leul M

**Introduction:** Muscles of the anterior and lateral compartments are innervated by deep peroneal and superficial peroneal nerves respectively. Peroneal nerve injury is the most frequently encountered mono-neuropathy in the lower extremity and a common cause of trauma-induced foot drop and may resolve spontaneously. Most peroneal nerve injuries are iatrogenic or secondary to trauma. Peroneal nerve palsies can occur from complications of total knee or Hip replacements, lacerations, tractions, hip or knee dislocations, fractures. When only DPN is damaged, the patient will have loss of dorsiflexion of the foot or “Foot Drop” but the peroneal muscles will be intact with intact eversion of the foot and no varus deformity. Treatment options are Ankle Foot Orthotics, Dynamic Foot Splints, physical therapy, Functional Electrical Stimulation, Tendon Transfer, and Ankle Arthrodesis.



terior compartment of the leg.

- A separate longitudinal incision was made on the anterior aspect of the leg at the same level as that of previous incision and dissection was carried out between anterior tibial muscle and lateral aspect of the tibia exposing the interosseous membrane.
- Creating a wide window on the interosseous membrane posterior tibial tendon was delivered from deep

### Case Report

A 12 years old male child who came to CURE pediatric orthopedic OPD with a complaint of high stepping gait and foot drop since 4 years back after he was given unspecified intramuscular injection on his left buttock for acute febrile illness. Then after few days of injection he started to have progressive foot drop. He had taken various types of treatment but got no improvement. Birth history, immunization history, milestone, family history and IQ were within normal limit.

On Physical examination pertinent findings were power of Left ankle dorsiflexors & Lt Foot Evertors were 2/5 & 3/5 respectively. Right side power was 5/5 & sensation was intact bilaterally.

**Technique:** Under General Anesthesia the patient was put supine. A medial approach to the foot was performed. The posterior tibial tendon was isolated and transected at its insertion on the plantar aspect of the navicular bone. A longitudinal incision was made on the distal third of the right leg posterior to the medial border of the tibia and transected tendon stump was delivered into this incision after opening the deep pos-



terior compartment through the window into the anterior compartment of the leg splitting anterior tibial tendon

- A Krakow suture was applied to the tibialis posterior tendon
- An incision was then made on the lateral border of the foot below the lateral malleolus and peroneus longus tendon was located and with an incision on the lateral aspect of the leg the lateral compartment was



entered, then peroneus longus tendon was transected distal to the musculo tendinous junction. The transected peroneus longus tendon was delivered into the incision over lateral aspect of the foot.

- The posterior tibial tendon was inserted in the middle cuneiform with suture anchors under full tension maintaining the foot in the position of full dorsiflexion.
- After the insertion of the posterior tibial tendon has been performed the anterior tibial and peroneus longus tendon in full tension were sutured to the transferred posterior tibial tendon in the incision on the anterior compartment of the leg with nonabsorbable suture.
- The wound was closed, maintaining the foot in the corrected position of full dorsiflexion short leg circular cast was applied.

## Postoperative Plan

- Non weight bearing for 06 weeks.
- Plaster splint will be removed after 02 weeks. Sutures are removed and below knee cast is applied and maintained for 04 weeks.

- initiate physiotherapy 06 weeks after surgery with cam walker brace for the next two months

## Conclusion

- Bridle procedure results in a well-balanced foot with adequate restoration of the loss of dorsiflexion of the foot.

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The inflammatory response due to trauma in the musculoskeletal tissue contributes significantly to the pain. Cataflam quickly reduces this pain and the underlying inflammation promoting early recovery.<sup>4,5</sup>

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## RESIDENTS CORNER

### **The Ethiopian and UK Residents Day – An International Collaboration in Audit and Research Activities**

Miss Kohila Vani Sigamoney, Mr. Luke Hughes, Dr. Biruk Lambisso Wamisho, Mr. Henry Wynn Jones, Mr. Anthony Clayson

The Ethiopian Residents Day is an event held to celebrate the collaborative work of Ethiopian Orthopaedic Residents and the Trauma and Orthopaedic (T&O) Registrars in Northwest England, United Kingdom (UK). It was an idea suggested by Miss Kohila Sigamoney (UK Registrar) initially in response to the multiple e-mails received from Ethiopian Residents requesting education on how to carry out audits and research following her visit to Ethiopia in May 2017 with NOTAA. The Chairman and the Vice Chairman of The Northwest Orthopaedic Trauma Alliance for Africa (NOTAA), Mr. Anthony Clayson and Mr. Henry Wynn Jones supported this event to realisation after further discussions with NOTAA Executive Committee and multiple other organisations.

The collaboration relies on international communication. It involves the T&O Registrars from the Northwest Deanery in the United Kingdom acting as mentors to interested Ethiopian Residents (mainly working in T&O). They have a period of time before the planned Residents Day (1.5 – 3 months) when projects (audits or research) will be suggested by either party and discussed over the internet. A presentation is put together and presented at the planned Residents Day.

The Residents Day is supported by the Programme Directors in Ethiopia (at present from Addis Ababa and Bahir Dar, Dr. Biruk Lambisso and Dr. Worku and the Programme Director of the Northwest Deanery, UK (Mr. Jaysheel Mehta), The Northwest Orthopaedic and Trauma Alliance for Africa, The John Charnley Trust, World Orthopaedic Concern (UK) and AO Alliance Foundation.

The event allows trainees from Ethiopia and UK to work together even if they cannot travel due to time and financial constraints. This activity fosters mentor-

ship, learning and also “shares” victory. The UK registrars mentor the Ethiopian residents. The Ethiopian residents learn about research and audits in order to improve clinical practice. It highlights areas that are good and those that need improvement in clinical practice. The event is fair and does not discriminate based on experience. It is a learning platform regardless of previous involvement in audit and research.

The main challenge is that the internet connection can be unreliable. However, this has improved over time. There is also the issue of timing and taking into consideration when Ethiopian examinations take place and this will be taken into account for future planning of the Residents Day. Feedback did show that communication was difficult on both sides but shows good interest in continuing the event on a yearly basis. There was also a suggestion to add audit and research into the Ethiopian training curriculum.

#### **The 1<sup>st</sup> Ethiopian Residents Day**

The 1<sup>st</sup> Ethiopian Residents Day was held on the 23rd of November 2017 at Hawassa University Comprehensive Specialized Hospital (HUCSH) with the support of Dr. Ephrem Gebrehana, Head of the T&O Department in HUCSH. The day showcased 7 projects (4 oral presentations and 3 poster presentations). The Residents who were working in Hawassa or who could travel to Hawassa presented oral presentations. Those who were not able to attend as they were in Addis Ababa or on placement elsewhere presented poster presentations. There was also some teaching on audit and research. 9 UK registrars and 14 residents and interns from Ethiopia were involved. The presentations were judged by the HUCSH's Head of Surgery, the Head of T&O and Mr. Anthony Clayson, Chairman of NOTAA. Prizes were awarded on the day and all members of a winning team, including the UK registrars, received a prize certificate. The UK registrars received their certificates at

the Registrar Day in UK in December 2018. The winning presenters received the classic orthopaedic textbook "The Closed Treatment of Common Fractures" by Sir John Charnley, that was kindly donated by The John Charnley Trust.



Dr. Bahru winning first prize for oral presentation (From left to right: Miss Kohila Vani Sigamoney, Dr. Samuel Tesfaye, Dr. Bahru, Dr. Ephrem Gebrehana and Mr. Anthony Clayton)



Mr. Anthony Clayton, Miss Kohila Vani Sigamoney and Mr. Henry Wynn Jones at the 2017 NW Registrar Day, Manchester UK

## The 2<sup>nd</sup> Ethiopian Residents Day

The 2nd Ethiopian Residents Day was held in the Black Lion Hospital (BLH) Addis Ababa on the 28th of June 2018. Collaboration started 2 months ahead of the date. This event saw the involvement of 22 Residents (19 from the BLH programme, 2 from the Bahir Dar programme and 1 from Hawassa) and 7 UK registrars. There were 9 oral presentations and 1 poster

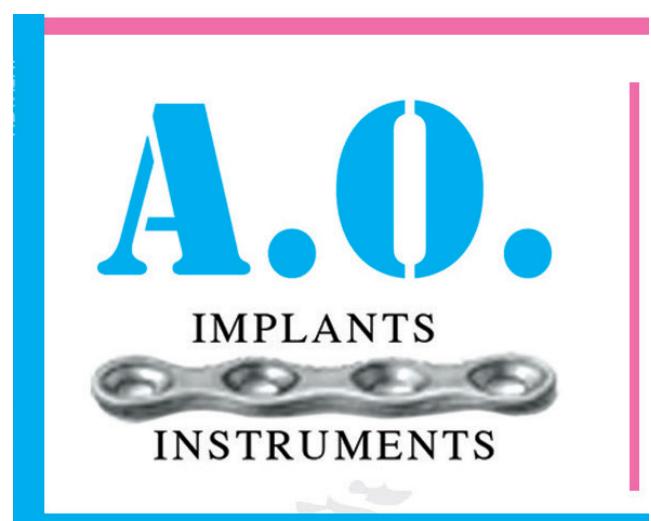
presentation.



From left to right: Mr. Anthony Clayton, Miss Sigamoney, Mr. Hughes, Dr. Samuel Hailu and the residents



With Dr. Biruk L. Wamisho, head of department



## The Kamala Devi award:

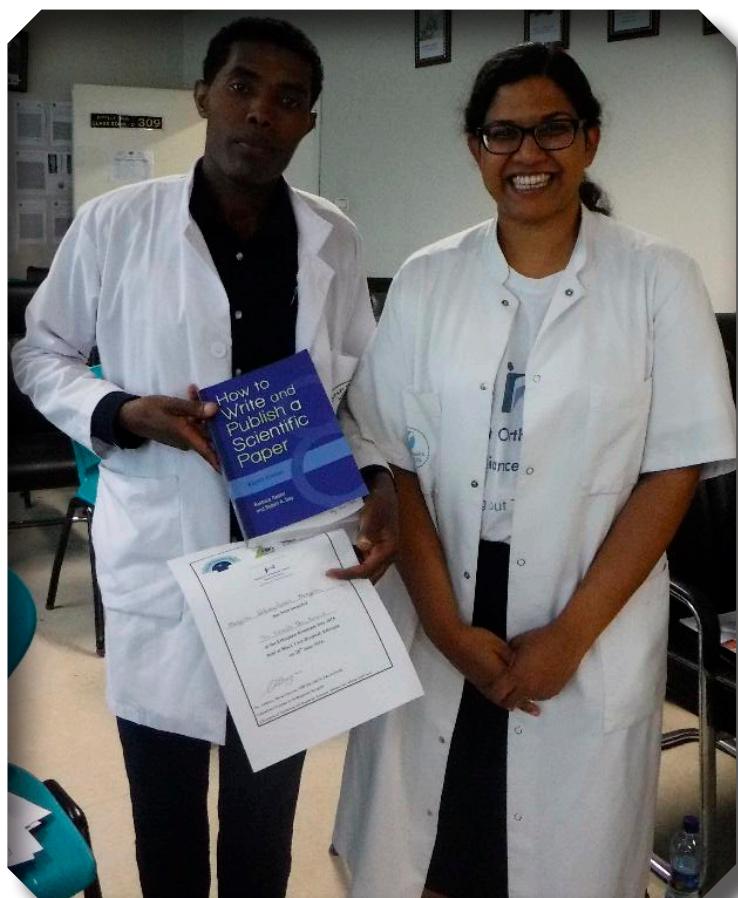
On Miss Sigamoney's first visit to Ethiopia in November 2016, her grandmother (Kamala Devi) unexpectedly passed away in Malaysia. She had sustained an orthopaedic injury and her condition had declined. She looked after Miss Sigamoney when she was younger and in Miss Sigamoney's words, 'she had taught me the importance of being a good person and helping others'. On her 1st year religious memorial service, Miss Sigamoney's family and friends from Kluang, Malaysia decided to support this award in her honour.

The award is a one off award for the best performing Ethiopian resident at the 2nd Residents Day including presentation skills and overall contribution in preparing for the Day. It will pay for the conference fees (or other expenses) for the winning resident to attend a conference in Africa should they get a place to present an oral presentation. The Resident will be regarded as an ambassador and an example to other trainees in Ethiopia and Africa.

It was awarded to Mengistu Gebreyohanes Mengesha at the 2nd Ethiopian Residents Day for his efforts in both events and his leadership skills.



Miss Sigamoney and her grandmother Kamala Devi in July 2016



Dr. Mengistu and Miss Sigamoney. Mengistu also won first prize for oral presentation.



## “WAKING UP IN A MORGUE”

Dr. Mariamawit Baye, R-3, AAU

You never expect to open a fridge and find someone in there, it sounds like something straight out of a horror movie. Strangely even in this day and age, it's more common than you might think.

Why does this happen? How can doctors not realize a “dead” body is actually a living person?

The following are few of true stories who woke up in a morgue after they are declared “dead”:-

- In Jan, 10, 2018 the Spanish prisoner, 29-year-old Gonzalo Montoya Jiménez who was declared dead by three separate doctors woke up in the morgue – just hours before his own autopsy was set to commence.
- In 2011 retired cook and grandmother Lyudmila Steblitskaya was hospitalized for health problems. When her daughter called to check on her, the hospital said her mother had died. It was a Friday night. Steblitskaya was taken to the morgue, where she was to remain until the funeral Monday morning.
- In Argentina, a premature infant was declared dead just 20 minutes after her birth. She was placed in a refrigerated coffin for about twelve hours, but found alive when the parents went to the morgue to hold their child and say their last goodbyes.

From the very recent event here is an example:

• ‘Dead’ woman found alive in South Africa morgue fridge: - The woman was taken to Carletonville morgue, in Gauteng province, having been declared dead by paramedics (Distress Alert Ambulance Company) following a road accident which left two others dead on Sunday, June, 24, 2018. But when a morgue worker returned to check on the body in the fridge, he found the woman was breathing.

• It is not the first time this has happened in South Africa. Seven years ago, a 50-year-old man woke up screaming in an Eastern Cape morgue.

• In 2016 another road accident victim, from kwazulu natal, South Africa was declared dead, only to be found

breathing the next day. He died five hours after the discovery.

People experiencing this real-life nightmare often wake up surrounded by corpses or locked in their own tiny metal drawer. They may feel as if they've been buried alive; the unbelievable stories of real people who woke up in the morgue are sure to leave you hoping it never happens to you.

As Taphophobics (those who fear being buried alive) are well aware, death isn't always an easy-to-detect, binary equation, even for medical professionals with sophisticated equipment.

So make sure you apply a methodical approach to both your assessment of the patient and the documentation is absolutely essential.

### Sample Death Report is Shown Below:

- Identity( name, age ,sex)
- Patient in bed , eyes closed, no sign of life
- No respiratory effort noted
- No response to verbal stimuli
- No response to painful stimuli
- No carotid pulse palpable
- pupils fixed and dilated
- No heart sound noted during 2 minutes of auscultation
- No breathing sound noted after 3 minutes of auscultation
- Time of death

### References

- Peter dockrill, *Man Declared Dead by 3 Doctors Wakes Up in Morgue Just Hours Before Autopsy*, Jan 10, 2018.
- ‘Dead’ woman found alive in South Africa morgue fridge, BBC NEWS, July 2, 2018.
- Amy Robleski, *16 Horrifying, True Tales Of People Who Woke Up In A Morgue*.
- <https://www.bbc.com/news/world-africa-44681264>.
- <https://geekymedics.com/death-confirmation/>.





# COSECSA GRADUATION CEREMONY

6<sup>th</sup> DECEMBER 2017, MAPUTO



We are Proud of our residents on COSECSA Examination.  
This year is in kigali. Best wishes!  
We Thank AOA.

# AO ALLIANCE

# ANNUAL REPORT 2017



ESOT'S 13<sup>th</sup> ANNUAL GENERAL MEETING



# A message

## from the AO Alliance Chair and Managing Director

Death and deformities from injuries are a huge, rapidly spreading, but still silent epidemic in low- and middle-income countries (LMICs). A third more people die from injuries (5 million people annually worldwide) than from many contagious diseases combined, (malaria, HIV/AIDS and TB). For every death, it is estimated that 25 survivors will suffer from disabilities and deformities due to a lack of timely and appropriate treatment. This causes physical and emotional pain to individuals, and traps

many and their families in a cycle of poverty. The importance of preventing and treating these injuries has yet to be embraced by the global public health community and the world. The United Nations Sustainable Development Goals (SDGs) insufficiently recognize this epidemic. The focus of attention is on road-traffic accidents, which is a major



issue, but only reflects one fourth of the actual burden of death due to injuries. A far greater and more concerted effort is required.

The AO Alliance Board therefore puts increasing emphasis on supporting awareness building and policy advice, as well as collaborating with like-minded organizations on prevention and improved care.

Under our policy advice and advocacy activities, AO Alliance took the lead in facilitating the establishment of the *Roadmap for Trauma Care in Myanmar*. This plan offers a comprehensive approach for action, from prevention to rehabilitation, and could become a model for other LMICs.

AO Alliance's operational activities have progressed further in 2017. The common denominator of the activities is to build sustainable local capacity to deal with

the increasing burden of injuries and their treatment. A unique feature is the extensive AO Alliance network of healthcare professionals. Our training is designed to produce better surgeons, and other healthcare professionals, as well as teachers and leaders. We trained over 4,000 surgeons and operating room personnel in 2017 (up from 2,850 in 2016) and invested heavily in faculty education programs to train the trainers. We were also able to add to our country initiatives strategic projects to include Ethiopia and continue to strengthen our efforts in Malawi and Ghana.

We would like to thank our Board of Directors, our donors and all volunteers, along with the dedicated AO Alliance staff, for their support.

Dr Rolf Jeker and Dr Claude Martin jr.



**Left** Dr Rolf Jeker  
Chair, AO Alliance Board

**Right** Dr Claude Martin jr, MD  
Managing Director, AO Alliance

- **AOA has Opened its office here in Addis Ababa as of April, 2018**
- **As usual AOA, ADFA, SIGN and WOC-UK helped substantially to improve the Ethiopian Orthopedics**
- BIG THANK YOU!**

## Capacity Building

# Fracture Solutions for Africa

This program targets healthcare professionals with face-to-face and hands-on education to impact clinical fracture care in 24 countries in Sub-Saharan Africa. All courses and workshops are led by a network of National and Regional Faculty.



**29**

International Faculty



**2**

Africa to Asia  
Faculty Exchanges



**122**

Regional Faculty



**16**

Sponsorships for  
AOTrauma courses



**2,416**

Course Participants



**2**

Faculty  
Education  
Programs

## Capacity Building

# Ethiopia Country Initiative

## Outcomes and impact



**Bahir Dar was added as a Regional Reference Centre**



**Reverse fellowships in Hawassa were carried out with the UK**



**50 first and second year residents from all the training T&O programs in the country were trained in basic operative principles of fracture management**





*A new headlamp helps Dr. Sam Kiwesa perform SIGN Surgery.*

## Lighting the Way

By Jeanne Dillner

During our recent visit to Ethiopia, we experienced a power outage during surgery at St. Paul Hospital. Dr. Milkias Tsehay and his surgical team compensate for these outages by having headlamps and flashlights available to light the surgical site. However, surgeries are still delayed because when the power goes out, the sterilizer has to restart its 40-minute cycle. When this occurred during our visit, we followed the residents to the emergency room to see what new trauma patients had arrived since the previous night. One patient had arrived a few minutes before. He was

in a road traffic accident that left him with three fractures. Dr. Milkias made plans to perform SIGN Surgery once the patient was stabilized.

Thanks to a generous in-kind donation from Leatherman Tool Group, Inc., we gave headlamps to SIGN Surgeons in Ethiopia, Tanzania, and South Sudan. This equipment helps SIGN Surgeons mitigate challenging environments and provide excellent care for their patients.

**Thank you to Leatherman Tool Group, Inc. for their ongoing support of SIGN Surgeons around the world!**



*Dr. Milkias will be among the first to participate in a new pelvic fracture fellowship in Ethiopia.*

# Innovation & Improvement in Ethiopia

By Lewis G. Zirkle, MD

**Ethiopia is addressing increased numbers of fractures due to road traffic accidents and trauma. This is an epidemic we are solving together.**

Problems to be solved include increasing numbers of fractures and increasing complexity of fractures. SIGN Surgeons and Staff are working to address these problems in a number of ways.

## TRAINING MORE ORTHOPAEDIC SURGEONS

Two years ago Ethiopia had 47 orthopaedic surgeons for 100 million people. There are now 78 residents in the Black Lion Hospital residency program and 26 in the St. Paul Hospital residency program. More residency programs to train orthopaedic surgeons are being established around the country. When these newly trained orthopaedic surgeons begin practice in their new hospitals, they will want SIGN Implants and Instruments.

## TREATING MORE COMPLEX FRACTURES

The first training program for pelvic fracture surgeons will be taught by



*Dr. Sami Hailu talks to Dr. Zirkle about pelvic fracture surgery.*

Dr. Sami Hailu at Black Lion Hospital. Dr. Sami recently completed a pelvic fellowship in Canada, and is now working long days performing pelvic fracture surgery. Dr. Mapuor Mading, a surgeon from South Sudan, will spend three months with Dr. Sami and become the only surgeon in South Sudan capable of treating pelvic fractures.

## PERFORMING SURGERY AS SOON AS POSSIBLE

St. Paul Hospital has one senior staff and a team of residents working through the night to treat the fractures that come in each day. The patients can be discharged the next day or the day after, which will allow more admissions. This is the protocol of trauma centers in United States.



*More than 100 surgeons and residents participated in the Ethiopia SIGN Conference.*

# Ethiopia

(continued from page 2)



*The rising number of trauma injuries are crowding hospital wards.*

## NEW PROTOCOLS FOR TREATING OPEN FRACTURES (EXPOSED BONE)

We are studying the results of early soft-tissue closure and early insertion of a SIGN Nail in open fracture cases. Open fractures are very serious injuries, and the surgeon must decide when to cover the bone with soft-tissue and place the SIGN Nail. The goal of the SIGN Surgeon is to get the best results for all fractures. The protocol used in the past was to clean the wound and put the patient in an external fixation device. This results in multiple surgeries and many question whether this is optimum treatment. Hospitals in developing countries are struggling

to treat many injured patients. Therefore, operating time and surgeons' time is at a premium. Earlier soft-tissue closure and placement of a SIGN Nail would decrease the number of surgeries and the time in surgery for the patient, allowing more patients to be treated. We must study these different approaches to provide the optimum care for each patient.

*SIGN is pleased that the Ethiopian orthopaedic surgeons are addressing the problem of increased numbers of fractures to be treated. This does mean more SIGN Implants and Instruments will be needed, but the patients will receive better results. That is our goal.*



*6,000 cars are imported to Ethiopia every day, increasing congestion.*

# Thank you!

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Portland, OR

October 21  
**Tri-Cities Benefit**  
Three Rivers Convention  
Center, Kennewick, WA

You Can Purchase Tickets via...

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Or online for each benefit:  
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*Save the date*  
August 24, 2017  
**SIGN Open House**  
11am - 2pm, tours, chats & lunch

## Contact SIGN

P: (509) 371-1107 F: (509) 371-1316  
[info@signfracturecare.org](mailto:info@signfracturecare.org)  
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## ACTIVITIES IN THE ORTHOPEDIC SPECIALITY TRAINING DEPARTMENTS

### 1. St Paul's Hospital Millennium Medical College (AaBET)

The 2nd opened fully fledged Orthopedic Specialty training center has enrolled their 3rd batches of new residents & is one-year shy of graduating their 1st orthopedic trainees. Currently the center has 35 residents of all batches & 7 Consultant Orthopedic surgeons. In 2017 the center was the 2nd highest for performing SIGN surgeries in the country.



### 2. Mekelle University-Ayder Referral Hospital

MU-Orthopedics and Trauma Surgery Department started the post graduate program in September 2009 E.C. and now the department has 3 consultant orthopedic surgeons, 13 residents out of which eight 2nd and five 1st year residents for 2011 E.C. The department has prepared to accept 6 new residents. It has different activities in two hospitals

- Ayder Comprehensive Specialized Hospital (ACSH)
- Mekelle General Hospital(MGH)

Arthroplasty Orthopedic surgeon visited from Germany for 1 week and they will have visitors of pediatrics orthopedic surgeon from Israel.



### 3. Bahir Dar University, (FHRH) Orthopedics Department

Also, one of the 2nd opened orthopedic training center in the country; Felege Hiwot Referral Hospital Orthopedic center in Bahir Dar enrolled their 3rd batches of new residents and inaugurated their new THREE standard Operation Theatre rooms which was done in collaboration with ADFA on June 24, 2018. Orthopedic Residents of Bahirdar University



## 4. AAU, CHS, School of Medicine, Mother Department of Orthopedics International Orthopedic Surgeons who visited AAU CHS, Orthopedics department since last ESOT AGM

Nº	Dates	Main Activities	Remark
1	<b>March 23-24, 2017</b>	12 <sup>th</sup> ESOT annual meeting conference	Successful
2	<b>March 26-31, 2017</b>	4 <sup>th</sup> SIGN conference and surgical campaign	Successful
3	<b>April 15-30, 2017</b>	Foot and ankle weeks (lectures and surgery) Dr. Loch T. and Dr. Dennis	Successful
4	<b>April 17-21, 2017</b>	<b>Hand surgeon's week. Dr. Matt and Dr. Neil</b>	Postponed
5	<b>April 30-May 13, 2017</b>	Dr. Carter Clement, USA	Successful
6	<b>May 29 &amp; 30, 2017</b>	Dr. Tony & Team (AOAF)	Scheduled
7	<b>August 13-25, 2017</b>	Tony Jeffries, Stephane and Paul from ADFA(Australia)	Successful
8	<b>Anytime in August</b>	<b>Joseph L. Pet field, military Trauma surgeon from USA/ Germany</b>	Postponed
9	<b>October 3-26, 2017</b>	Dr. Peter & Lars from Norway (Pediatrics)	Successful
10	<b>November 2-12,2017</b>	Dr. Alexis from USA (Orthopedic surgeon)	Successful
11	<b>November 6-18,2017</b>	Dr. Loch T. (USA)	Successful
12	<b>November 18-25, 2017</b>	Dr. Sanjay from UK (Onco surgeon) & Dr. Max Gibbons (Onco surgeon)	Successful
13	<b>November 20-25,2017</b>	Dr. Sally Pollock (WOC-UK)	Successful
14	<b>November 27 &amp; 28, 2017</b>	Professor Ramesh & Sameer India (pelvic and Acetabulum)	Successful
15	<b>December 6-9</b>	Dr. Markku Nousiainen (Toronto)	Successful
16	<b>December 19-23/2017</b>	Prof. Geoffrey Walker (WOC-UK)	Successful
17	<b>Dec. 26,17- Jan 6 , 18</b>	Dr. Laurence Wicks (WOC-UK)	Successful
18	<b>Jan 15-30,2018</b>	Drs. David Jones, James Berwin and Susan Hendrickson (WOC-UK)	Successful
19	<b>Feb 5-16, 2018</b>	Dr. Shawn O'Driscoll (USA)	Successful
20	<b>March 20-23</b>	AO Pre-Basic Course for Residents (AO-Group)	Successful
21	<b>April 23-27, 2018</b>	AO-OF Pediatric Orthopaedic Course	Successful
22	<b>May</b>	Basic tumor conference, UK and Australian Team (ADFA)	Planned
23	<b>June 25- 29</b>	Dr. Tony Clayson, Dr. Kohila and Dr. (UK).... Residents Research Day	Successful
24		Dr. Neil, Mr Rupert Eckersley, Orthopaedic Hand surgeon from London and Mr Henk Giele, Plastic Hand surgeon from Oxford	Planned



## The 4th SIGN conference and surgical campaign, March 26-31, 2017. at Intercontinental Addis Hotel

Dr. Lewis Zirkle, president and founder of SIGN fracture care international is one of the giant collaborators with Black Lion hospital with his donation of SIGN nail which changed the overall orthopedic management in our hospital. On the 4th SIGN conference and surgical campaign he discussed important topics about SIGN nail use which was very helpful for our practice. Interesting articles were also presented and the Black lion and St. Paul orthopedic residents learned a lot from the surgical campaign. Many Thanks for your commitment and support Sir!

### Total Hip Replacement Campaign

Dr Alexis Falicov, M.D., Ph.D. our regular guest from Seattle, USA did a total Hip Replacement campaign from November 2-12, 2017 which served about 20 patients who were on the waiting list of the hospital for as long as more than 5 years.

Dr Alexis was more than a kind & brilliant surgeon who brought THR implants for free by donation & improved the lives of many patients who were suffering for long period of time. The THR Campaign was also a great opportunity for all the residents to learn new skills & appreciate advanced implants from a giant surgeon like Dr Alexis. Bravo!!

### CME on Difficult Elbow Conditions

One of the world's renowned orthopedic surgeon Dr Shawn W. O'Driscoll, (PhD, MD) from Mayo Clinic, Rochester, Minnesota, USA was our guest & give his Lectures on Orthopedic CME on Difficult Elbow Conditions on February 09, 2018 at EPHI New Auditorium. Dr Shawn also performed operations on difficult elbow fractures & chronic elbow conditions in TASH & CURE Hospital. It was one of our biggest events in this year to learn first-hand from the man who described the O'driscoll classification of coronoid fractures. Hats off!!

### AO Alliance/ADFA pre-basic course- Basic principles of fracture management for residents, March 21-23, 2018 G.C. at AAU, CHS

We would like to thank AOA/ADFA and all the AO faculty members who dedicated their time to share with us their skill and knowledge for improved patient care. The training was surely more than our expectation and we gained a lot from it from the exciting lectures and workshops on bone models. It helped us to have some overview of basic fracture management. It also involved residents from different parts of Ethiopia which helped us to interact and share experiences. So, we would like to recognize their great work and believe AOA/ADFA will come up with expanded program with more faculty members and more advanced courses.

We are looking forward to welcome you next year. Thank you!

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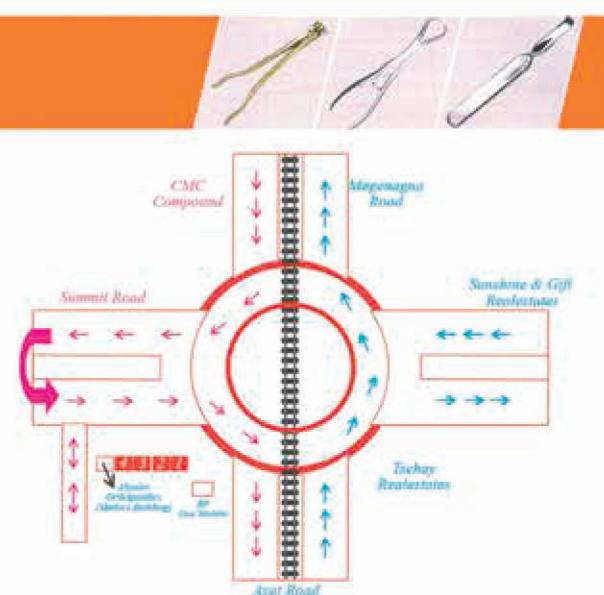
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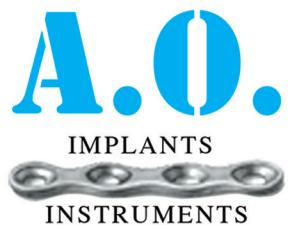


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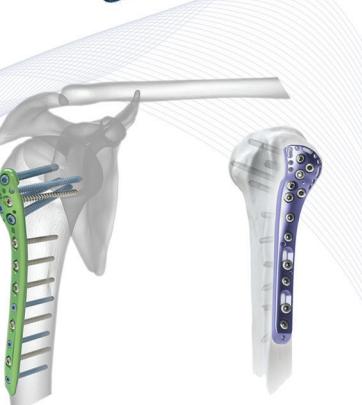




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## ORTHOPAEDIC CME ON DIFFICULT ELBOW CONDITIONS

**SHAWN W. O'DRISCOLL, M.D., PH.D.**

PROFESSOR OF ORTHOPAEDICS AT MAYO CLINIC,

Rochester, Minnesota, USA

**VENUE: EPHI New Auditorium (Pasture Compound)**

**Date: Friday February 09/2018; 8am-5pm**

**Welcome!**



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