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Worldwide News

Failure Rates of Stemmed Metal-on-Metal Hip Replacements: Analysis of Data from the National Joint Registry of England and Wales

Alison J Smith, Paul Dieppe, Kelly Vernon, Martyn Porter, Ashley W Blom; on behalf of the National Joint Registry of England and Wales, Lancet 2012; Mar 12 [Epub ahead of print]

Summary:

Background

Total hip replacement (THR) is extremely common. Some prostheses fail, particularly in younger patients, and need to be revised, most commonly for loosening secondary to wear or dislocation. Surgeons have tried to address these problems by implanting large diameter metal-on-metal bearing surfaces. Our aim was to assess if metal-on-metal bearing surfaces lead to increased implant survival compared with other bearing surfaces in stemmed THR and, additionally, if larger head sizes result in improved implant survival.

Methods

We analysed the National Joint Registry of England and Wales for primary hip replacements (402051, of which 31171 were stemmed metal-on-metal) undertaken between 2003 and 2011. Our analysis was with a multivariable flexible parametric survival model to estimate the covariate-adjusted cumulative incidence of revision adjusting for the competing risk of death.

Findings

Metal-on-metal THR failed at high rates. Failure was related to head size, with larger heads failing earlier (3•2% cumulative incidence of revision [95% CI 2•5–4•1] for 28 mm and 5•1% [4•2–6•2] for 52 mm head at 5 years in men aged 60 years). 5-year revision rates in younger women were 6•1% (5•2–7•2) for 46 mm metal-on-metal compared with 1•6% (1•3–2•1) for 28 mm metal-on-polyethylene. By contrast, for ceramic-on-ceramic articulations larger head sizes were associated with improved survival (5-year revision rate of 3•3% [2•6–4•1] with 28 mm and 2•0% [1•5–2•7] with 40 mm for men aged 60 years).

Interpretation

Metal-on-metal stemmed articulations give poor implant survival compared with other options and should not be implanted. All patients with these bearings should be carefully monitored, particularly young women implanted with large diameter heads. Since large diameter ceramic-onceramic bearings seem to do well we support their continued use.

Comment:

by Aad Dhollander

Recently, controversy has arisen about the use of metal-onmetal hip replacements. In February 2011, the U.S. Food and Drug Administration (FDA) issued a public health communication about hip replacement components that have both a metal ball and a metal socket (metal-on-metal hip devices). In this article data from the National Joint Registry of England and Wales – established in 2003 and the largest arthroplasty database in the world – were used to assess if metal-on-metal bearing surfaces lead to increased implant survival compared with other bearing surfaces in stemmed THRs.

This article was published in a very high-impact journal, 'The Lancet'. The conclusions were based on a large amount of data (31171 metal-on-metal hip prostheses). The statistical analysis, results and conclusions were clearly presented.

However, the presented data were based on stemmed metal-on-metal THR's only, no resurfacings were included. Furthermore, ASR implants were excluded from the metalon-metal analysis. These two facts are very important in the metal-on-metal discussion and in this way the general perception created in this study should somehow be relativized. Moreover, the data were retrieved from one national joint registry only. One could question if the results of one registry are enough to draw any broad conclusions.



A Report on the SICOT Foundation

The SICOT Foundation was established in 1990 to manage and distribute funds donated for the purpose of supporting SICOT's research and educational missions. It is incorporated in the United States, designated by the US Internal Revenue Service as a 501 (c)(3) private non-profit organization, and registered as a charitable trust in the State of New Hampshire. Donations are made by organizations and individuals wanting to contribute to the society's scientific endeavours, and fund multiple programmes and awards designed to promote international training and global unity among orthopaedic surgeons. Since its inception, the Foundation has undergone significant reorganization and collaboration, further supporting this group in its endeavours.

A policies and procedures manual specific to the SICOT Foundation has been created to organize and maintain information relevant to the group, including bylaws, articles of agreement, meeting minutes, awards/fellowships and financial statements. This manual is updated regularly and will serve as a reference point for the Foundation as it continues to grow. Additionally, the central location of the SICOT Foundation checking account has been transferred recently from the Royal Bank of Canada in Montreal, Canada, where Denise Duhaime served as signer to the Kennebunk Savings Bank in Portsmouth, New Hampshire, maintained by Stephen H. Roberts, Esq. of the Hoefle, Phoenix, Gormley & Roberts, P.A firm. All funds maintained in Montreal will be transferred to the Portsmouth account.

The SICOT Foundation continues to collaborate with prominent orthopaedic groups with the aim of promoting educational opportunities and fundraising. The Foundation established an international partnership with the Orthopaedic Research and Education Foundation (OREF) in 1998. More recently, however, OREF has been exploring different methods interacting with their partners with the chief goal of making it easier to donate and access money. Donors can give to SICOT through the OREF in one of two ways: 1) through an endowment fund, in which 5% of the allotted donation is given to SICOT at the beginning of the year, but outstanding funds do not roll over into the next year if not utilized or; 2) through designated giving, in which \$500 of the donated contribution is directed to OREF and SICOT can withdraw the non-invested money at any time.

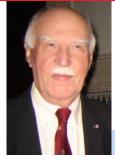
Board members of both the SICOT Foundation and the American Academy of Orthopaedic Surgeons (AAOS) met during the SICOT 2011 XXV Triennial World Congress in Prague, Czech Republic, to discuss ways to further promote educational activities at an international level. Discussion included the broadcast of webinars and video teleconferences with the intent to not only deliver live content but to also archive and disseminate these recorded sessions globally. Additionally, two new joint SICOT/AAOS scholarships have been instituted to provide free registration and travel expenses up to EUR 500 for the AAOS Annual Meeting to SICOT-selected scholarship recipients. Eligible candidates are comprised of the winners of the best oral and poster presentations awarded at the annual SICOT meeting.

Generous donations provided by both orthopaedic groups/societies and individuals have permitted the establishment of new fellowships and awards. Contributions made by the Scoliosis Research Society (SRS) will reimburse young spine surgeons up to USD 5,000 to attend SRS/SICOT meetings. Details about other awards/fellowships funded through the SICOT Foundation and SICOT International can be found on the SICOT website.

John Dormans

SICOT Vice President North America

Article by a SICOT Member



Traditional Healers - How can we become involved?

Geoffrey Walker SICOT Emeritus Member – London, United Kingdom

It is generally accepted that the great majority of fractures in low and middle income countries (LMIC's) are treated by Traditional Healers and that few of these injuries will receive any form of conventional care. These Healers often have considerable experience and will have time to listen to their patients and to touch them before starting treatment. Among orthopaedic treatments they use are manipulation, splints, massage, application of "magic" oils, and scarification with cupping. It is unfortunate that visiting expatriate orthopaedic teachers gain a poor impression of the work of Traditional Healers as they usually only see bad results following "too tight splints", "the poor treatment of open fractures", or from "other unorthodox treatments". The Healers may not appreciate the dangers of the swelling associated with fractures and circumferential splints. A child may then present with a gangrenous hand or foot which necessitates amputation (Fig. 1); or if they are relatively lucky with "only" a ischaemic contracture. Volkmann's These horrific complications could have been avoided by the use of a splint of "gutter type".

Traditional Healers tend to be secretive people who have learned their practice from a father, mother or other relative. They are loath to reveal their methods of management and to allow "foreigners" to observe their work. In many years of teaching in LMIC's I have only managed to see three healers at work. The first of these was in Bangladesh where I visited a Healer of great repute and who treated about thirty new patients daily (Fig. 2). Displaced fractures were reduced by manual manipulation and then supported with simple wooden splints.

The second Healer worked in rural Indonesia and I saw him treat several patients either with fractures, other limb problems or "backache". He had great manipulative skills and using his foot was able to produce very satisfactory and loud "cracks" when treating patients. I eventually realised that this impressive noise came from his **own** foot.

The third Healer that I know works in Addis Ababa and has addressed the local Orthopaedic Association as well as giving a WOC presentation during a recent SICOT conference. He and other Ethiopian colleagues would like to learn modern methods of management.

Dr Mekonnen Eshete when working far from Addis Ababa has shown that with care, diplomacy and the cooperation of local government and other organisations Traditional Healers can be trained (Ref. 1). His work resulted in a major decrease in the number of amputations performed in his district hospital for gangrenous limbs following the use of "too tight splints". **It can be done**, but how to do this seems to be beset by all sorts of problems.

As "foreigners" making short teaching visits it is almost impossible to help Traditional Healers and this means that their instruction must be done by our indigenous colleagues. Traditional Healers are usually seen locally as quacks and competitors rather than potential colleagues. When a visitor, even those with a considerable track record of teaching in LMIC's, suggests cooperating with Traditional Healers he or she will usually be told that this has been attempted but failed. However, with patience and diplomacy it should be possible to cooperate rather than to compete with Traditional Healers and thus help them to improve their treatments. I am not going to give up, and I hope that others will think and act along these lines.

At present the Ponsetti management has become popular for the management of clubfeet. This requires dedicating time to the actual treatment of relatively large numbers of children (and their families), and with the shortage of medical cover in many LMIC's it could be helpful to all concerned if appropriate Traditional Healers could be taught this technique. I have suggested this on several occasions but while interest is expressed I do not know of anywhere that this has been tried.

Reference:

1). Mekonnen Eshete. *The prevention of traditional bone setter's gangrene*. Journal of Bone and Joint Surgery (Br) 2005; B:102-3





(continues on page 5)

Training Around the World



Orthopaedic Training in Canada



Ingrid Radovanovic Orthopaedic Resident, University of Western Ontario – London, Canada

My surgical training has been an interesting journey thus far. I have had the privilege of working in two systems: the Irish system, and now the Canadian system.

I was born and raised in Canada before starting my journey in Ireland as a medical student. I elected to stay in Ireland the first few years of my training and completed my internship and basic surgical training which obtained my MRCS. At that point I focused on research so I could attempt to get into their higher surgical training system. I had the pleasure of working with some amazing surgeons, with unforgettable personalities, in a great programme but, at the end of the day, I realized I wanted to be closer to my family.

I chose to apply to the Canadian system via the Canadian Residency Matching Service (CaRMS). I was one of the lucky ones who were able to match. While there were 76 positions for Canadian medical graduates, for international medical graduates, there were only six positions available.

The CaRMS process begins with submitting an application and a personal letter explaining your interest in orthopaedics. After the applications are submitted, the Programmes review all applicants and offer interviews to a select few. The interview process begins with a social night where you can talk to the current residents about the programme to determine if it is a good fit for you. The interview itself occurs the next day. Upon completion of the interviews, the ranking process begins and, shortly after, the results are released. If you are lucky enough to be accepted, you will start a fiveyear training programme.

The first two years is a mix between orthopaedic and nonorthopaedic specialities. The non-orthopaedic rotations are all relevant to our speciality. For example, we complete two months of vascular surgery where we learn how to perform

Acknowledgements:

Fig. 1: A gangrenous hand from too tight splintage. This photograph is reproduced and adapted with permission and copyright © of the British Editorial Society of Bone and Joint Surgery (citation). Mekonnen Eshete. *The prevention of traditional bone setter's gangrene*. Journal of Bone and Joint Surgery (Br) 2005; B:102-3

amputations. The final three years is focused on orthopaedics. In my programme, we rotate between three teaching hospitals and have rotations in Spine, Paediatrics, Trauma, Hand and Upper Limb, Arthroplasty, and Sports. We also travel to Toronto for a Tumour rotation and to a smaller city for our Community Orthopaedics rotation. During these rotations we are encouraged to operate as much as possible. Right from the start, first-year residents are assigned operating days to begin learning our craft, and they do more than just hold the retractors.

My programme prides itself on its daily teaching regime. Every morning after rounding on our in-patients, we have a teaching session at 7 a.m.. This is both a blessing and a curse. The staff members expect you to be prepared and will question a couple of the residents each morning. No matter how much you study, the staff will push you past your limits in an attempt to motivate you to learn more. These sessions seem scary at first, but you soon realize how beneficial they are. At the end of the five-year programme, you are required to write your exit exams and are more than ready after this training programme.

At the end of my training and the completion of my exit exams, I feel the methods employed in this programme will make me a more knowledgeable, confident surgeon. The one thing to impress upon is the amount of discipline it will take to successfully complete this programme.

A few people have asked me if I am happy with my training since moving back to Canada. A colleague of mine once said, "Surgical training in Ireland was like a marathon". I could not agree with him more. However, in Canada it is more like a sprint. Five short years to learn how to operate, complete research, and learn about the intricacies of orthopaedics. I am a sprinter.

Article by a SICOT Member (continued)

Fig. 2: A Traditional Healer managing a tibial fracture. This photograph was taken in Bangladesh about 35 years ago and the 'Healer' has since died. This picture is reproduced with the kind agreement of his 'Grand Nephew' who is continuing the Practice in Dhaka, although advertising by Traditional Healers has now been banned by the Government.

To read the complete article, please go to the SICOT website: <u>www.sicot.org/?id_page=646</u>

Scientific Debate

Ankle Arthrodesis versus Ankle Replacement

The treatment for patients with end stage ankle arthritis between the ages of 45 to 60 years is controversial. Where ankle arthritis is secondary to post traumatic without evidence of infection, neuropathy, diabetes, peripheral vascular disease or rheumatological condition, either option is possible.

Ankle Arthrodesis

Syah Bahari & Johnny McKenna Foot and Ankle Unit, Sport Surgery Clinic & St James' Hospital – Dublin, Ireland

When comparing ankle arthrodesis to ankle replacement, one needs to understand that ankle arthrodesis is a pain relieving salvage procedure. It does not allow ankle range of motion where ankle replacement does. Thus, the comparison for these two treatment modalities needs to be based on surgical technique, complications, level of pain relief and level of activities achievable after the procedure.

Ankle arthrodesis is still considered as the gold standard for end stage ankle arthritis. Main complications are wound infection and failure to fusion. Introduction of arthroscopic ankle arthrodesis technique has significantly improved the incidence of these complications and also decreased the time to union [1]. However, risk of developing hindfoot arthritis has been the main concern for ankle arthrodesis. Long-term follow-up of ankle arthrodesis patients did show a development of hindfoot arthritis mostly in the subtalar joint. Interestingly, their clinical and functional outcome remains unclear as subjectively 91% of the patients were satisfied with the results [2]. This complication may be avoided by ankle replacement but aseptic loosening associated with ankle replacement is also a concern.

For a young patient, ankle arthrodesis can be viewed as an intermediate procedure where, when symptomatic hindfoot arthritis has developed, triple arthrodesis can be performed and the ankle arthrodesis can be converted to a replacement [3]. However, preservation of ankle anatomy is essential to allow ankle arthrodesis to be converted to ankle replacement [4]. With ankle replacement, significant bone loss may occur with osteolysis preventing any revision procedure or ankle arthrodesis and may end up with tibiotalar-calcaneal arthrodesis or pantalar arthrodesis.

Ankle arthrodesis is a reliable pain relieving procedure. Failure to fusion or pre-existing subtalar or talonavicular arthritis would explain persistent pain after surgery. MRI scan of the ankle and hindfoot is advisable to detect any degenerative changes in subtalar or talonavicular joint prior to surgery. SPECT scan has been advocated as a more sensitive modality than MRI in assessment of subtalar or talonavicular arthritis [5].

Patient level of activity is not limited after ankle fusion, even high impact activity. Activity that requires ankle movement such as standing on tip toe, jumping, squatting or lunging may not be possible but subtalar joint and medial column movement will increase to compensate thus allowing some sporting activities such as cycling, hiking, swimming, skiing and rowing [6]. Ankle replacement may allow more physiological ROM of ankle but there is no consensus on activity allowed after surgery. Expert opinions suggest avoiding high impact activity thus limiting the activity of patients with an ankle replacement.

For patients aged 45 to 60 years old with expectation to continue with high impact activity and workload, ankle arthrodesis is recommended as it will provide pain relief and allow returning to their expected level of function.

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Ankle Replacement

Sudarshan Munigangaiah & Paula Kelly Foot and Ankle Unit, Adelaide and Meath Hospital – Dublin, Ireland

Total ankle replacement has remarkably progressed as one of the treatment options for end stage arthritis of ankle. Total ankle replacement is technically demanding and generally performed by only experienced foot and ankle surgeons. Saltzman et al. [1] in their multicentre randomised control trial comparing total ankle replacement to ankle arthrodesis reported that ankle replacement was superior in postoperative relief and functional outcome at twenty-four months follow-up. Recent studies have shown that ankle replacement could be attractive surgical alternative ankle arthrodesis for patients with advanced osteoarthritis of ankle in short and intermediate follow-up studies [2]. At this point of time long-term follow-up studies are not available to say that total ankle replacement has replaced the ankle arthrodesis as the surgical gold standard.

Most of the time ankle arthrodesis is successful in relieving pain in ankle arthritis patients. However, many reports have highlighted that there are short- and long-term problems following ankle arthrodesis in activities like getting out of chairs, climbing stairs, running and walking on uneven surfaces [3]. A young patient undergoing ankle arthrodesis has a high risk of developing osteoarthritis in hindfoot in subsequent years to come. This might lead to an additional subtalar or pantalar fusion procedure [4]. Although many studies have shown that ankle arthrodesis is successful in relieving pain in end stage osteoarthritis of ankle, this is associated with non-union and malunion. Now the question arises: how do we treat painful non-union and malunion of ankle arthrodesis. Hintermann et al. [5] carried out a study in which thirty painful ankle arthrodesis in twenty-eight patients were revised to total ankle replacements. Average age of these patients was 58.2 years. Total ankle replacements were followed up to average 55.6 months with functional and radiological outcome. Authors in this study concluded that for patients with pain at the site of a failed ankle arthrodesis, conversion to total ankle arthroplasty with the use of a threecomponent ankle implant is a viable treatment option that provides reliable intermediate-term results. In this case series total ankle replacement has been used as a salvage procedure for failed ankle fusion.

Although total ankle replacement is becoming increasingly popular for treatment of end stage osteoarthritis of ankle it has a steep learning curve [6]. Correct positioning of the talar component is one of the most demanding steps in the ankle replacement. Sagittal mal position of the talar component is one of the most common complications of the total ankle replacement [6]. A systematic review carried out in 2009 by Gougoulias concluded that total ankle replacements that are available currently improve ankle function. Residual pain is common and wound complications can occur. Overall, failure rate is approximately 10% at 5 years with a wide range from different centres [7]. This systematic review also revealed that the improvement in ankle range of movement was relatively small from 0 to 14 degrees. Surgeons should inform the patients preoperatively that improvement in ankle range of movement is not one of the expected benefits [7]. So far only two studies have suggested participation in certain sports activities after total ankle replacement [8,9]. However, till date we don't know whether sports activities are advisable after total ankle replacement. If participating in sports activities, would this affect the survival of the ankle replacement? Further long-term follow-up studies are needed to answer these questions.

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Fellowship News



Experience in Germany

Mahmoud Badran SICOT Associate Member & Orthopaedic Surgeon. Assiut University Hospital – Assiut, Egypt

I am an assistant lecturer, specialist of Orthopaedic Surgery and Traumatology, at the Assiut University Hospital, Egypt. I had the great opportunity of travelling to Germany as a SICOT fellow at one of the most organised hospitals I have ever seen, the König-Ludwig-Haus Hospital in Würzburg which is located in Bayern, Germany. The fellowship extended for 6 months from September 2010 until the end of February 2011.



Dr Mahmoud Badran and Prof Maximilian Rudert

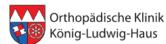
The hospital is specialised in Joint Arthroplasty, Arthroscopy, Sports Surgery, and Foot & Ankle. Here I met Prof Maximilian Rudert, the chief of the hospital. He is a very generous man, as well as an intelligent and highly experienced surgeon, who always greeted us with a smile on his face and from whom I learned a lot. Dr Ulrich Nöth. who also has plenty of experience in dealing with difficult and complicated cases of joint arthroplasty, gave me some of his experience in dealing with these kinds of cases. While I was there, I presented two lectures of my work in Egypt. The members of staff were very kind and generous, and helped me to get accustomed to the German way of living. The only problem I had was the language barrier, but I took some courses in German which greatly assisted me in communicating with people outside the hospital. Also, one of the great winnings of my life was to gain a friend like Dr Anis Almansoury who was also working there and helped me a great deal with some of the problems which I was faced with.

After this wonderful experience in Würzburg, I travelled to another great hospital in Tübingen in Baden-Württemburg, which is a small town close to Stuttgart, the city of the Mercedes-Benz headquarters. The BG Trauma Centre is the name of the hospital where I stayed until the end of May 2011. Prof Dr Ulrich Stöckle, who is one of the pioneers of pelvic and acetabular surgery in Germany, is the new chief of the hospital. He helped me very much to gain experience in dealing with all types of trauma surgery and pelvic fractures. I also met Dr Fabian Stuby and Prof Dr Dankward Höntzsch who taught me a lot. The hospital is highly equipped with multiple navigation systems for arthroplasty and pelvic fractures. The arthroplasty team also does excellent work, including navigated total knee arthroplasty as a routine for arthritic knees.



Prof Dr Ulrich Stöckle and Dr Mahmoud Badran

I found great hospitality in Germany and I hope I will be able to return to Germany many more times.





8

Young Surgeons



SICOT Oral Presentation Awardee attends the CCJR Spring Meeting

Maik Stiehler

SICOT Associate Member & Orthopaedic Surgeon, University Hospital Dresden – Dresden, Germany

I was extremely honoured to receive the SICOT/CCJR oral presentation award at the SICOT 2011 XXV Triennial World Congress in Prague. From 20 to 23 May 2012, I then had the great pleasure to participate in the Current Concepts in Joint Replacement Meeting in Las Vegas, Nevada, United States.

Attending this meeting denotes an outstanding opportunity for a front-line update on both evidence-based treatment modalities as well as latest trends, for instance on biologically orientated concepts, new biomaterials and implant designs, and smart tool-based strategies in joint replacement therapy.

In a total of 111 presentations, world renowned speakers focused on both new and established techniques for the therapy of joint disorders, treatment indications, management of complications, and rehabilitation strategies – to mention only a few of the interesting topics. Highlights were the instructive live surgeries from four of the world's leading orthopaedic centres (including Hospital for Special Surgery, New York, NY, United States) on reverse shoulder arthroplasty, primary cementless and patient-specific TKA, instrument guided mobile medial UKA, rotating platform PS TKA, patient matched and engineered TKA, as well as robotic arm guided THA.

A few examples of striking recent news in the field of total hip arthroplasty (THA) are given below.

Michael D. Ries (San Francisco, United States) claimed that further follow-up is still necessary to determine the long-term durability of highly crosslinked ultra high molecular weight polyethylene (UHMWPE) as a bearing surface material in THA as there is evidence for an increased risk of liner fractures resulting from edge load or impingement as a consequence of crosslinking compared to conventional (e.g. gamma inert or gas sterilized) UHMWPE.

Moreover, Michael J. Dunbar (Halifax, Canada) reported about an increased interest in the use of cemented femoral fixation, especially in the emerging markets of e.g. India and China, due to excellent survivorship (even in the younger age group), variable stem positioning without the need for modularity, reduced risk for periprosthetic fracture, costeffectiveness, and the ability to add antimicrobial agents to the cement.

Furthermore, Fares H. Haddad (London, United Kingdom) summarized recent data on metal-on-metal (MOM) bearings suggesting that stemmed/modular large head (>36 mm) are at risk most likely due to problems concerning the taper junction while in hip resurfacing patient selection, favourable implant design, and correct implant positioning are key. He concluded that both MOM resurfacing as well as 28/32mm MOM THA with proven designs remain a viable option.

Finally, Mark W. Pagnano (Rochester, United States) argued from the data available on direct anterior THA that the extraordinary claims of this approach are not sufficiently supported by evidence.

In addition to the excellent scientific programme, the CCJR meeting with more than 1,000 participants of over 30 nationalities has proven to be a fantastic platform to establish new contacts with international colleagues and potential industry partners.

I would like to express my gratitude to SICOT for this invaluable experience.



Las Vegas Skyline in front of the CCJR congress centre

Orthopaedics in War-Torn Areas



An Orthopaedic Surgeon's experience in Afghanistan *MSF – Kunduz Trauma Centre*

Assistant Professor of Orthopaedic Surgery, Cairo University – Cairo, Egypt

Afghanistan has been characterized as a state torn with violence for many decades. Since 1979 the country has experienced major wars in which millions of Afghans have lost their lives and even more have been brutally injured. Eleven years after the last war in Afghanistan the political situation is far from stable and the violence between main actors still continues. With the growing conflicts, the Afghans have been trapped for decades in conditions of poverty and lack of access to medical treatment.

As violence continued across northern Afghanistan, MSF opened – in August 2010 – a specialized surgical trauma hospital in the northern Kunduz province. Amongst other projects in different areas of Afghanistan, the Kunduz Trauma Centre aims to provide high quality free surgical care to trauma victims thus reducing mortality and morbidity in the north east region of Afghanistan. This trauma centre obviated the need of victims with severe injuries to travel a long, expensive and dangerous journey to the capital, Kabul, or neighbouring Pakistan.

Going to Afghanistan as the first mission with MSF was a challenging experience. I had the privilege to join the team working in Kunduz Trauma Centre for a five-week mission as an expat Orthopaedic Surgeon from 1 August to 12 September 2012. The MSF Trauma Centre operates through the facilities of one Emergency room, two operating theatres, an intensive care unit, one outpatient department with dressing and plaster rooms as well as X-ray and laboratory/blood bank facilities. There are separate surgical wards for male and female patients with a current capacity of 58 beds. The trauma centre also provides physical rehabilitation by physiotherapists for in and out patients. The expat medical team, amongst other members, consists of an ER doctor, ICU doctor, two Anaesthetists, a General Surgeon and two Orthopaedic Surgeons.

The spectrum of cases seen by the orthopaedic surgeon range from war wounded injuries due to bomb explosions, land mines, road side IEDs (Improvised Explosive Device) and gunshot injuries as well as the common injuries from road traffic accidents and other domestic injuries. Given the nature of injuries there is a wide spectrum of fractures from simple to complex to be dealt with; mostly open fractures with extensive soft tissue damage. Frequently, the limb injuries will be as a part of polytrauma patients with other head, chest and abdominal injuries. It is not uncommon for these injuries to be seen in a multiple casualty situation whether they are the result of bomb explosions or a bus collision. The orthopaedic interventions possible during the first year since the beginning of the project, in addition to closed fracture treatment in adults and children, are basic management of open fractures applying the principles of soft tissue debridement and fracture stabilization with external skeletal fixation and wiring. Knowledge of the principles of management of war wounded in situations of limited resources, published by the ICRC, is helpful in having satisfactory outcomes in these devastating limb and trunk injuries.

Improvement of the orthopaedic surgical care, offered in the Kunduz Trauma Centre, to include internal fixation of closed fractures is currently underway with improvement in the OT setup, sterilization and providing a C-arm in theatres in the very near future. In addition, there is a considerable load of wound surgery for limb soft tissue injuries often requiring plastic reconstruction. Needless to say, given the nature of the injuries, upper and lower limb amputations are frequently being performed for the non-salvageable mutilating limb injuries.



The MSF Trauma Centre policy notice

Since it started almost a year ago, the number of patients treated in the Kunduz Trauma Centre has steadily increased. This is due to the increased awareness of the population of Kunduz province and nearby areas of the unique services the MSF Trauma Centre offers to the victims of trauma without regard to their ethnicity or political affiliations.

The key to success of the MSF Trauma Centre in providing such services, as I witnessed during my mission, is a hard working team of expats and local staff in a well-structured and organized project. During my mission, I had the pleasure to work in a team of 20 expatriate staff members of 15 different nationalities, working together with about 300 national staff members. I witnessed a distinguishable team spirit and obvious cooperation between all members. This ensured everyone's duties to be fulfilled in a professional and effective way.

MSF also ensures the working environment to be as optimal as possible for the expat staff being in a foreign environment with a noticeable different cultural background. Security issues with the local political unrest dictates strict guidelines to be followed for the safety of all staff from the moment they arrive in Afghanistan until the end of the mission. During my stay I never felt threatened or unsafe during work or outside the hospital in the living compound or during transportation from one place to another. Also the mental status and wellbeing of the expat team is well looked after with good housing conditions and recreational facilities available within the living compounds. The friendly spirit between all team members made it an enjoyable experience in spite of the stress expected at times from the hard work of dealing with victims of this kind of violence.

The experience as a whole in the MSF Kunduz Trauma Centre, for an Orthopaedic Surgeon, is a very rich one. Dealing with victims of violence and war injuries is very different from what one faces in day to day common orthopaedic practice. This is in addition to the invaluable humanitarian role of helping victims of multiple injuries in an area struck with violence for decades with a poor population sometimes not having access to basic health services. An overall travel and work experience I much cherish and look forward to repeat in the near future.



View of the Kunduz Trauma Centre







Welcome to Hyderabad, India, the venue of the 2013 SICOT Orthopaedic World Conference.

Since the inception of SICOT, this will be the first time that its Orthopaedic World Conference will be held in the Indian subcontinent. Hence the tremendous enthusiasm for welcoming Orthopaedic Surgeons and SICOT members from far and wide for this landmark meeting of World Orthopaedics. We will deliberate on many facets of Orthopaedics and Trauma discussing

these topics at great length. All subspecialties will be represented and discussions will revolve around the cutting edge technology of today and the future. Fringe areas like information technology, resource management, orthopaedics in the developing world and preventive orthopaedics will hold the stage with traditional topics for debate. Conventional teaching, learning modalities like debates, instructional course lectures, symposia and case discussions will be there, complementing the many innovative and interactive programmes. With a growing Indian economy and emerging markets, spending on health care and well-being is fast rising up on the priority list, bringing many new avenues for those connected with the health industry.

Hyderabad as a city is both ancient and modern, offering many opportunities to experience the culture and the area's many sights. In addition, incredible India offers you a rich sightseeing experience to relax before and after the Conference.

Hyderabad OWC 2013 is sure to boast of a record attendance of delegates from this subcontinent and other parts of the world. I do hope that you consider participating in this very important meeting in the Indian subcontinent.

Ashok Johari Conference President

Call for abstracts

Abstract submission is open from 5 December 2012 to 15 February 2013. Please submit your abstracts in English via the SICOT website: <u>www.sicot.org</u>

Main topics:

Arthroplasty Arthroscopy Minimal Invasive Surgery

Other topics:

Allografts Biomaterials Cartilage Clubfoot Developing World Infection Information Technology Limb Reconstructive Surgery Natural Disasters Navigation Neglected Problems Osteoporosis Research Spine Trauma

Paediatrics Pain Management Polytrauma Prosthetics & Orthotics Quality of Life Rheumatology Road Trauma Safety Sports Thromboprophylaxis Tumours Upper & Lower Extremities

Registration

Online conference registration opens on 5 December 2012.

Registration fees in EUR	Early (05/12/2012- 30/06/2013)	Normal (01/07/2013- 15/09/2013)	On-site (16/10/2013- 19/10/2013)
SICOT Full Members	EUR 150	EUR 250	EUR 350
SICOT Associate Members	EUR 75	EUR 100	EUR 150
Non-Members	EUR 350	EUR 450	EUR 600
Non-Member Trainees	EUR 150	EUR 175	EUR 250

Special rates are available for participants residing in the SAARC member countries.

More information about Hyderabad OWC 2013 can be found on the SICOT website: www.sicot.org

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