Dear BHS Member,

The spring newsletter has now become a regular part of the BHS calendar.

We have tried to encompass within it some of the key issues at the moment, including an update on metal-on-metal and the surgeon individual data publication issues that have been at the front of all of our minds and required a great deal of negotiation and work over the last few months.

We are interested in your thoughts as to which other issues you would like profiled both at the BOA annual meeting, and also at our own meeting next year at Exeter.

As you will also see the website is going to be revamped and will hopefully be a vehicle for us to provide you with more information on a timely basis. Please update your e-mail and contact details as soon as you get this, and let us know if you have any queries that the BHS executive can help with.

With Best Wishes,

Fares S Haddad
BSc MD (Res) MCh (Orth) FRCS (Orth) FFSEM
## CONTENTS OF THE 2013 BHS NEWSLETTER

### INSIDE

<table>
<thead>
<tr>
<th>Presidents Musings</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Transparency Agenda</td>
<td>3</td>
</tr>
<tr>
<td>Going Forward: Payment by Results in 2014</td>
<td>5</td>
</tr>
<tr>
<td>The Non Arthroplasty Hip Register</td>
<td>6</td>
</tr>
<tr>
<td>Commission Guidance for Orthopaedic Services</td>
<td>7</td>
</tr>
<tr>
<td>Get It Right First Time</td>
<td>9</td>
</tr>
<tr>
<td>2013 BOA Meeting</td>
<td>10</td>
</tr>
<tr>
<td>2014 BHS Congress</td>
<td>11</td>
</tr>
</tbody>
</table>

| The 2013 BHS Annual Congress - Reflections                                          | 12   |
| Prizes Winners                                                                     | 13   |

<table>
<thead>
<tr>
<th>Topics in Focus</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proximal Hip Fractures</td>
<td>14</td>
</tr>
<tr>
<td>The Peterborough Hip Fracture Project</td>
<td>16</td>
</tr>
<tr>
<td>NICE Clinical Guidelines and BPT</td>
<td>19</td>
</tr>
<tr>
<td>Implant Removal in Revision Hip Surgery</td>
<td>21</td>
</tr>
<tr>
<td>How I get my patients home</td>
<td>22</td>
</tr>
<tr>
<td>The Jury's Out at BHS 2013</td>
<td>24</td>
</tr>
<tr>
<td>Recognised Complication or Negligence?</td>
<td>25</td>
</tr>
</tbody>
</table>

| An Update on Metal Bearing Hips in the Olympic Year                                | 27   |

| BHS Website Update                                                                | 30   |

| BHS Treasurer's Report and Accounts                                               | 31   |

| Insight: The Rothman Ranawat Travelling Fellowship                                | 33   |

| The 2014 Rothman Ranawat Travelling Fellowship                                    | 40   |

| The HipToulouse 2014 Annual Congress                                              | 42   |
As you will see from this newsletter there is a revolution going on in many areas of healthcare with the collection, interpretation and presentation of huge amounts of data including clinical outcome data. The UK will be in a position to be a world leader with the quality and breadth of data available to plan and deliver healthcare for the very best possible outcomes for our patients. If the profession fully engages and is at the centre of this revolution, than we can be confident that the effect will be good for our patients and the profession as a whole. One only has to look at the effect the NHFD has had to see what profound improvement can result from the sensible use of these data especially when associated with payment by results (PBR) tariffs.

In December 2012 the NHS commissioning board published its planning guidance for 2012/13, entitled *Everyone counts: Planning for patients 2013/14*. As you will have heard by now the Board (now NHS England) has dictated that 10 specialties, of which Orthopaedics is one, must publish data at surgeon level by 30th June 2013. Interestingly, no medical specialty is on the list - they simply do not have data of sufficient quality.

The Board stated that the process should be clinician led and are not dictating what is published with two exceptions. They insist that for all chosen specialties publication of i) surgeon volume (probably team volume) and ii) individual mortality rates is not negotiable. They do not say which subspecialty of orthopaedics should publish mortality but one section is mandated to do so. The NJR is in the spotlight as so much money has been spent on it and the Registry has been running for 10 years. Sadly as we know, the NJR data has not been validated and there are significant concerns over the completeness of revision data etc. No validated, useful, surgeon level data is available from the Registry for publication at this point. There is no push to publish revision data yet and HQIP have finally taken on board that relevant parts of the NJR data urgently need validating.

There has been general acceptance that data must be published from the NJR with our assistance since the alternative was for another body such as Dr. Foster to publish data with no input or commentary from ourselves.

It has been agreed that the following data should be published in collaboration with HQIP:
• Units where a surgeon works (where they have data recorded as Consultant in Charge in 2012)
• Total activity by procedure type across all units for the individual surgeon (for the past 12 months and 3 years). In line with other audits, the data released will relate to all activity carried out in the Consultant’s name
• Unit-level NJR compliance for data entry (for the past 12 months and 3 years)
• Risk adjusted 90-day mortality for elective procedures for total hip replacement and total knee replacement (the data timeframe has been confirmed as April 2003 to February 2013)
• The analysis will use Funnel Plots to avoid the creation of league tables
• Narrative explaining the data will be written by the specialist societies
• Any individual who is in an outlying position will be contacted in advance of publication and any issues explored, including individual data validation
• Surgeons can opt-in or opt-out of releasing their own data.

Early indications are that there are, in fact, no outliers with regard mortality data. This should mean that no surgeon is at risk from these data (shown, in any case to be irrelevant to their personal practices) but the public can have a good news story - joint replacement is safe wherever it is carried out.

You will receive more letters from HQIP and the BOA/BHS/BASK concerning the publication process. Please note that you need to confirm a response to the request from HQIP to consent to the processing and publication of NJR data for this year. You will need to log on this month to http://www.njrclinicianfeedback.org.uk to view your data and indicate whether you wish to give your consent. The consent process will start on Friday, 31 May and close on Friday, 14 June. If you are in any doubt about this process please phone NJR Service Desk on 0845 345 9991.

One of the most significant outcomes of these negotiations is that going forward we are promised that the Profession will have a more Executive role in deciding how data will be analysed and what data should be presented. It is imperative that this happens and the BHS will fight hard to ensure this promise is kept. I believe it has become apparent to all those dictating the Transparency Agenda that these data are so complex that only the specialist clinicians in each area have the breadth and depth of knowledge to analyse and interpret the data adequately. I am led to understand that a Medical Director for the NJR is to be appointed and I have written to Elaine Young requesting information about the reorganisation of clinician involvement within the NJR and details about the appointments to be made and timescales involved. As soon as I have learned these I will be in contact with the membership to ensure that these posts are better advertised than they have been previously so that interested parties can apply. The profession needs to be at the hub of the decision-making process.

Going forward, it is likely that Unit data will be presented in preference to individual data, certainly whilst the NJR is being validated.
As you may be aware, one of our own, Peter Kay, has been appointed as National Clinical Director (NCD) Musculoskeletal Services (NHS England). The PBR team has approached Peter to see if the Profession can agree a sensible, workable, best practice tariff for Hip and Knee to try to improve patient outcomes. Peter points out that we need to agree a scheme by which we drive genuine improvement but such that units are not wrongly penalised for carrying out complex work/case mix. Conversely, the process should challenge Units to improve if they are producing results that are truly significantly below average.

There is therefore an opportunity to get the profession – BHS, BASK and BOA to join with a single view for a tariff, using pre-existing data sources that measure outcome rather than process, to drive improvement in outcomes. Whatever is agreed initially will be imperfect and will undoubtedly evolve but we must be at the centre of the process helping direct this evolution. One of the most important effects of the introduction of any PBR system will be that all healthcare providers will comply more effectively in the process of collecting comprehensive, quality data. The general feeling within the profession is that it is worth engaging at this point to demonstrate our commitment; some form of PBR scheme will be imposed if we do not – and it is far less likely to achieve the desired result.

Several ideas are under discussion at present for Best Practice Hip and Knee Tariff to be paid but will probably include a high threshold level for consented NJR compliance and PROMS collection pre- and post-surgery. Data completeness (e.g. record of BMI) may also be taken into account. Improvement in Oxford hip or knee score (not EQ5D) is under consideration. If the Thresholds for NJR and PROMS are not met the provider will lose a percentage of into Best Practice Tariff for the current quarter based on most recently available PROMS and NJR returns - this sum is not recoverable.

If the provider is an outlier in improvement of Oxford score (bottom 10%) then the commissioner initially withholds a percentage of the best practice tariff. The pathway could then involve an offer from the BOA/Specialist society (and possibly a representative from a surgical team positioned in the top 10% result) to meet and help that team understand and explain their data and position. This initial meeting would then be followed by one with the Commissioner. If appropriate, a formal plan to improve the results with actions points and time-lines are agreed. If the Trust engages in this process then the withheld money would be paid. If there is no engagement in the process then the Tariff is lost.

The highest 10% may receive an enhanced tariff. These are just suggestions at the moment and nothing has been agreed.

Your own practical involvement in the data revolution
The data revolution has implications for how we all work. Clinicians understandably have concerns about these data. The best way we can protect ourselves from its misuse or misinterpretation is not only to be involved at the very heart of decision-making, but also ensure that local data entered in our name is comprehensive. There is an increased risk of any individual's practice being undervalued if COMPLETE data is not entered or the important Fields allowing case mix are not
comprehensively available. All clinicians would be wise to check that the data being submitted in their name is complete in every institution they work. As an example, BMI is only submitted in about 30% of cases nationwide but this is extremely important as this of one of the important factors in case mix adjustment. Similarly gaining accurate patient consent is often deemed unimportant. If patients are recorded as not giving consent, linkage of data is problematic and the denominator of any calculation for complications for that surgeon may deliver results lower than they should be. It is in the surgeon’s interest to make sure as many patients are entered onto the Register as consent to do so. We should all take an active interest in the systematic processes within our departments to enter data. Although the hospital may lose BPT for providing poor data, it is the surgeon who is individually at risk from the effects of poor data acquisition and submission. Similarly, it may well be worth you meeting with the coders in your hospital to make sure the HES data that will be used to measure your practice is coded as accurately as possible (vide infra). Linkage with HES is undoubtedly going to be increasingly common in the future.

In summary, it is therefore imperative that data compliance is as complete as possible, not only because this will probably attract BPT in the future but also because it will help protect the individual surgeon from spurious analyses of their work and results.

3. THE NON ARTHROPLASTY HIP REGISTER (NAHR)

The NAHR continues to grow and more surgeons are submitting data. As you will be aware this Register was set up by the BHS to collect longitudinal outcome data for any type of hip condition and/or surgery other than arthroplasty and the treatment of acute fracture. It has been constructed so that any hip condition including paediatric conditions can be studied for the lifetime of the patient on a unique pathway passing between treating clinicians. Collecting these data will put us at the forefront of understanding the natural history and effect of surgical treatments of hip pathologies. Additionally the data will be invaluable for revalidation and for protecting the profession from Doctor Foster-like interpretations of outcomes for these conditions using HES and Private sector equivalent data sources. We can prove the efficacy of our operations so that purchasers will fund them. Once again the argument goes – if we don’t collect and interpret relevant data, who is in a better position to do so? In the words of Matt Wilson: ‘It is no good standing in front of a runaway train trying to stop it, you have to be in the cab’.

With the NAHR, clinicians are able to use the Register to collect and display comprehensive outcome and audit data for all of their own patients using scores and outcome measures of their own choice. Data can be entered for patients who do not undergo surgery for any specific condition so that their clinical course can be followed. Only one hip ‘pathway’ can be started for left or right hips in an individual so patients are not lost if they move between clinicians. If the patient has consented for their data to be collected, only an arthroplasty or the patient’s demise will close the record.

The independence of the reporting of data remains critical to the credibility of the NAHR. The BHS will protect the
The confidentiality of the information contained in the NAHR and maintains high level data security procedures. No other clinician, including members of the NAHR Subcommittee, will be able to view an individual surgeon's data or outcomes. We are protected from any FOI requests since there is no public money involved in the NAHR. A Policy document sets out who can request data of the Registry and how access to information can be requested. Changes can be agreed for the purposes of running clinical trials.

NICE Interventional Procedure Guidance on Arthroscopic (IPG 408) and Open (IPG 403) Femoro-Acetabular Surgery for Hip Impingement Syndrome notes that clinicians should submit details to this national register. For the condition of femoro-acetabular impingement, clinicians may choose to facilitate only collection of an initial Minimum Data Set (as they do with the NJR) and leave the Registry to collect further outcome data but the functionality is there for the clinician to organise any outcome measure or clinical score he/she desires. Going forward it is very important to collect the patient's e-mail address and gain their consent for data entry. Collection of outcome scores can then be automatic. At the request of high volume surgeons who have their own methods of data collection for non arthroplasty operations at the hip, the BHS has invested in a software platform to allow the import of data from existing databases into NAHR. This will also circumvent the need for double data entry. Gavin Webb will be delighted to help you get started with submitting contemporary or historical data to NAHR (Gavin Webb gavin.webb@bluespier.com).

If you work in the UK and treat patient with hip disorders please Register and organise the protocol for data collection for patients under your care. Full information and instruction are available on the BHS website. Please contact myself, Marcus Bankes (mjkbankes@me.com) or Gavin if you have any questions or suggestions for how we can improve the NAHR. The development of the NAHR remains a very open process - please let us know what changes you would like to see.

### 4. COMMISSIONING GUIDANCE FOR ORTHOPAEDIC SERVICES

The BOA has recently embarked on the development of evidence-based guidance for commissioners. High volume, high cost procedures within each sub-specialty area of orthopaedic practice, have been identified and commissioning guidance for the first group is being compiled with the aid of the Specialist Societies including, for adult hip pain, the BHS. In total, over 30 procedure-based pathways have been identified together accounting for £4.5bn spend in the NHS. A Guidance Development Process has been identified by Joe Dias in collaboration with other specialties and the Royal College of Surgeons so that the work will be by so that the work will be accredited by NICE and the guidance recognised by The guidance is being consolidated into “care pathways” in accordance with the Guidance Development Process and several workshops have been held to this end. Gordon Bannister has led the creation of a Care Pathway for hip pain. This describes the roles of primary, intermediate and secondary care. Quality specifications (CQUINS) have been defined. A quality Dashboard for hip disease has been created with various measures being defined and fields will be populated with HES statistics. The likely data available to commissioners is illustrated below:
The Right Care Dashboard provides rates of Activity for CCGs for interventions identified as a priority by the surgical specialist association. These rates are directly standardised against the national population for Age and Sex. This dashboard supports the carpal tunnel and cubital tunnel commissioning guidance document developed by the BOA working group with the RCOSE.

Report Overview

- Period for which data is displayed: In this report quarterly rolling year.
- Actual value for this indicator: Total Number of procedures, if less than 5 will be represented with 0.
- The mean value for all CCGs in England: SPC Chart displaying variance for each indicator.

Indicator reference

Indicator name:

How to interpret charts

- If a CCG is in this range their rate is within 1 standard deviation of the national rate (25th or 75th). If a CCG is in this range their rate is better than expected by chance (25th or 75th).
- The diamond represents the value for the CCG.
- The vertical bar represents the average value for all CCGs in England. If a CCG is in this range their rate is much better than expected by chance (99.7% or 99.9%).
- The ends of the bar are dynamic to allow a range that enables each measure to be viewed clearly for the CCG in question. See Max data document for further information.

The chart on the left shows a CCG whose performance on this indicator is better than the national picture by a degree that is unlikely to be explained by random chance.

The two charts on the left show a CCG whose performance on this indicator does not differ from the national picture by more than can be explained by random chance.

The chart on the left shows a CCG whose performance on this indicator is worse than the national picture by a degree that is unlikely to be explained by random chance.

The chart on the left is for an indicator that does not have a desired direction for improvement. The CCG shown in this example is within the expected range based on the national picture.

* For a full description of each metric and metadata, please see technical guidance.

** These charts are constructed using statistical process control (SPC) principles and use control limits to indicate variation from the national mean. The display shows both two standard deviation (95%) control limits and three standard deviation (99.7%) control limits. Values outside these limits (the light grey section) are said to display “special cause variation” at two standard deviation level, and a cause other than random chance should be considered. Values outside these sections (in the dark green or red sections) also display “special cause variation” but against a more stringent test.

Variation at the two standard deviation level can be considered to raise an alert, and variation at the three standard deviation level to raise an alarm.
The latest draft of the commissioning guidance is due to go out for peer review and public consultation imminently and your feedback is important. The BHS will direct you to the document when it is released.

A multidisciplinary Guidance Development Group will review all received comments and decide whether suggestions should be incorporated into this guidance.

5. GET IT RIGHT FIRST TIME (GIRFT)

As you may know, last year, Tim Briggs published a report entitled 'Getting it right first time' (GIRFT). The report considers the current state of England’s orthopaedic surgery provision and suggests that changes can be made to improve pathways of care, patient experience, and outcomes with significant cost savings (www.timbriggs-gettingitrightfirsttime.com). The secretary of state has approved the funding of a pilot based on GIRFT led by clinicians from the BOA and the specialist organisations. The pilot will undertake a national review of baseline data building up a picture of local and regional orthopaedic provision of services including aspects of patient experience, outcomes, waiting times and financial impacts. The baseline data set for these reports will include: HES, NJR, PROMS, variation, litigation, readmissions, infection, mortality, day case arthroscopies and fractured neck of femur best practice adherence.

It is intended that the report will be used to drive improvements to routine services and the provision of specialist elective Orthopaedics.
Many Trusts have offered to engage by meeting with the project team to review local data and discuss its validity and significance. In the next few weeks a member of the GIRFT team will be contacting clinical directors and commissioners for orthopaedics around England to discuss the possibility of a visit and to give more information concerning the background to this initiative.

I will keep you up-to-date as more details of the process become clear. More information will become available on the BOA website.

6. 2013 BOA MEETING AT THE ICC IN BIRMINGHAM

For the first time Registration for this event is free for BOA members but please register soon! All 3 days will have multiple sessions relevant to your practice although the main BHS “badged” sessions are on the Wednesday and Thursday.

As President it was my privilege to invite the Charnley lecturer for 2013 sponsored by the John Charnley Trust. I invited Robert Barrack to talk to a controversial title: “Ethics Probit and Science. The history of Thromboprophylaxis in Hip and Knee Replacement Surgery”

The Congress Dinner will be at the Jam House but there are already very few seats remaining so please book soon on-line. The full programme of the BOA 2013 meeting is now available online at http://congress.boa.ac.uk/delegates/programme/
The 2014 scientific meeting of the BHS will be held in the Cathedral of Exeter, a building that dates back to the 12 Century. The details of the Programme are yet to be decided but are likely to include a number of the following options:

- A BORS session on Wednesday afternoon
- A young adult hip session chaired by Johan Witt
- The emerging Surgeons session will be run by Matt Wilson and Ben Bolland
- Multiple short debates on topical subjects
- A Registry session. Stephen Graves is the Presidential Guest lecturer
- A session on the young adult hip possibly involving paediatric surgeons
- A session on infection

Please put these dates in your diary. Further details and a call for abstracts will be published in due course. We look forward to extending a warm welcome to the Society.

As you can see there is a wealth of activity going on which will affect all our practices in the very near future. Please engage with the BHS on-line and through the website and let us know your thoughts. The Society is yours to help direct to serve the best interest of our patients and our Profession.
424 delegates of the BHS and Arthroplasty Care Practitioners Association met in the centre of Bristol for the 2013 meeting to a very varied programme. There was basic science at the BORS session, Topics in Focus on proximal femoral fracture, medicolegal conundra and the removal of well-fixed prostheses, a short Metal on Metal update, a lively interaction with members of the NJR and HQIP and free paper sessions. There were 40 free papers were and 100 posters selected from 225 submitted abstracts. The free papers addressed the outcomes of THR, revision THR, metal on metal bearings (6), proximal femoral fracture and mortality, surgeon outliers, demand for THR, gait, surgical approach, noisy bearings, prosthetic orientation, pelvic osteotomy and hip arthroscopy.

Leif Havelin gave the Presidential Guest Lecture on ‘Minimising Failure in THR’ and, drawing on his 20 year experience of data analysis from the Norwegian and other Scandinavian hip registers, concluded that most highly promoted novel prostheses were inferior to existing implants. The single most effective intervention to reduce revision rates in Norway was teaching surgeons how to implant the Charnley properly.

For the first time, we had reliable voting keypads which proved invaluable in promoting interaction in the scientific sessions, speeding up the election of new officers (no missing ballot boxes at the BHS) and obtaining feedback on the sessions. Feedback on the Topics in Focus, Metal on metal update and the NJR session was over 90% good or excellent.

At the AGM, a motion was passed encouraging members to enter their data on to the Non Arthroplasty Hip Register and Keith Tucker asked for volunteers to help with the ‘Beyond Compliance’ assessment of new hip implants. Over 20 new members were elected. Traditionally, admission to membership was subject to presentation of a paper to the Society but, such is the competition for podium presentation, this has become extremely difficult. It was agreed that, in future, prospective members should demonstrate an interest in hip surgery by presentation to any peer reviewed meeting, publication, completion of a hip fellowship or a consultant appointment with a special interest in hip surgery.

The meeting was let down by the failure of the central heating at the venue and an outside catering company that failed to deliver. The increasing size of our meetings is very encouraging but poses logistic problems with venues. Most of these have capacity for 300 leaving little choice outside the major conurbations. However, it would be sad to be centralised on these as delegates were able to get a flavour of the city in which the meeting was held rather than occupying a cavernous, impersonal, concrete conference centre.
The programme was a return to the generality of hip surgery with everyone’s interests represented. The message emerging was that the best practice need not be the most expensive; we should be brutally discerning in the devices we implant, ensure robust training before doing so and pool our results in national registers to improve our outcomes.

The absence of trade exhibitions continues to allow members to concentrate on the programme, posters, and the renewal of old friendships and the making of new ones. On a personal note, it was an especial pleasure to see so many of my old trainees happily settled in consultant posts and making or eager to make a contribution.

PRIZES FROM THE BRITISH HIP SOCIETY 2013

THE MCKEE PRIZE FOR BEST PAPER
R Lawton, C Brown, W Wang, B Clift. Survivorship and function correlated in young hip arthroplasty patients? A prospective study of survivorship in Harris hip scores after hip resurfacing, hybrid, cemented and uncemented THA. Inpatients aged 55 and under with minimum five year follow-up.


THIRD PLACE: Catherine van der Straeten, B de Roest, K de Smet. Randomised controlled trial comparing metal ion levels between nine different hip resurfacing designs.

POSTER PRIZE

PRESIDENTS UNDERGRADUATE PRIZE
Background:
The mean age of patients who break their hips is 82 years. Only 20% are fully mobile and independent before fracture and all have compensated medical pathology. The mortality after 30 days is around 9% and after 1 year 30%. The mean length of hospital admission is around 20 days highly skewed by long stayers who have lost their independence as a result of the injury and who are waiting long term care in the community. Because there is often little joy from much effort, there has been a nihilistic approach to proximal femoral fracture.

Improved Fracture Management:
Bristol has undertaken 4 randomised prospective controlled trials over the last 35 years. For displaced intracapsular fractures, reduction and Garden screw fixation of produced a pain free hip in only 30% of cases and total hip replacement better function and survival for 5 years. In trochanteric fractures, the sliding screw produced better looking radiographs than the Jewett nail plate without any change in patient outcome (Bannister et al 1990) and the long Gamma nail higher rates of mortality than the sliding hip screw (Barton et al 2010). These were welcome but limited advances that refined our surgery to hemiarthroplasty for the displaced intracapsular fracture, total hip replacement for the fit active patient and the sliding hip screw for trochanteric fractures.

Total patient care:
It became apparent that fixation was just part of the care necessary to treat patients with hip fractures. In 1990, a previously fit and independent 70 year lady was admitted to a north Bristol hospital having fallen at home two days before and been kept there by her GP. On arrival, she lay on a hard trolley in Casualty for 6 hours before transfer to an understaffed trauma ward with a high turnover of nurses and no pressure relieving mattresses. She rapidly developed pressure areas and was listed for surgery, starved and cancelled on 5 consecutive days. Her bed sores became worse so she was nursed on her side in which position she was unable to eat. There were insufficient nurses to feed or assist her or even provide her with a bed pan asking her to soil her bed which they would change when there was time. She died 7 weeks later and the Ombudsman found the hospital care wanting and recommended the engagement of additional nursing staff. The hospital management provided a mathematics graduate to improve administration of the ward.

At that time, trauma was carried out on emergency lists shared with other specialities and the consultant orthopaedic surgeons’ request for trauma lists declined on grounds of cost. The main cost of treating patients with fractured hips is bed occupation so we set up a prospective review of the hospital practice. The mean length of stay was 31 days of which 30% was associated with non-medical delay to surgery, wound infection and pressure areas all of which were correctable by trauma lists, clean theatres and a high standard of nursing care. Daily trauma lists would not be provided for 10 years until the two hospitals in north Bristol combined services on to one site with ultraclean air theatres and wound infections became rare.

A persistent problem was getting patients home. Although we had one or two proactive

Total patient care:
It became apparent that fixation was just part of the care necessary to treat patients with hip fractures. In 1990, a previously fit and independent 70 year lady was admitted to a north Bristol hospital having fallen at home two days before and been kept there by her GP. On arrival, she lay on a hard trolley in Casualty for 6 hours before transfer to an understaffed trauma ward with a high turnover of nurses and no pressure relieving mattresses. She rapidly developed pressure areas and was listed for surgery, starved and cancelled on 5 consecutive days. Her bed sores became worse so she was nursed on her side in which position she was unable to eat. There were insufficient nurses to feed or assist her or even provide her with a bed pan asking her to soil her bed which they would change when there was time. She died 7 weeks later and the Ombudsman found the hospital care wanting and recommended the engagement of additional nursing staff. The hospital management provided a mathematics graduate to improve administration of the ward.

At that time, trauma was carried out on emergency lists shared with other specialities and the consultant orthopaedic surgeons’ request for trauma lists declined on grounds of cost. The main cost of treating patients with fractured hips is bed occupation so we set up a prospective review of the hospital practice. The mean length of stay was 31 days of which 30% was associated with non-medical delay to surgery, wound infection and pressure areas all of which were correctable by trauma lists, clean theatres and a high standard of nursing care. Daily trauma lists would not be provided for 10 years until the two hospitals in north Bristol combined services on to one site with ultraclean air theatres and wound infections became rare.

A persistent problem was getting patients home. Although we had one or two proactive
social workers most were risk averse to discharge and seemed to think that the patient was safe in hospital.

How safe is hospital?
A further prospective review followed patients daily recording the progress of their walking and the effect of prolonged hospital stay. 85% of patients reached their maximum mobility after 8 days, 95% reached after 9 and by 15 58% had hospital acquired infections by 15. It seems that the best window of opportunity is the first 10 days from fracture after which momentum is lost, progress becomes static and static patients infect each other.

Conclusion:
Although patients with fractured hips are frail before they fall, poor hospital treatment makes them substantially worse. Quite apart from humanitarian considerations, poor treatment costs more and there can be no logical excuse for it. In the care of patients with proximal femoral fracture, there is a golden day to get it right. Fracture management is important and timing of surgery critical. Good nursing care is vital and discharge planning essential. Patients with hip fractures have finite rehabilitation potential and approximately 10% are unable to return home and will need residential care. If this is not planned, they languish in hospital making slow or no progress. There have been many improvements in the management of patients with proximal femoral fracture but their management will not be optimised until hospital and community care is joined up.

References:
About the author:
Martyn Parker was the second Hip Fracture Fellow at Peterborough but enjoyed the field so much that he never returned to general Orthopaedics has devoted his career to the care of patients with hip fractures. He personally treats 65% of all the hip fractures in Peterborough. He completed his doctorate, has published over 190 papers of which over 175 are on hip fracture, conducted the 24 Cochrane reviews on areas related to hip fractures and is the lead coauthor in the standard textbook on the subject.

Background:
The Peterborough Hip Fracture Project was set up in 1986 by John Myles, Consultant Orthopaedic Surgeon, with the aim of streamlining hip fracture patients through hospital care to free up beds for elective surgery. Although the team required to treat patients with hip fractures includes a surgeon (registrar), anaesthetist, theatre nurse, theatre radiographer, theatre ODP, physiotherapist, occupational therapist, discharge co-ordinator and secretary, the project was originally one orthopaedic research registrar. Martyn Parker succeeded Glynn Prior in this role and found an interest he could not relinquish. He remains the one Orthopaedic surgeon responsible for the pre-operative assessment, surgery, post-operative care for 65% of cases admitted to Peterborough City Hospital and the follow-up, audit and research for all patients with hip fractures in the hospital. The number of cases with hip fractures has increased from 209 in 1987 to 486 in 2012.

The Peterborough Protocol:
In the Accident department there are protocols for diagnosis, fast tracking to the ward, analgesia, assessment, bloods, ECG and intravenous fluids. On the ward, resuscitation commences. Fluid balance is assessed and a urinary catheter passed if necessary. Thromboembolic prophylaxis with LMWH is prescribed, and analgesia (regular paracetamol, prn codeine & oromorph) are commenced along with pressure area care and planning for discharge.

Thromboprophylaxis after Hip Fracture:
Measures suggested to reduce the risk of thromboembolism include early surgery and mobilisation, avoidance of dehydration, prolonged surgery and overtransfusion and pharmacological and mechanical methods of prophylaxis.

Phamacological methods reduce thromboembolic complications but at the expense of wound haematomas, infections, increased rates of transfusion and thrombocytopenia.

The evidence supporting heparins comes from a Cochrane review of 15 randomised trials involving 1199 hip fracture patients in which asymptomatic DVT was reduced from 42% to 26% and pulmonary embolism (PE) from 4% to 1%. The complications were an increase in mortality from 10% to 12%. There was limited reporting of bleeding complications, transfusion requirements and wound infections.

Aspirin has been much more exactly studied with the PEP multicentre trial of 14,254.
The benefits of aspirin were a reduction of clinical DVT from 9% to 6%, PE from 1.6% to 0.8%, fatal PE from 0.6% to 0.3% and 35 day mortality from 6.9% to 6.7%. Aspirin however increased gastrointestinal bleeding from 2.1% to 3.1%, wound bleeding 2.4% to 3.0% and the mean volume blood transfused by 53mls.

The evidence for foot pumps comes from a Cochrane review of 5 randomised trials involving 487 hip fracture patients. Foot pumps reduced DVT from 22% to 7%, PE from 6% to 2%, fatal PE from 6% to 1% and mortality from 11% to 6% at the expense of inconvenience to patients and staff, skin abrasions compliance and cost.

There have been no studies on hip fracture patients but they are exposed to all the complications of increased skin breakdown, blisters, ulcers and skin necrosis. The data are so incomplete that only a large multicentre randomised trial including a placebo group of the different mechanical and pharmacological methods will provide the answer. Until this is done we have no idea if the adverse effects outweigh the benefits.

Preoperative care:
The aim is to minimise delays to surgery. 94% of my patients are operated on within 48 hours and a critical part of achieving this is liaising with anaesthetic team and reducing the reasons for delay. Each hospital should have a lead anaesthetist for hip fracture who realises the importance of stabilising the fracture, is prepared to anaesthetise frail patients and is not deflected by irrelevant investigations that delay surgery.

Delay to surgery:
Troponin T is a marker of acute myocardial infarction and to the uninitiated is justification for cancelling surgery. 30% of hip fracture patients have some rise in their Troponin T. Troponin T is a marker of a frail patient. The one year mortality is increased in those who have a raised Troponin T and this is associated with medical referral, investigations, possibly treatment and delayed surgery. Medical referral increases mortality in patients with hip fractures from 9% to 21%. Other factors that delay surgery unnecessarily are Echo-cardiogram, medical or cardiac consultation, minor electrolyte imbalance, abnormalities on ECG, use of clopidogrel or aspirin, acute confusion, chronic medical conditions, an elevated INR and lack of facilities, staff and equipment.

Acceptable reasons for delaying surgery are anaemia (Hb < 8.5g/dL), dehydration, acute uraemia, oliguria, severe electrolyte imbalance (Na < 115 or > 150 K < 2.6 or > 6.0 mmol/l), uncontrolled diabetes or heart failure and correctable cardiac arrhythmia. The sicker the patient the more urgent is the surgery.

Conservative treatment:
Approximately 2% of patients can be treated conservatively. These include undisplaced stress fractures, patients who are already immobile but not in pain and the terminally ill who are expected to die within the week.

Operative treatment:
I undertake or directly supervise 65% of all hip fractures operation in Peterborough. He uses standard implants and techniques but more minimally invasive, quicker and technically correct. His preferred implants are the cemented Exeter Trauma Stem as a hemiarthroplasty for displaced intracapsular fractures, the Targon hip screws for undisplaced intracapsular and displaced fractures in young and very frail, the sliding hip screw for trochanteric fractures and the Targon PFT nail for subtrochanteric fractures.
Postoperative Care:
Mobilisation begins the day after surgery full weight bearing. A check Hb is performed on the first day. Check X-rays are not performed. The aim is for a postoperative Hb of 9g/l. The transfusion threshold should be 8g/l. Assess and treat if needed associated medical conditions complications, avoid over treatment and investigation and transferring patients to other wards or rehabilitation units. Care of patients with hip fractures is undertaken by the most junior member of the Orthopaedic, Anaesthetic and Geriatric team or as in Peterborough by a specialist physician (Martyn Parker). Admission to and discharge from a hip fracture unit which has medical and surgical care and early supported discharge home of patients wherever possible is the best option.

Follow-up:
Patients seen at six weeks from discharge by me in a hip fracture clinic where fracture prevention assessment is undertaken. Unless clinically indicated the rest of the follow-up is by phone with all patients rang at one year from injury.

Results from the Peterborough Hip Fracture Project:
The Peterborough Hip Fracture Project has reduced delays to surgery, surgical complications and hospital stay. The project was initiated with the advent of the Hospital at Home scheme of early supported discharge. In 1987, fewer than 60% went home supported by this programme but, by 2011, this had fallen to 22% as the Hospital at Home scheme was used by other departments.

Before 1987, between 50% and 60% of patients were discharged home directly and rose to 95% by 2007. Since 2007, this has declined to under 90% since the hip unit has been moved to a new, smaller PFI hospital.

The mean hospital stay has fallen from over 40 days before 1990 to 17 in 1997 and 20 in 2011 in the PFI hospital. The 30 day mortality has been below the national average of 8-9%. The project has been impaired by the new PFI hospital leaving a financial deficit of £45,000,000, reduced bed numbers, poor ward design and a severe strain on resources.

Audit and research:
All patients are entered on a database which now contains data of over 5000 patients. This continues to evolve and is used for audit and research articles. The unit has undertaken 2 multicentre randomised controlled trials on Aspirin/placebo for thromboembolism and Calcium & vitamin D for fracture prevention.

There have been 8 single-centre randomised controlled trials on Saline/gelofusin resuscitation, fixation versus arthroplasty, different screw types, uncemented versus cemented arthroplasty, plate fixation versus nail fixation, transfusion threshold, iron therapy for anaemia and general versus spinal anaesthesia. Over 170 journal articles and 24 Cochrane systematic reviews related to hip fractures have been published. The Targon FN is has been developed and is now available worldwide.

Conclusion:
The message is to keep it simple, operate in less than 48 hours with quick effective surgery, initiate immediate unrestricted mobilisation and discharge patients back home early.

References:


---

**NICE Clinical Guidelines and BPT in Hip Fracture**

**Tim Chesser**

**About the Author:**
Tim Chesser is Consultant in Pelvic and Acetabular Trauma where he leads a tertiary referral unit at the Major Trauma Centre at Frenchay Hospital, Bristol. He has a particular commitment to all aspects of hip fracture surgery and an elective interest in hip arthroplasty. Tim was part of the committee that produced the NICE Clinical Guidelines. Tim is Lower Limb Editor for Injury.

**NICE Clinical Guidelines:**
The background to this is 2007 National Hip Fracture (NHFD) database set up by the British Geriatric Society and BOA which produced an annual report in 2012. Between January 2009 and June 2011, the DoH asked NICE to prepare a clinical guideline on the management of fractured neck of femur. The scope was defined with stakeholders in March 2011. The NICE panel was multidisciplinary, could only address issues raised at the stakeholders' meeting and was allowed to use scientific, health economic and humanitarian arguments. The final document avoided areas of little controversy and other NICE guidelines such as osteoporosis, falls, delirium and thromboprophylaxis.

The surgical controversies included the timing of surgery and fracture management. There was very little evidence on timing of surgery. It was not ethical to perform a randomised controlled trial but there was no literature to suggest that delay was beneficial so surgery within 36 hours was recommended on humanitarian criteria. The Proximal Femoral Fractures recorded on the NHFD were 46% displaced intracapsular, 34% trochanteric, 11% undisplaced intracapsular and 5% subtrochanteric fractures. In displaced intracapsular fractures, the NICE panel discussed whether to fix or replace, replace with a hemi or total...
髋关节置换术（THA）和是否使用骨水泥。证据表明，置换术优于固定，因为其再手术率低、疼痛小且功能较好，而死亡率、住院时间和活动能力无显著差异。没有研究表明固定后有较好的结果。

THA 推荐用于能够独立在户外行走且无需拐杖，且认知功能无明显障碍的患者，因为它在所有合格的研究中均优于髋关节半置换术。NPSA 报道，在 2003 年 10 月至 2008 年 10 月期间，26 例死亡发生在使用骨水泥的关节置换术中，警告其使用。然而，在 NHFD，68% 的关节置换术是骨水泥的，且没有显著的死亡率差异。与骨水泥关节置换术相比，骨水泥关节置换术在 3 个月和 12 个月后疼痛减轻，活动能力增加，假体周围骨折率降低。因此，骨水泥关节置换术被推荐。

关节置换术的内植物设计基于 NICE 关于选择髋关节置换术的指南，而非历史上的 Moore 和 Thompson。在股骨近端骨折中，争论是螺钉是否应附在钢板上还是髓内钉上。髓内钉植入后，内脏和术后骨折的发生有统计学和临床显著增加。2010 年，滑行螺钉成本£252，短髓内钉螺钉成本£760，长髓内钉螺钉成本£1,175。因此，滑行螺钉应用于股骨颈骨折患者。

在过去的三年中，髋骨骨折的置换率从 65% 增加到 94%，骨水泥关节置换术从 63% 增加到 74%，THA 从 10% 增加到 16%，滑行螺钉从 72% 增加到 84%。

**Best Practice Tariff (BPT)**

BPT 是基于入院方案，联合整形科护理，36 小时内手术，跌倒和康复评估，骨质疏松症评估和心理测试。第一年，其费用是 £440，第二年 £880，第三年 £1335。平均髋骨骨折的费用是 £6885，其中最佳实践费用目前 20%。BPT 的遵守性从 78% 下降到 38% 在北ristol 到 Royal Infirmary。全国平均遵守性在 2011 年为 65%。NHFD 已记录 250,000 例骨折，每月招募 5000 例。自从 2008 年以来，许多最佳实践指标有所改善，由骨科医生评估的比例从 56% 增加到 67%，36 小时内手术从 53% 增加到 68%，跌倒评估从 52% 增加到 85%，骨科评估或评估从 70% 增加到 92%。死亡率从 10% 降低到 8%。平均住院时间缩短了 6 天，髋骨骨折花费比 3 年前节省了 £20,000,000。这些变化的领导者是医疗专业人士。工作已经完成了一半。遵守性不完整。95% 的患者有部分数据提交，但精神状态、ASA 等级和 30 天内的再手术率经常被忽略。30 天后和 120 天后的返回率为 32% 和 25%。估计有 12,000 名患者应进行 THA。为了提供这种服务，髋关节外科医生需要对患者感兴趣。

**References:**

1. National Hip Fracture Database. Available online at http://www.boa.ac.uk/LIB/LIBPUB/Pages/NHFD.aspx
TOPICS IN FOCUS: IMPLANT REMOVAL IN REVISION HIP SURGERY

Andrew Manktelow

As part of the Topics in Focus, a session was devoted to implant removal in revision hip surgery. Talks were given by Martyn Porter, (Wrightington), Sarah Muirhead-Allwood, (London), and Andrew Manktelow, (Nottingham). The session was chaired by Professor Fares Haddad and Mr Stephen Jones. The theme of the session was a practical approach to implant removal in revision hip surgery. It was suggested that this is an under-appreciated area and can constitute a significant challenge. The importance of identifying the specific implant to determine how best to remove it was discussed. In that regard, communication with other colleagues and indeed with industry is essential to ensure any potentially helpful instrumentation is made available. All three speakers stressed the importance of planning, reminding the audience that that successful reconstruction starts with safe, bone-preserving implant removal.

Martyn Porter set the scene, extolling the virtues of careful planning and evaluation of radiographs to ensure all potential challenges are appreciated. Mr Porter discussed the importance of soft tissue exposure, while maintaining soft tissue integrity and bone viability.

Mr Porter discussed the indications and technique for the extended trochanteric osteotomy (ETO). Determining the appropriate length in different circumstances was discussed along with the differences in performing an ETO with the stem ‘in situ’ or removed. The benefits and concerns in performing an ETO were detailed as well as describing reduction and fixation techniques.

Beyond that, Mr Porter spent time discussing cement removal in revision surgery. He presented demonstration videos showing his suggested techniques for cement removal using a variety of hand instruments, from the proximal and distal metaphysis as well as dealing with diaphyseal cement and the cement plug.

Subsequently, Sarah Muirhead-Allwood discussed removal of well-fixed uncemented sockets. The importance of full circumferential exposure of the acetabulum was made clear. Miss Muirhead-Allwood discussed and demonstrated her technique in the use of Explant. Miss Muirhead-Allwood stressed the importance of understanding socket geometry and having the correct instrumentation available to remove screws, including a ‘broken screw set’.

With regard to varying geometry, Miss Muirhead-Allwood demonstrated the differences in technique removing hemispherical and peripherally expanded sockets. Similarly, she discussed technique for the removal of non-hemispherical and ‘screw in’ uncemented socket designs. As part of her presentation, Miss Muirhead-Allwood discussed the potential techniques for removing resurfacing sockets, including the use of ‘conversion inserts’ to centralise the Explant blades when removing ‘dual radius’ sockets. Miss Muirhead-Allwood discussed the removal of hard bearing liners.
She demonstrated ‘suction cups’ with rim impaction, disrupting the taper junction of the hard bearing liner. Similarly, she showed a video of drilling through a Forte ceramic liner in case of ceramic failure in the presence of a particularly deep and unfavourable taper. Other alternatives included drilling through the external aspect of the shell and ‘punching’ the liner out from within, and cutting an ‘episiotomy’ through the peripheral rim of the shell, to reduce taper fixation and gain access to the liner.

Subsequently, attention was turned to uncemented femoral implants. Andrew Manktelow discussed the concepts involved in the removal of well-fixed, uncemented implants. The importance of implant identification was discussed to ensure that all potential and helpful instrumentation was available. Specifically the importance of obtaining any specific extraction bolts that could be screwed into the stem to allow any extraction force to be applied in the direct line of insertion of the stem, rather than at a tangent to it.

Mr Manktelow showed videos demonstrating a technique for the removal of a well-fixed HA coated uncemented stem, involving sectioning the stem in the metaphyseal region, removing the proximal component and subsequently ‘trephining’ out the stem. Practical ‘tips and tricks’ were discussed. The use of a Gigli saw to disrupt fixation around the calcar was shown.

The importance of having adequate numbers of correctly-sized trephines was discussed. This ensures that the trephines are kept sharp, in an attempt to avoid thermal injury to the surrounding diaphysis. Other alternatives such as long ‘step-cut’ osteotomy and femoral ‘episiotomy’ to facilitate extraction were presented.

Mr Manktelow then discussed the removal of intra-pelvic components describing the retroperitoneal approach for high intra pelvic components. Mr Manktelow presented a case of intra-pelvic migration, below the pelvic brim, of a trabecular metal revision component. This was removed via a lower abdominal laparotomy incision and a ‘Stoppa’ approach. The importance of pre-operative imaging, communication with vascular radiologists and vascular surgeons, utilising a combined approach to these thankfully rare but challenging cases was discussed.

The session ended in case discussions demonstrating the planning, approach and practical techniques described in the three presentations. It is hoped that this session will provide the basis of, and potential for, an ever-increasing library resource, for BHS members, where colleagues can submit and review techniques found to be helpful in dealing with and removing specific implants in revision hip surgery. More details of this will follow in future communications from the editorial secretary.

HOW I GET MY PATIENTS HOME
Sister Jill Roberts, Ward B3, Rotherham General Hospital

**Background:** Jill Roberts qualified in 1978. Having undergone the then traditional ward based nursing training; she worked on medical wards until 2008 when she was appointed sister to the orthopaedic trauma Ward B3 at the Rotherham General Hospital. She was advised against applying for the post by her peers because of the size of the challenge. On the ward at that time, 20% of patients had broken pressure areas, the
wound infection rate was between 20% and 40%, in hospital mortality was around 20%, there was inadequate provision of trauma lists causing delay to surgery and the mean length of stay for proximal femoral fracture was 28 days. Communication was poor. The ward attracted the highest number of complaints in the hospital. There was no nursing leadership, high levels of sickness and poor staff retention. The Consultants were not engaged.

**Action:**
Jill recognised that her patients were sick, malnourished, at risk of falling and that communication with relatives was poor. She introduced the Patient at Risk, Falls and Notional Risk scores and a Traffic light system. Communication was poor. The Patient at Risk score identifies low blood pressure and poor urine output from the charts the end of bed. Patients are then given a fluid challenge and the Haemoglobin checked and the on call medical registrar called if there is no improvement. All patients are at risk of falls but the Falls score identifies those especially high risk such as the demented and they are nursed on low electrically powered beds (Parkhill) with crash mats either side so that they come to no harm if they who fall out of bed. Beds are raised for washing and feeding. Cot sides are not used for confused demented patients as they climb over them and fall.

The Notional Risk assesses patients’ state of nutrition and the traffic Light system directs additional nutritional support. Most patients are malnourished and they are identified by weighing, BMI and skin fold thickness. There is a Health Care Assistant designated as Nutritional Support Worker. Great emphasis is placed on improving nutrition so no drug rounds take place at meal times, all staff assist patients who have difficulty feeding themselves, wherever possible patients are sat out of bed at a table as they take food better in that position than lying or propped up in bed. Between meals, there are banana and cake rounds to improved carbohydrate input and reduce protein breakdown. Patients like cake and bananas so will eat them. The nursing staff spends all their time with patients. All documentation takes place at the bedside with patient input. Either Sister Roberts or her Charge nurse see the relatives of sick patients as soon as possible after admission advising them that hip fracture is a life threatening condition. This task is undertaken by the nursing not medical staff. Relatives’ ward round takes place daily lead by sister or charge nurse with all the nursing staff.

**Outcome:**
Over the six years that the above regimen has been in operation, bed sores have been eliminated. Infection rates are extremely low and extended trauma lists have reduced non-medical delay to surgery. Communication has improved so that Ward B3 attracts the fewest complaints in the hospital. Nursing staff sickness likewise has become the lowest in the hospital and the only reason for leaving is promotion or parturition. The mean length of stay has fallen to 14 days. The hospital management approached Jill suggesting that the banana and cake round be stopped as a cost cutting measure. Jill objected and said that she would buy the bananas herself. The banana and cake rounds continue.

**Conclusion:**
A 'sink' ward has been transformed by the leadership of an exceptionally high quality nursing sister, attention to hands on basic nursing care, nutrition and communication with relatives. This has significantly reduced patient suffering, improved the morale of staff, patients and their families alike and reduced the cost of caring for patients by avoiding the complications that cause morbidity and prolong hospital admission.
As a member of that hated breed, the lawyers, I was invited into the lions’ den, a conference hall in Bristol, where the lions (of varying ferocity) were the participants in the British Hip Society’s annual meeting.

My brief was to explain clinical negligence - what it is, and most importantly what it isn’t - and to take part in a sort of mock trial at which I was to cross-examine expert witnesses for and against a semi-fictitious surgeon who had had a disastrous (and with due care avoidable) outcome in replacing a hip. I didn’t bring my wig, which is abolished now in most courts except the criminal, but it would have been no protection if the scalpels had come out. Instead, and despite the fear and loathing I no doubt inspired in some, a warm reception and generous hospitality were extended to me, and I was impressed by the thoughtfulness and the focus of the audience.

I wanted to get across two central truths:

(1) that for a surgeon to make a mistake or to have a bad outcome is not in law of itself negligent; and

(2) that before the law will condemn you in negligence it must be proved that you made a mistake which no reasonable practitioner, in precisely the circumstances of the given case and professing the relevant skill, would have made if acting with ordinary care and skill.

And it must be admitted that in a tough profession, with many excessive demands upon you, all or most of you can and will one day probably make such a mistake – many eminent surgeons have - and your hope then will be that you can rescue the situation for your patient before the lawyers are called in.

The mock trial was enjoyable for me and it seemed for the audience too, though the outcome, (overwhelming majority for acquitting the fictitious surgeon of negligence) was perhaps predictable!

It was a foreshortened version, even a parody, of an actual trial and I would have been struck off for acting for and against both sides (only estate agents are allowed to do that), but I hope it served to give a taste of what to expect if you are facing a claim, or acting as an expert witness in court. In that regard I will be happy to email to anyone who asks for it a copy of a past lecture I gave on the subject “What to expect if you are sued”. Just email me on jb@jbadenoch.com and I will attach it by return.
Medico-legal claims are becoming increasingly common when patients are disappointed with the result of their hip replacement. Despite this, few of us have any direct experience of a clinical negligence claim, or how the process works. This session set out to give some insight into this process. We were lucky enough to welcome James Badenoch QC, who has made his career dealing with clinical negligence (and has close relationships with the orthopaedic community, having been Roger Vickers’ best man!)

Mr Kay outlined the types of complications, which led to claims. James Badenoch explained the legal process and how the law related to clinical negligence. John Skinner then presented a real case; Simon Bridle acted as expert for the Claimant and Peter Kay for the Defence, with James acting as judge, jury and executioner!

The risks and complications of hip replacement are well recognized and can occur even with appropriate treatment. The National Health Service Litigation Authority (NHSLA) has analyzed the complications, which can lead to litigation. Of the cases with adequate data they found that 21% involved nerve injury, 16% leg length discrepancy, 8.5% infection and 6.8% femoral fracture. The cost of orthopaedic related claims between 2006 and 2008 was in excess of £6.85 million.

Nerve injury cases usually involve the sciatic nerve. Successful litigation requires a demonstration that the surgeon has failed to take proper care to protect the nerve during the course of the procedure.

These cases often involve thermal injury to the nerve by polymerizing cement, direct damage to the nerve, or involvement of the nerve in sutures used for posterior repair.

Leg length cases almost always involve lengthening and frequently shorter female patients, who seem to be more aware of their leg being too long. There is really no consensus regarding how much lengthening is acceptable. The surgeon should demonstrate that he has planned the procedure and taken steps during the operation to ensure that the correct length is obtained. It is recognized that getting the correct leg length is more difficult in complex primaries and revision procedures.

Infection cases can be very complex. They will often involve failure to give appropriate antibiotics or not taking advise from microbiologists. Very frequently these cases involve the surgeon not appreciating that there is a deep infection, or failing to follow the basic principles of managing deep peri-prosthetic infection – surgical removal of foreign and infected material, appropriate antibiotics (depot and systemic) and a one or 2 stage exchange.

Intra-operative fracture cases usually involve cementless components. Allegations will often involve the use of oversized implants. Again it is important that the surgeon demonstrates he has planned the procedure and taken intra-operative steps to avoid damaging the femur. It is usually possible to defend these cases if the surgeon has identified the fracture – intra-operatively or on post-operative X-rays – and dealt with it appropriately.
James Badenoch explained the Bolam test, upon which clinical negligence claims are judged. This was established in a High Court case from 1957, involving a patient being treated with electro-convulsive therapy without muscle relaxant, who sustained bilateral acetabular fractures. The judge decided that a person falls below the appropriate standard, and is negligent, if he fails to do what a reasonable person would in the circumstances. The Bolam test states that "If a doctor reaches the standard of a responsible body of medical opinion, he is not negligent." This has been refined by another judgment from the House of Lords, the Bolitho case, which concludes that a judge will be entitled to choose between two bodies of expert opinion and to reject an opinion which is 'logically indefensible'. This has been interpreted as being a situation where the Court sets the law not the profession. The test is now commonly referred to as the Bolam – Bolitho Test.

Recent legal reforms mean that cases very rarely reach a court. The process starts with a patient instructing a solicitor to investigate whether their treatment has been sub-standard. The solicitor will then instruct an expert to give an opinion on the merits of the case. If the expert report is positive a letter of claim will be sent to the surgeon or the Health Authority. Sometimes the allegation will be accepted and settlement will follow.

More often the Defendant will instruct another expert to comment on the merits of the claim. Particulars of claim and a Defence will be exchanged and the experts will met to discuss their areas of agreement and disagreement, to help the lawyers decide on the strength of their respective cases. This will often lead to settlement. It is only in cases where the position is very finely balanced where it will go to court for a judge to hear all the evidence and make a decision.

The session concluded with a highly entertaining 'mock trial', with James Badenoch filling the roles of counsel for the plaintiff, defence and Judge! John Skinner presented a case of a young woman with acetabular dysplasia, who underwent a ceramic on ceramic total hip replacement. She experienced post-operative problems, eventually leading to the diagnosis of impingement as a result of oversizing and malposition of the acetabular component. Simon Bridle argued, as expert for the plaintiff, that the component was too large for her acetabulum, had been implanted with an anteversion angle of at least 30 degrees and that the surgeon did not have a full range of head sizes available in theatre. Peter Kay agreed that the size and position were not ideal, but argued that the component was not excessively large, that the head size used was reasonable and that the anteversion angle was not outside a range which would have been achieved by a reasonable body of surgeons.

Both 'experts' had an uncomfortable time on the stand under cross examination, quite accurately reproducing what would happen in court; their experience would probably put most of us off going into this line of work! The judge decided for the defence, indicating in conclusion that what was done did not fall below the standards of a reasonably competent orthopaedic surgeon. This was supported by the audience, who also voted in favour of the surgeon.

It was felt that the session represented a highly valuable insight into the legal process behind clinical negligence system. Hopefully we were able to give some pointers regarding how to avoid getting involved in this type of claim.
At the British Hip Society Meeting in Manchester in 2012, a motion was passed at the Annual General Meeting that made the following recommendation: that Metal on metal bearing primary total hip replacements using bearings of 36mm or above should not be used until further evidence was available, except in properly conducted and ethically approved research studies. The reason for this was that the NJR had shown that these devices as a group were showing higher revision rates than expected.

The MHRA had not been able to make such a recommendation to withdraw these devices as the varying devices had differing outcome profiles. This was a bold and unprecedented move for the British Hip Society, but I think one that showed the Profession was prepared to make a stand and show leadership in doing the right thing for both patients and surgeons.

In fact it was merely reflecting the trend in practice that hip surgeons had in the main part already adopted. It has also been mirrored around the world. In fact metal bearings had declined since their peak usage in 2008 and the fastest drops were in bearings of 36mm and above. It is interesting to note that the numbers had dramatically fallen before the first recalls. The surgeons themselves had noticed problems and adapted practice based on experience, presentations at meetings, publications and word of mouth.

The response to the BHS recommendation was generally favourable, although some surgeons felt aggrieved as they had very good personal data on their own practice with a particular device. However the reality was that most surgeons no longer favoured metal as their first choice bearing in primary THR.

The latest NJR information shows that 75% of resurfacing type cups inserted with a stemmed component, in the last year were the Birmingham Mid head resection prostheses. Also there have been no 36mm MOM THRs inserted and recorded in the NJR since August 2012 (Peter Howard, Personal Communication May 2012). The recommendation has therefore been effective. Time will tell whether it was right!

Following the BHS meeting the Press Coverage of Metal bearing hips has been consistent, persistent, at times slanderous and in the main alarmist. A paper presented in Manchester that raised the possibility of bladder cancer in association with Metal bearing was reported in the Sunday Times.

Graph showing use of metal bearings of different sizes in THR against time

What happened since the last BHS Meeting?

John Skinner
BHS President Elect
The paper presented alongside it with a conclusion that Metal bearings were not associated with bladder tumours was not reported.

This scaremongering in the Press generated an enormous amount of work for the BHS and BOA executives in putting out advice to surgeons and patients on the risks and the significance of what had been reported. This advice to patients was on the BHS and BOA websites on the Monday morning, following the publication of this story in the Sunday Times the day before.

This story, alongside a concern that there may be a cluster of patients with myeloma who had had metal bearing hips meant that there needed to be a fast and thorough assessment of the risk of any form of malignancy in patients with Orthopaedic implants and Metal bearings in particular. This was performed amazingly quickly after collaboration between the Profession, the NJR and the MHRA. This culminated in a paper in the British Medical Journal on April 3 2012 that showed that there was no increased risk of cancer in patients with Metal on metal bearings. This was true for patients with hip resurfacings and patients with Metal on metal THRs. In fact, in the first 7 years after implantation the risk of cancer was less for patients with both device types than age matched controls. The study linked NJR to HES data and probably represents the most thorough study, using the best data sources available at that time. However it is a short follow up based on known cancer lead times and will need to be repeated at 5 yearly intervals. It is unlikely that more can usefully be said on this subject until the study is repeated in 2017. It is reassuring for the short term.

Several research groups have also reported on the speciation of Cobalt and Chromium metal ions in tissue found in periprosthetic ALVAL type reactions. The predominant Chromium species reported is Chromium III rather than the known carcinogen Chromium VI and predominantly in the oxide and phosphate forms.

With metal bearing usage in decline, the commonest bearing currently used in the UK, is metal on polyethylene (approximately 60% of all bearings used nationally). There have also been significant rises in the usage of ceramic on ceramic and ceramic on polyethylene bearings. These findings have possibly been driven by concerns regarding a desire to use larger bearings and concern over reports of taper problems with larger Cobalt chrome heads, even against non -metal bearings.

The MHRA updated its advice in February 2012. It recommended that all patients with metal on metal bearings should be followed up. Components were risk stratified in different groups. The lowest risk seemed to be in small diameter 28mm MOM bearings and hip resurfacing devices that have ODEP 10A ratings.

The next highest risk group was other resurfacings, followed by modular metal bearings with 36 – 40 mm bearings. The group with the highest revision rate in the NJR was THRs with large diameter resurfacing type cups. The final group was hips with components that had been withdrawn. At the time of release that was the ASR and ASR XL components. During the year other components have been withdrawn for metal related failure problems either from the bearings or from the taper / modular junctions. These include the Stryker ABG II and Rejuvenate stems (both low volume usage in the UK), the Smith and Nephew R3 modular metal bearing THR and the Adept metal bearing for use in THR. These have all had higher than expected failure rates.
The MHRA advice was that all patients should be clinically followed up and recommending measurement of cobalt and chromium ions and use of cross sectional Imaging either USS or MARS MRI. The advice of the MHRA has been followed around the world with regulators in Canada, Australia, Scandinavia and several other jurisdictions making surprisingly similar recommendations.

In the USA, the FDA held a hearing in June at which the British Hip Society was represented. Following this the FDA provided advice that had slightly different emphasis. Patients were categorized as being symptomatic or asymptomatic. Regular follow up was recommended. Less emphasis was placed on metal ions and cross sectional imaging. However patients with elevated ion levels needed closer follow up. The use of CT, MRI or USS should be determined on an individual basis, as should the need to revise. More emphasis was also put on systemic symptoms than in any other recommendation worldwide. These included a check for thyroid and cardiac dysfunction, neurological and hearing loss. This is presumably based on a number of reports from Alaska of a small number of symptomatic cases.

Several units have published work on taper problems and this seems to be a hot topic for research going forward.

The practical problem for Orthopaedic surgeons at the present time is that of follow up of a large number of patients with metal bearing hips. Now that they are being implanted in much smaller numbers the incidence of the rare but devastating complications of massive local tissue destruction is much reduced. The patients being followed up fall into 3 groups. Those with excellent function, low metal ions and reassuring scans can be reassured and followed simply. The group with significant symptoms, high ions and adverse scans almost certainly require revision surgery. The difficult group is surely those that have either good function and slightly elevated ion levels or some abnormality, usually a fluid collection on imaging. These findings cause considerable angst for both surgeons and patients. More experience is being gained on the results and interpretation of serial imaging and serial blood tests. Interpretation of MARS MRI scans with particular reference to red flag signs and assessment of muscle damage and identifying silent osteolysis is improving dramatically. There seems to be consensus developing in several centres.

In summary 2012 has been a difficult year for metal bearings for so many reasons. The emphasis remains on follow up but the casualty has been loss of confidence in well performed Hip resurfacing in the right patient, by the right surgeon as an option in truly active patients. The results for the Birmingham Device remain excellent. Large diameter MOM THRs have all but disappeared in the last year. Research is ongoing looking at Tapers where it is felt that up to 30% of the material loss comes from the taper in a metal on metal bearing THR. This will be important in establishing the role of modular head neck junctions and use of large metal heads on tapers, going forward, regardless of the counter-face bearing. So all in all, 2012 was an excellent year for the London Olympics but much less good for Metal bearing hips.
BHS WEBSITE UPDATE

Richard Field

It is nine months since our new BHS website went live. By and large feedback has been positive and we are most grateful to the membership for their helpful comments and advice. Our main teething problem has been members encountering difficulty logging on to access the ‘Members Area’. Usually this turns out to be a simple matter of the member having forgotten their username or password. If you experience any difficulty remembering your password but you do know your username, please click on the ‘Forgot password’ utility. If the username that you provide matches the username recorded on the BHS database, you will receive an email reminding you of your password. The system generally takes under five minutes to provide this response.

If you have lost or forgotten your username, please email me directly (see below). I will ensure your login information is emailed to the most recent email address that you have provided to the BHS. If you have changed your email address please let me know so that the necessary changes can be made to the BHS membership database. Please ensure that you supply a contact telephone number so that we can reduce the risk of you becoming a victim to identity fraud.

A number of improvements are being implemented to make the BHS website feel smoother. The first of these is to modify the ‘Recent News’ links so that viewers are taken directly to the relevant page in this section. Another challenge has been to maintain functioning links to pages in other websites. If you notice any links that have stopped working, please email me so that the link can be re-established.

With regard to new features, we are developing an online abstracts submission utility for the 2014 BHS meeting in Exeter. This is scheduled to go live by the end of July. We are also looking into the possibility of providing an online facility for members to pay their annual subscription. We will keep you posted on progress with these projects.

Finally, the BHS is relatively small society that is funded out of membership subscriptions and money that we generate from our annual conference. The upside of this strategy is that we are not beholden to any sponsoring organisations and our opinions are highly regarded for being well informed and independent. The downside is that we have limited resources to develop a web-based education programme. We would greatly value your input on how you would like to see the BHS website develop over the next few years. Also, an indication of the role that you would be able to take on to help us achieve your suggestion.

I look forward to hearing from you and am most grateful for your feedback.
### BHS INCOME AND EXPENDITURE ACCOUNT

#### TREASURER’S REPORT

**John Nolan**

**Eleven months ended December 2012**

<table>
<thead>
<tr>
<th></th>
<th>31 January 2012</th>
<th>£</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INCOME</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Subscription</td>
<td>20,060</td>
<td>13,655</td>
</tr>
<tr>
<td>Meeting Receipts</td>
<td>15,515</td>
<td>10,168</td>
</tr>
<tr>
<td>Sundry Income</td>
<td>4,478</td>
<td>1,650</td>
</tr>
<tr>
<td>Bank Interest</td>
<td>147</td>
<td>236</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td><strong>40,200</strong></td>
<td><strong>25,709</strong></td>
</tr>
<tr>
<td><strong>EXPENDITURE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOA Administration</td>
<td>129</td>
<td>841</td>
</tr>
<tr>
<td>BHS Executive &amp; Secretarial</td>
<td>19,712</td>
<td>12,386</td>
</tr>
<tr>
<td>Society Meetings</td>
<td>3,559</td>
<td>10,533</td>
</tr>
<tr>
<td>Telephone &amp; Communications</td>
<td>100</td>
<td>2,450</td>
</tr>
<tr>
<td>Subscription refunds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fellowships:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Visiting</td>
<td>6,088</td>
<td>-</td>
</tr>
<tr>
<td>- Travelling</td>
<td>2,596</td>
<td>8,031</td>
</tr>
<tr>
<td>Gifts &amp; Prizes</td>
<td>350</td>
<td>-</td>
</tr>
<tr>
<td>Accountancy</td>
<td>59</td>
<td>3</td>
</tr>
<tr>
<td>Bank Charges</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Expenditure</strong></td>
<td><strong>32,593</strong></td>
<td><strong>34,244</strong></td>
</tr>
<tr>
<td><strong>Profit/(Loss) for the Year</strong></td>
<td><strong>7,607</strong></td>
<td><strong>(8,535)</strong></td>
</tr>
</tbody>
</table>

#### CURRENT ASSETS

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash at bank</td>
<td>34,330</td>
<td>27,894</td>
</tr>
<tr>
<td>Cash on deposit</td>
<td>45,218</td>
<td>45,074</td>
</tr>
<tr>
<td>Petty cash</td>
<td>112</td>
<td>156</td>
</tr>
<tr>
<td>Prepayments</td>
<td>3,306</td>
<td>2,253</td>
</tr>
<tr>
<td><strong>Total Current Assets</strong></td>
<td><strong>82,966</strong></td>
<td><strong>75,377</strong></td>
</tr>
</tbody>
</table>

#### CURRENT LIABILITIES

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Creditors and Accruals</td>
<td>-</td>
<td>18</td>
</tr>
</tbody>
</table>

#### FINANCED BY

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserves</td>
<td></td>
</tr>
<tr>
<td>Opening Balance</td>
<td>75,359</td>
</tr>
<tr>
<td>Profit/(Loss) for year</td>
<td>7,607</td>
</tr>
<tr>
<td><strong>Total Financed By</strong></td>
<td><strong>82,966</strong></td>
</tr>
</tbody>
</table>
The Memorandum of Understanding between the BOA and the BHS has now been signed by the Presidents of both societies and the BHS annual accounts can now be incorporated into those of the BOA.

For tax purposes, the BHS now comes under the umbrella of the charitable status of the BOA and as detailed in a former issue of this newsletter, this removes both the obligation on the BHS to submit annual tax returns as well as its liability for corporate taxation.

Additionally, some additional administrative services at the BOA have been made available to the BHS executive.
I have been fortunate to have just completed The Hip Society Rothman Ranawat travelling fellowship. This was a particular privilege as 2013 was the first time this fellowship has been run. The fellowship is organised by The Hip Society (USA), and has been funded by very generous donations from individual surgeons, practices and support from industry partners. The Rothman Institute from Philidelphia and Dr Chitranjan Ranawat from The Hospital for Special were two of the major donors and the fellowship has been named in their honour. Dr Adolph Lombardi from Columbus, Ohio was instrumental in establishing the fellowship when he was President of The Hip Society 2011.

The stated goal of the Hip Society in setting up this fellowship is "to foster emerging thought-leaders and to provide them with an inspirational tour of state-of-the-art facilities offering exemplary surgical care of the hip joint throughout North America."

The fellowship will continue to occur annually, starting at The Hip Society specialty day at the end of the AAOS meeting and will lasts approximately 4 weeks. There will be two Attending surgeons from the USA, one International surgeon, and one British travelling fellow every year. This will replace the US fellowship part of the British American Hip Society Travelling fellowship. The UK fellowship for two American surgeons will continue alternate years.

The selection process for the British fellow will be organised by the British Hip Society. I was selected having been interviewed at the British Orthopaedic Association in Manchester in 2012. Having been selected, the hard work then began. Leaving work for 5 weeks requires very understanding family and colleagues!

The Open Meeting 2013 - Chicago
The fellowship started at the Open Meeting on the Hip Society in Chicago. I met the other fellows, and we were introduced to the Hip Society. The meeting itself was very interesting, and comprehensively covered a wide variety of current concepts in hip surgery. Unsurprisingly MoM was a major topic of discussion. There was some interesting work on corrosion and potential causes of adverse local tissue reactions. Another interesting session was a vote on types of hip replacement for different clinical scenarios. I quickly realised that we would not hear much about cemented hip replacements on the fellowship!

Hip Society Members Dinner - Union League Club of Chicago
In the evening we were invited to be guests at the Hip Society dinner. This was a special occasion and we honoured to be introduced to the society and were very warmly hosted by the members. We were entertained at dinner by Chit Ranawat, Adolph Lombardi, John Callahan and Robert Maloney.
1. Rush University Medical Centre – Chicago. Hosts: Dr’s Della Valle, Rosenberg, Berger, Jacobs, Paprosky, Sporers.

Craig Della Valle organized the program in Chicago and was an excellent host. It was particularly interesting to observe day case hip and knee arthroplasty in action. In the afternoon we had an informal academic session and heard more from Dr Berger on their experience of day case arthroplasty. Robert Urban presented some of their research on implant corrosion.

The second day was spent at Central DuPage hospital where Dr’s Paprosky and Sporers practice. We were all particularly keen to discuss various aspects revision hip arthroplasty. After a morning observing a selection of primary and revision arthroplasty cases, we had a further academic session which led to some very interesting discussion regarding corrosion in hip arthroplasty, and potential mechanisms of tissue damage. We had some great food in Chicago, but the most memorable was roast goat’s leg and pig face.

2. Mayo Clinic – Rochester. Hosts: Dr’s Trousdale, Hansson, Lewallen, Berry, Pagnano, Sierra, Cabanelo, Tounton

On arrival we had a tour of the facility and were amazed to learn that all the buildings are linked by subterranean hallways linking all the buildings, as the Minnesota winters are so harsh.

Coming from Wrightington, I was delighted to see an x-ray of a patient who had a Charnley LFA inserted at the clinic in 1967, on
prominent display in the main patient information area. This was where the similarities between the appearance of the outpatient facilities at Mayo and Wrightington ended.

Over two days we saw a huge array of cases. The hosts assured us they had not specially selected cases, but that was just a normal selection of cases. We had opportunity to discuss techniques with the faculty, and really enjoyed to discussing the management of pelvic discontinuity and periprosthetic infection. The Mayo team presented some very interesting cases and we discussed how we would manage them in our own practice. The final afternoon was spent touring the research labs and facilities at Mayo, after which we were kindly invited to have dinner with some of the faculty at Rob Trousdale's home.

We had a long and enjoyable conversation with Chit Ranawat on topics ranging from the history of knee replacement, to how to lead a happy and successful life. A morning was spent with the biomechanics research team. It was interesting to hear about their retrievals work and also about their collaborative work with Cornell University. Interesting animal model research on the role of bone stimulation to enhance implant in-growth was presented.


We spent two days in Indianapolis. Merrill Ritter established the Centre for Hip and Knee Surgery over 30 years ago together with John Keeting. He was the first surgeon in Indiana to obtain an FDA license for bone cement.

The unit continues to undertake both clinical and biomechanical research in collaboration with Indiana University. We had an enjoyable morning in theatre which was incredibly efficient. An interesting selection of cases had been specially arranged.

3. Hospital for Special Surgery – NYC. Hosts: C Ranawat, Padgett, A Ranawat, Su, Bostrom

We arrived in New York on Easter Weekend. Dr Ranawat had arranged for us to have some tickets to a Broadway show, and he and Dr Padgett were very generous hosts during our stay in New York. After the weekend relaxing we had two days of activity in the hospital. Two mornings were spent observing surgery. Dr Padgett demonstrated a robotically assisted hip replacement.
We also had an enjoyable academic session in which Merrill Ritter shared some of his thoughts on the history hip arthroplasty, as well as describing how they have continued to maintain their database over 40 years.

We also heard some interesting basic science research they are currently undertaking on stress shielding behind uncemented shells. Other highlights were a trip to Indianapolis Motor Speedway and a fantastic dinner at Dr Ferris's home.

5. Joint Implant Surgeons Inc. – New Albany, Ohio. Hosts: Dr's Lombardi, Berend, Hurst, Morris

Adolph Lombardi and his partners were very welcoming and extremely generous hosts. They had organized a fantastic and packed program.

A day of specially selected cases had been arranged, ranging from an MIS direct anterior approach THR to a complex acetabular reconstruction with a custom triflange prosthesis. The next day was an academic session with Orthopaedic

from the Columbus region, followed by a cadaveric workshop. It was good to use our hands after a couple of weeks.


Harry Rubash arranged a varied program in Boston. He had arranged for us to visit other units in addition to MGH. I visited New England Baptist, where Otto Aufranc
practiced. They now have a very productive practice and perform over 6000 arthroplasties per year through 8 theatres (total 16). One of the most interesting things was to see how they have invested in a state of the art sterilisation facility directly under theatre, which allows very rapid and efficient turnover of equipment. It was interesting to contrast this with the move to offsite sterilisation in the UK.

We were privileged to have an academic session in the Ether Dome. This is a very historic site in surgery, and it was a real privilege to present our talks there. MGH has an excellent research program. Other highlights were a dinner hosted by Dr Rubash at the Harvard club, and learning about the long history of orthopaedic surgery in Massachusetts.

An interesting range of cases had been arranged including a PAO, Direct anterior approach THR under II control and revision arthroplasty. Once again it was enlightening to see how efficiently the theatre was run. The academic session was also excellent. An interesting area of research was searching for potential protein markers for MoM related pseudotumours. A cadaveric session was also arranged for us. We were interested to see a direct anterior approach and how this can become an extensile approach if required. A highlight of the visit was a home cooked southern dinner at the Griffin family home -shrimp and grits, and authentic southern fried chicken were delicious. However it didn’t help our rapidly rising BMI.

8. University of Southern California – Los Angeles, California. Hosts: Dr’s Dorr, Gilbert, Leiberman, Longjohn

Over to the Sunshine State! Dr Larry Dorr and his partners welcomed us to USC. The day started with a residents teaching program at which we presented our topics. This was followed by live video link to a robotically assisted THR via a MIS posterior approach performed by Dr Dorr.

We had fascinating discussions over lunch with the faculty and university research collaborators about the future of hip surgery. An especially interesting discussion was regarding the ethics of new product development. We also witnessed Koby Bryant rupturing his achilles in what may now be his last match for the Lakers (Lionel Messi of Basketball).

9. Stanford University – Palo Alto, California. Hosts: Dr’s Maloney, Huddlestone, Goodman, Smith

Stanford must be the most beautiful university campus in the world. I spend a day in the clinic with Dr “Hutch” Huddleston and Bill Maloney. I had met Hutch in the UK when he was a British Hip Society travelling fellow. We enjoyed reminiscing about shooting clay pigeons in Keith Tucker’s field. I was pleased to see that although the facility was very modern, that their clinic was not too dissimilar to my own in the NHS.
**Hosts:** Rothman, Hozack, Austin, Deirmengian

We had a "red eye" overnight flight back to "Philly", and went straight into the OR. The Rothman Institute is renowned in the US for being both a very productive academic unit, and also a highly efficient arthroplasty group. We observed Dr Rothman, and it was refreshing to hear him extolling the virtues of a generous exposure. Both Dr Rothman and Hozack had performed 4 joint replacements each by 10am. We were warmly welcomed to Dr and Mrs Rothman's apartment for a meal with the faculty.

11. Anderson Clinic – Alexandria, Virginia. **Hosts:** Dr Andy Engh, Fricka, Hamilton, Goyal

We had a very well organised program at the Anderson Clinic. We had several hours in the OR, and were pleased to observe a fully porous coated prosthesis being inserted for both primary and revision arthroplasty, at the clinic that was instrumental in developing them. The academic session was very interesting with a range of speakers presenting work from numerous units in Virginia and Maryland. A social highlight of the visit was a Segway tour of Washington. Despite there being 10 highly competitive orthopaedic surgeons in one group we managed to avoid any high speed crashes or injuries.

12. London Health Sciences, London, Ontario. **Hosts:** Dr MacDonald, McCaulden, McAuley, Naudie

The high level of both clinical and basic science academic work undertaken in London in collaboration with the university was impressive. We observed surgery and were impressed by the level of training the residents and fellows received. We were warmly hosted and the final night out of the fellowship was a night to remember.

**After the Fellowship**

We were frequently asked through our fellowship, what we would change about our practice after the fellowship, or what we had gained from the fellowship. Whilst we had all picked up lots of interesting techniques or alternative ways of doing things, we all agreed that it was unlikely that the mainstay of our surgical practice would change dramatically in the short term at least. We had however all picked up lots of small tips and tricks that we thought would be useful. We had also all had the opportunity to discuss particularly challenging cases of our own and found that particularly helpful.
The predominant thing we all felt we had really benefitted from was the opportunity to meet and talk to some of the most eminent clinicians and academics in the field of hip surgery in North America.

We were also able to meet and get to know some of the emerging experts and leaders in American hip surgery who will be contemporaries throughout our careers. I felt that having the opportunity to step off the treadmill of NHS practice for a short period and get a global different perspective on hip surgery was very beneficial. This has led me to reflect on my own practice, efficiency, teaching and research and consider areas where I might change how I would have otherwise done things.

By the end of nearly five weeks together, with many hours of travelling, we had become close friends. Goinquang was pleased that his English had improved, but we were all still completely incompetent at Mandarin. All four of us had gained several kilos in weight and in urgent need of a diet. The Rothman Ranawat fellowship has been a fantastic experience. It is a major commitment to take 5 weeks away from family, and off work. It is not possible to even begin to consider a fellowship without support from others. I am very grateful to everybody at home who supported me and enabled me to have this once in a lifetime opportunity. I am also very grateful to the Hip Society and our hosts for their generosity during our stays at the hosting centres.

**Application for the 2014 fellowship**

Information regarding the fellowship is available on the Hip Society website (www.hipsoc.org) under educational offerings. International applicants need to apply by August 2013. The British fellow will be selected by the British Hip Society and information regarding application will be available via the British Hip Society website. I would strongly recommend planning early if even considering application.
The Hip Society is pleased to be accepting applications for the 2014 Hip Society Rothman-Ranawat Traveling Fellowship. Download and save the application form from our website: http://www.hipsoc.org

The 2014 Hip Society Rothman-Ranawat Traveling Fellowship is open to four young orthopaedic surgeons from North America and throughout the world.

The traveling Fellows will visit up to twelve sites in North America within a period of approximately four weeks, starting on Saturday, March 15, 2015, in New Orleans, LA, USA (at the AAOS 2014 Annual Meeting and Specialty Day).

The North American hosting sites will be identified by The Hip Society. These visits will include personal interactions with some of the world’s most prominent specialists in adult joint reconstruction, scientific conferences, surgical observations, and much more.

The goal of the Fellowship is to foster emerging thought-leaders and to provide them with an inspirational tour of state-of-the-art facilities offering exemplary surgical care of the hip joint throughout North America.

Fellowship applications are due to Professor Fares Haddad by midnight 15th August, 2013. (Incomplete applications or applications received after the deadline will not be considered.)
The Hip Society Rothman-Ranawat Traveling Fellowship is made possible through generous donations from the following:

**Diamond Level ($1,000,000)**
The Rothman Institute:
- William J. Hozack, MD
- Peter F. Sharkey, MD
- Javad Parvizi, MD
- William V. Arnold, MD
- James J. Putrill, MD
- Matthew S. Austin, MD
- Alvin C. Ong, MD
- Fabio R. Orozco, MD
- Gregory K. Deirmengian, MD
- Jess H. Lonner, MD
- Carl A. Deirmengian, MD
- Eric B. Smith, MD
- Zachary Post, MD
- Michael Harrer, MD

**Platinum Level ($750,000)**
Chitranjan S. Ranawat, MD

**Silver Level ($250,000)**
Lawrence D. Dorr, MD
Adolph V. Lombardi, Jr., MD, FACS
Biomet
Smith & Nephew
Stryker Orthopaedics
Zimmer

**Bronze Level ($100,000)**
Douglas A. Dennis, MD
CeramTec GmbH
Anderson Clinic PGME Foundation:
- Charles A. Engh Sr., M.D
- Gerard A. Engh, M.D
- C. Anderson Engh, Jr., M.D
- William G. Hamilton, M.D
- Kevin B. Fricka, M.D
- Nitin Goyal, M.D
HIPToulouse 2014 is a forum for discussion on various topics from hip surgery among which we focused this year:

- Fractures of the femoral neck
- The periprosthetic fractures
- Update on modular necks
- Update on the usefulness of MetalBack
- Focus on the technique and results of short stems.
- Unequal leg length pre and post-operative
- Surgery of inflammatory arthritis
- THA and obesity
- Indication and results of THA on children
- Clinical cases of bone tumours
- What’s new about infections? (Day CRIOAC)

HIPToulouse 2014 beyond its contribution thematic information wants to be a meeting place where everyone benefits from the experience of all. The charm of our good “pink city” decidedly southern, sun in September, his home, his lifestyle should encourage you to share these moments come many. We put all our energy to make this event a convivial instructive and memorable. We will share with you a gala at the "city space" whose price is included in the registration.

See you in Toulouse!