

Welcome to the second issue of Hip and Knee News, a newsletter for Patients, General Practitioners and Health Care Professionals.

February 2011 saw the 20th anniversary of metal-on-metal hip resurfacing. It is fantastic to look back on the two decades since I implanted the world's first modern metal-on-metal hip resurfacing. Much water has flowed under the bridge since then, but the Birmingham Hip Resurfacing (BHR) continues to perform as the globe's most successful hip resurfacing device as demonstrated in national joint registers throughout the world. Evidence also demonstrates that hip resurfacing is still the best treatment option for young patients with end-stage hip arthritis.

Hip and knee arthritis continue to affect the quality of life in patients of all ages. Over the past few decades, orthopaedic research has begun to reveal some of the underlying pathologies that lead to premature arthritis, a condition which had hitherto been assumed to be altogether idiopathic. Recent trends show that younger patients are increasingly affected. Treatment options should be individually targeted for each patient, bearing in mind not only the pathomechanics that led to the disease, nor just its current extent and severity but also the age, demographics, activity demands and expectations of each patient.

A variety of management strategies including bone conserving and joint sparing options are now available. Unravelling the risks and benefits of these procedures can be quite daunting. This newsletter is an attempt to provide a tool for GPs to offer evidence-based choices to their patients. We use real-life case studies as starting points and aim to highlight matters of current interest in this field.

My team and I continue to look forward and embrace the challenges and advances in hip and knee replacement. We hope you find this newsletter useful and informative. If you have any queries, please don't hesitate to contact us. Our email address is: enquiries@mcminncentre.co.uk



Derek McMinn MD FRCS
Consultant Orthopaedic Surgeon

How Well do Patients Recover Following a Birmingham Hip Resurfacing?

A six month journey following BHR surgery

Jim is an active 42 year old who enjoys running half marathons, coaching cricket and playing football with his two young sons. After completing the Great North Run in 2007 he began experiencing mild hip pain.

The pain gradually worsened and Jim was finding it harder and harder to get a comfortable night's sleep. His GP recommended getting a total hip replacement but said he would have to wait several years until he was a suitable age. Jim was becoming less active each week and the thought of waiting for surgery and more pain was off-putting.

Jim heard about the Birmingham Hip Resurfacing (BHR) procedure through a physiotherapist friend. She told him that the BHR was suitable for people his age, and it would allow him to get back to his active lifestyle after the procedure.

After an initial consultation with Mr McMinn, Jim underwent a right Birmingham Hip Resurfacing in June 2010. The day after surgery, Jim was amazed to be asked to get up out of bed and on to his feet. He recalls, "Much to my surprise I was up out of bed taking a few steps the day after the operation. By the third day I was on crutches walking up and down the corridor." He goes on, "It just felt so nice to get the parts moving again. The progress was really quite noticeable. I did feel more mobile with each half day in hospital."

All of Mr McMinn's patients undergo a routine ultrasound scan of the legs and pelvis to objectively confirm the absence of DVT. Like most patients, Jim had this on his fourth day, which confirmed there was no DVT. On the fifth day he was discharged from hospital. Every effort is made to ensure that returning home is a smooth transition. Each patient has a one on one interview with a physiotherapist to discuss their exercise regime and address any concerns.

"I had some good advice from the physio before I was discharged home. They showed me practical things like getting in and out of cars and walking up and down the stairs."

On returning home Jim quickly came off pain killers and steadily regained confidence with walking. From the first day, Mr McMinn allows his BHR patients to fully bear weight. However they are advised to use two elbow crutches for 4 weeks. Jim says, "I probably remained on the crutches for 2 weeks. I then went on to a walking stick for 10 days. After that I felt confident and have been walking well since then." After 6 weeks, Jim took the opportunity to start swimming and began walking up to a mile a day.

Just over six months later Jim is back to a more active routine. Mr McMinn advises his patients not to take up high impact sports until 1 year after surgery. Jim is regularly working out at his local sports centre, following a low impact programme which includes cycling, rowing, swimming and a variety of stretching exercises. He couldn't be happier with his progress. "It has completely transformed my life. I'm exercising regularly, trying to increase the flexibility on my joint and I'm not getting any pain at all. It's more than fulfilled my expectations"



Jim's back to a low-impact exercise routine 6 months post op



Jim walking confidently 3 days after his operation

Most importantly, Jim's back to a comfortable night's sleep and has set some goals for the future, "I've signed up for this year's Great North Run. Whether that's a realistic goal this year we'll see what happens. But I want to be an active person and the hip certainly feels good enough."

A video diary of Jim's progress can be viewed on our YouTube channel:

www.youtube.com/TheMcMinnCentre

Bilateral BHRs give Wagner the “X-Factor”

Wagner Carrilho spent 8 weeks wowing the nation with his colourful song and dance routines on the X-Factor. But turn back the clock to 1999 and things were quite different for the Brazilian born boogie-er. Severe arthritis in both hips meant just walking a few feet was painful, and dancing was completely out of the question. Reminiscing about those days, Wagner recently commented on ITV Central News, “If I had to walk 100 yards it would have to be leaning against a wall or with a walking stick and I could not go anywhere without a walking stick.”

To overcome the pain and get back to his active lifestyle, Wagner underwent bilateral Birmingham Hip Resurfacings with Mr McMinn at the BMI Edgbaston Hospital when he was 43. Twelve years on, his BHRs are certainly doing the trick. He continues to wow crowds across the country with his performances, including his signature piece, the Hippy Hippy Shake. Wagner comments, “Today I can walk from Birmingham to Scotland, I can run miles, I went back to karate. My life is normal and I owe that to Mr McMinn.”

Mr McMinn is delighted with his patient’s progress, “I think Wagner is amazing. His movement was terrific on the X-Factor... But he’s quite an entertainer and that part I had nothing to do with!”



The Birmingham Mid Head Resection

A Short Stemmed Hip Replacement for Young, Active Patients

Martin runs a lively B&B in Nottingham. He began experiencing left hip pain during his mid 50s. What started out as the odd twinge of pain worsened until simple tasks like putting socks on and getting in and out of cars were nearly impossible. “Playing badminton and my long distance walking were seriously affected,” he says. “I had to give up badminton completely and I was only able to take my dog on short walks. I used to enjoy lovely walks in hilly Derbyshire but these were completely out of the question.”

After four and a half years of pain, he decided enough was enough and began researching his options. He soon heard about the BHR procedure pioneered by Derek McMinn in Birmingham. He was attracted to the idea of getting back to his active lifestyle and booked a consultation.

Looking at his x-ray, Mr McMinn told him that the hip joint was arthritic. He recalls Mr McMinn despairing that, “The ball joint was so eroded that it wasn’t suitable for hip resurfacing. The anti-inflammatory pain killers I’d taken for many years had accelerated the deterioration.” Hip Resurfacing is typically unsuitable for patients with poor femoral head bone stock or with severe femoral head deformity. Martin was saddened by the news because the only option now was a total hip replacement. Or so he thought.

Around this time Mr McMinn had designed and begun using a new, short-stemmed hip replacement, the Birmingham Mid Head Resection (BMHR), which is particularly suitable for patients with damaged or deformed femoral head bone. Mr McMinn designed the BMHR for those patients who would otherwise only have the option of a total hip replacement. This procedure is also bone conserving, restores the natural anatomy of the patient and allows patients to be active following surgery.

Martin was delighted by this new option and booked himself in for surgery, “I knew Mr McMinn was a very experienced hip surgeon and that put me at ease to go with the treatment”.

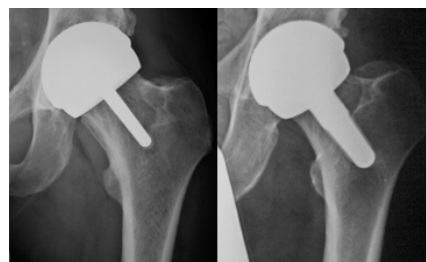
Following surgery, Martin quickly returned to his normal, pain free life, “I was able to get back to work in 3 or 4 weeks and I was right as rain. It can get extremely busy and we’ve got three flights of stairs to go up and down!”

Martin is thrilled with his outcome, “I’ve been able to get back into my walking – I can now comfortably walk almost any distance. And I can play badminton again!”



The conical stem of a BMHR, fitted with a modular head and a BHR acetabular cup

The BMHR is a procedure for patients who are unsuitable for a Hip Resurfacing. During the BMHR operation, the femoral head is resected through the middle, thereby removing the diseased or necrotic bone. The head and neck are prepared into a conical shape and the stem is tapped into place, without the need for cement or screws.



Left: X-Ray of a BHR. Right: X-Ray of a BMHR. With the BMHR, the natural anatomy can be restored (without the need to remove a large portion of the femoral head, even in patients with considerable bone loss)

The stem is fitted with a large diameter modular head, closely matching the patients’ natural anatomy. The femoral head component fits into the same acetabular cup as used for a BHR.

Many of Mr McMinn’s BMHR patients have gone on to live pain-free, active lives following surgery. The BMHR has been in clinical use since 2003 and is showing excellent medium-term results.

Further Developments

In our last issue we reported on the topic of metal debris reactions in a tiny proportion of patients (3 in 1000) with hip resurfacings.

Over the course of time, the two articulating surfaces of a hip replacement begin to wear. This happens with all artificial joints, regardless of material - metal, ceramic or polyethylene. The debris created by this wear has caused unwanted reactions in some patients.

In most cases it is a reaction to excess debris. It is not clear yet if there is a group of patients who are inherently hypersensitive even to the regular levels of wear. Mr McMinn has begun using a specialized BMHR for this group of patients.

Patients who present with a past history of metal sensitivity undergo a blood test (called an LTT) prior to their operation. If they test positive, a ceramic-on-metal BMHR is proving very useful. It utilizes the same stem and cup as a regular BMHR. Instead of the standard metal head, the stem is fitted with a custom made ceramic head which matches the existing anatomy.



A BMHR fitted with a ceramic head - particularly useful in the treatment of patients who have metal sensitivity.

The large diameter ceramic-on-metal coupling has produced excellent results in Smith and Nephew wear tests. The 2-year results in a small group of Mr McMinn’s patients show that the device is performing well with no adverse effects and almost no metal ion elevation.

The Birmingham Knee Replacement

Innovation in Knee Replacement

Mike is an active Sales Director living in Nottingham. After having bilateral BHRs with Mr McMinn in 2001 and 2002 he was able to get back to playing regular golf. "I've played sport all my life. It's highly important to me and it's all part of my quality of life."

But with a history of orthopaedic issues and a passion for physical exercise, Mike's left knee began to deteriorate. By early 2010, Mike was using a splint to manage his knee condition. "I was in a lot of discomfort. I'd get to about the 14th and I'd be feeling pretty worn out. A friend said, "You're walking like an ostrich, Mike".

Mike went for a follow-up consultation for his hips. He wanted to know if Mr McMinn could do anything for his knee. They got talking about a new knee replacement Mr McMinn had designed, "In his opinion it would be the best. He said it would be the nearest knee produced that replicated normal knee function." Furthermore, the design would allow patients to stay active, putting Mike's mind at ease. "I needed to know I could be mobile following a knee replacement. I often travel 1000 miles a week with work, pulling heavy sample cases out the car."

Studies show that 20% of patients with regular Total Knee Replacements (TKRs) are dissatisfied with their knee function in the months and years following operation¹. These patients suffer with pain and tightness around the knee, limited flexion and struggle with daily activities. Mr McMinn's design, the Birmingham Knee Replacement (BKR), is an innovative knee replacement which tackles these design flaws head on. The BKR mirrors the natural kinematics of the knee, including accurate patellar tracking, increased stability and high flexion.

Mike's surgery took place in July 2010 and he was quickly back on the road to recovery.

However, the recovery period following any knee replacement is more demanding than that for a hip replacement. Mr McMinn informs all his Knee Replacement patients that 50% of their final outcome is down to his surgery, with the other 50% down to the hard rehabilitation work of the patient.

Mike was conscious of the advice and determined to get the most out of his new knee, "I organised a physio for when I came out of hospital. We had a programme of 2-3 sessions a week for 8 weeks, and he would really put me through my paces. It was essential."



The Birmingham Knee Replacement (BKR)

The BKR offers patients the confidence to perform essential everyday activities but also also to pursue their more rigorous hobbies.

Within 2 months of surgery Mike was able to swim and began training daily on a static bike. His recovery went from strength to strength, and after a consultation with Mr McMinn, Mike was back to the sport he loves. "Twelve weeks after the operation I was back to playing golf twice a week on a Saturday and a Sunday. I cannot express strongly enough how delighted I am with the surgery and rehabilitation."

Mike is a shining example of how meticulous surgery and focussed rehabilitation have combined to give an excellent outcome for the patient. The BKR has been in clinical use since 2007 and early results with the implant are looking extremely positive.



"12 weeks after the operation I was back to playing golf twice a week."

New Website for the McMinn Centre

We are delighted to announce the launch of our new McMinn Centre website. We have redeveloped in order to improve the quality of information available for patients and healthcare professionals visiting the site.



Visitors now have easy access to relevant information on Mr McMinn's treatment options including the BHR, the Birmingham Knee Replacement (BKR) and Birmingham Mid Head Resection (BMHR), as well as patient testimonials and detailed information for our patients coming from overseas.

Get Involved!

We'd like to know what you think - please log on to www.mcminncentre.co.uk and tell us your opinions of the new site.

Do you have a story?

Are you an active BHR patient? Do you have a story you want people to hear? If you have a testimonial you would like to submit for our website, please email us with further details, we are always pleased to hear from patients.

enquiries@mcminncentre.co.uk

Social Networking

As well as these exciting new developments, we are now operating on all the major social networking sites including Facebook, Twitter and YouTube. We are thrilled that our YouTube channel recently surpassed 250,000 video views.

Follow us

Search for "Derek McMinn" on Facebook, Twitter and YouTube to keep up to date on all the latest McMinn Centre news.



www.mcminncentre.co.uk

References

1. Baker PN, et al; National Joint Registry for England and Wales. The role of pain and function in determining patient satisfaction after total knee replacement. Data from the National Joint Registry for England and Wales. J Bone Joint Surg Br. 2007 Jul; 89(7): 893-900

Mr McMinn Celebrates 20 Years of Metal-on-Metal Hip Resurfacing

On Tuesday 1st March Mr McMinn and a group of his colleagues celebrated the 20th anniversary of Metal-on-Metal Hip Resurfacing. In February 1991, Mr McMinn implanted the world's first modern Metal-on-Metal Hip Resurfacing, eventually leading to the development of the BHR. The BHR has since become a global phenomenon, restoring the quality of life in thousands of patients all over the world.

After a busy day in surgery, Mr McMinn was led to a surprise party to honour this auspicious occasion at the BMI Edgbaston Hospital.

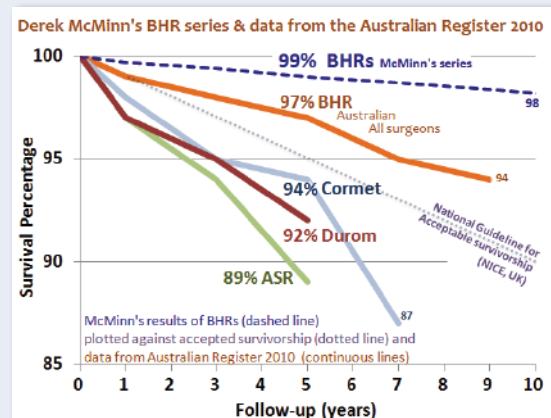
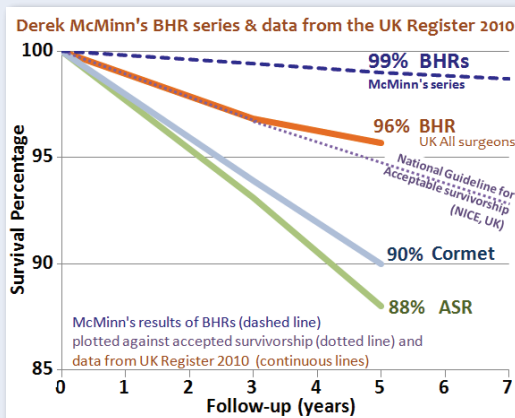
Of course, Mr McMinn continues to push the boundaries in hip and knee replacement. But it was important to acknowledge two decades of his vision and technical innovation which has transformed the lives of so many patients.



BHR Continues to Out-Perform other MoM Resurfacings

Channel 4's "Dispatches" recently gave extensive coverage to high failure rates from a UK Orthopaedic Centre using a brand of hip resurfacing called ASR (manufactured by DePuy, Johnson and Johnson). Though it is true the ASR has been linked with an unusually high number of failures (leading to its withdrawal from the global market), we would like to make a distinction. Not all MoM resurfacing devices perform the same. Dispatches failed to highlight the consistently superb results of the BHR in Joint Registers across the world.

The Australian and the UK National Joint Registers together comprise the largest unbiased documentation of artificial joint devices in the world. The data from these registers (below) show the excellent performance of BHRs, in the hands of surgeons at all levels of experience. Other Metal-on-Metal resurfacing brands (ASR, Cormet, Durom) show two to three fold higher failure rates. But the BHR performs better than the expected national guideline in both registers. The BHR also has the longest follow-up and the largest number of resurfacing cases included in both these Registers. We have also included Mr McMinn's personal success rates with the BHR procedure.



If you would like any further information on the Metal-on-Metal issues raised in Channel 4's Dispatches program, please see www.mcminncentre.co.uk/response-dispatches-program.html alternatively you can email us on enquiries@mcminncentre.co.uk



The McMinn Centre - Profile

The pioneering work of Mr Derek McMinn in the field of hip and knee arthritis over the years has created a large, well-documented cohort of patients with ongoing follow-up who offer a great opportunity for research into the efficacy of orthopaedic devices. In order to direct and co-ordinate his clinical and research work he established The McMinn Centre.

The McMinn Centre is a centre of excellence where patient care goes hand in hand with research on hip and knee sciences. Our research has led to over one hundred pieces of published literature in the last few years with several original citations and papers.

The Centre also coordinates an ongoing educational programme for surgeon training. Surgeons come from all parts of the world to closely observe and gain an insight into the surgical techniques developed and perfected by Mr McMinn in the specialist field of conservative arthroplasty.

Over the years, Mr McMinn has built up a team of dedicated staff who are passionate about their role as facilitators of patient care. They are committed to transforming the worrisome preoperative period for patients into a smooth, easy process and continue this care throughout their follow-up.

We are always pleased to hear from you and offer a professional, personalised service.

The McMinn Centre Team
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