



## Orthopaedic Shoulder Surgery

The future of medicine ...

...Take Control of your Life

**Surgery & Treatment**  
*easy, simple & trouble free*



DIRECT HEALTHCARE  
INTERNATIONAL

## When Considering Overseas Surgery?

This booklet has been put together to help you to make informed decisions on surgery overseas, what to look for in choosing a facility and surgeon. The Sunday Times and David Hancock, the author of *The Complete Medical Tourist* suggest certain points to take into consideration considering overseas surgery:

**Be realistic.** A stay in a tropical location may sound alluring, but could you get the same treatment or better nearer home? India has fantastic medical centres but it is a nine-hour flight away. Think of the cost of taking a companion along to accompany you too.

**Think of the physical implications** of the journey —a day in economy class is a long time, business class is comfier but much more expensive.

**Stay in constant touch** with the medical facility you have chosen. Ask which doctor will be performing the operation, how many he has done before.

**Ask what kind** of post-operative support the facility has.

**Ask what arrangements** are made for transfers between the airport and the medical centre on arrival and departure. What arrangements are made for your carer?

**Ask for testimonials** of patients who have undergone procedures at the medical facility. Contact the people personally.

**Who is the surgeon?** – Skill level is important, you need to ask how many procedures the surgeon carries out each year; more practised means higher skill. A good surgeon will undertake a procedure 150 times a year.

**What length of hospital stay?** – Some facilities send the patient home after 3 or 4 days, usually to save money or beds. This may not give sufficient time for full recovery. Be wary of organisations that substitute hospital bed stay for hotel stay. The patient should remain within the hospital throughout their treatment.

**Medical Liability Insurance?** – With the emergence of eastern European states in the healthcare market. Are the facilities in these locations fully insured? What happens if something goes wrong?

**Blood Quality?** – What is the blood screening policy? European policy on filtration and testing of blood is very strict. Is the facility using blood screened to European standards?

**MRSA & hospital borne infections?** What is the MRSA policy? Does the facility have compulsory testing?

*Direct Healthcare International Limited has taken into account all these factors and put a package together that ensures the best possible care and standards. When compared with some of the top private facilities Direct Healthcare International Limited's quality of care is of a higher standard. Comparisons have shown that our patients after just a few weeks, 6 months, and 2 years have more mobility and are fitter than those treated in other leading establishments*

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## 2 The Shoulder

The shoulder joint has a wider range of movement than any other joint in the body. It consists of three bones: the scapula; the humerus; and the clavicle. The scapula or shoulder blade is the large triangular bone located on the backside of the upper body the humerus is also known as the upper arm bone. The clavicle or collarbone attaches the shoulder to the rib cage and holds the shoulder out from the body.

Several ligaments stabilise the shoulder joint, whilst other soft tissue helps the joint to move and flex easily. The rotator cuff is a complex of four tendons that connect the upper arm with the shoulder blade. It holds the head of the upper arm firmly into the shoulder socket when moving. The tendons connect the muscles with the bone, which moves when the muscles pull on the bone. The bursa is a pocket of lubricating fluid, which allows muscles to move freely over each other. It is located under the collarbone, between the rotator cuff muscles and the larger surrounding muscles.

## 3 Symptoms

In the early stages of shoulder problems, pain is often experienced in the entire shoulder. As the shoulder causes discomfort with every movement, sleeping problems are likely. It is common to experience pain when reaching behind, for example, for one's back pocket or trying to reach for something on the back seat of the car. The longer the pain is there, the more likely it is that stiffness in the entire shoulder occurs, eventually preventing normal lifting or normal mobility of the arm.

## 4 Diagnosis and Treatment

The surgeon will conduct a physical examination and may order X-rays, CT Scans or even an MRI to determine the exact cause of the problem. It may be necessary to perform a shoulder arthroscopy to ascertain the extent of damage or to locate the problem.

Initial treatment may be a course of physiotherapy or cortisone injections to promote natural healing. the surgeon may suggest that the arm is immobilised in a sling so as to allow the damaged tendons and ligaments to heal. If the damage is considered to bad or the above methods fail to improve the condition then surgery may be considered.

## 5 Types of Shoulder Surgery

Shoulder surgery can be used for a number of treatments:

- Arthroscopic acromioplasty - This is an arthroscopic procedure to widen the space between the upper arm and the shoulder blade so that the rotator cuff tendons do not get stuck between them.

- Arthroscopy with shoulder instability - In case of dislocation of the shoulder, it is normal to have an arthroscopy. It is often possible to repair damage to the shoulder but sometimes a separate operation is needed.
- Rotator Cuff Repair - Arthroscopic repair of the shoulder tendons. The goal of these procedures is to minimize the pain, restore strength and functionality.
- Total Shoulder Replacement - Shoulder arthroplasty - With loss of cartilage the patient will suffer severe shoulder arthritis. This is quite painful, and can cause restriction of motion eventually surgical treatment is necessary.

## 6 Shoulder Arthroscopy

After an anaesthetic has been administered, your surgeon and the operating room staff will then make sure that you are correctly position on the operating table. For some shoulder surgeries you will be placed in the "beach chair" position, as if you are reclining on a beach chair. Other types of shoulder surgery require that you lie on your side and have your arm in traction. This position is becoming more popular and is now quite common for arthroscopic rotator cuff repairs.

Once you are in the correct position on the operating table your arm will be cleaned with special surgical soaps and the draped off from the rest of your body with sterile surgical drapes. Some of the surgical soaps that are used today create a film that adheres to the skin very well and does not wash off easily. It can often take days for this type of soap to wash off completely, but don't worry, it does not stain the skin permanently. After the shoulder has been "prepped and draped", the surgeon is then ready to begin the procedure.



Shoulder arthroscopy is performed through "portals". These are small incisions, generally about 10cm long are located over particular areas of the joint that the orthopaedic surgeon will need to operate upon. Small plastic tubes, called "cannulas" are then inserted into the portals so that instruments can easily be placed in the shoulder joint. Shoulder arthroscopy itself involves inserting a specially designed video camera with a very bright fibre optic light source into the shoulder joint so that the important parts of the joint can be seen. Instruments that have been specially designed to remove inflamed tissue, attach sutures to bone, and repair tears and damaged tendons are then used to operate inside the shoulder.

Once the procedure is finished, the instruments, camera, and cannulas are removed, the wounds are closed with either suture or staples, and a sterile dressing is applied to the shoulder. The shoulder is then placed in a sling or immobilizer, the patient is moved from the operating table to a hospital bed, and then wheeled back to the recovery room.

## Recovery from Shoulder Arthroscopy?

In most cases, it will be possible to do light work within a few days. Most normal activities can be carried out within four to six weeks. Heavy labour and contact sports may be restricted for as long as six months. After surgery you will need to wear an arm sling for a few days. Full recovery from shoulder surgery typically needs a great deal of intensive physiotherapy. You will need to ask a Physiotherapist about setting a course of treatment for you.

## 7 Rotator Cuff Tear

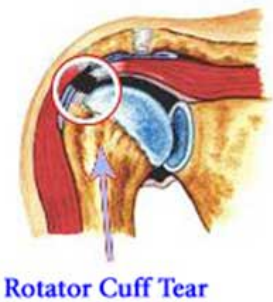
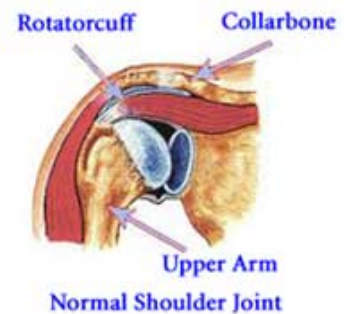
The most common symptoms of rotator cuff tears are:

- Pain - Often the pain is felt over the outside of the shoulder and upper arm. Pain while performing overhead activities (with the arm above head height) and pain at night are also quite common. When the condition is more severe, the pain may awaken patients from sleep.
- Decreased strength - Strength of the rotator cuff tendons can be tested by your doctor. By isolating the different tendons of the rotator cuff with special tests, your doctor can determine the extent of the tear. Depending on the severity of the rotator cuff tear, there may also be a loss of motion. Significant rotator cuff tears may affect a patient's ability to raise up their arm over their head.
- Loss of Mobility- Patients often have difficulty performing activities such as combing their hair, clasping a bra behind their back, reaching behind their back, or sleeping on the affected shoulder.

## Diagnosis of Rotator Cuff

As well as a physical diagnosis the following diagnostic tools can be used:

- X-rays of the shoulder will be obtained if there is a concern of a rotator cuff tear. The surgeon will look for signs of a rotator cuff tear, although the rotator cuff tear itself cannot be seen on a regular x-ray. Signs of a



problem within the rotator cuff include a narrowing of the space for the rotator cuff and bone spurs around the rotator cuff tendons.

- MRI - is helpful because it can show both complete rotator cuff tears and partial rotator cuff tears. The MRI can also show evidence of shoulder bursitis and other common shoulder problems.
- Arthrogram - once was the most commonly used test to diagnose a rotator cuff tear. In this study a dye (contrast dye) that shows up on x-ray is injected into the shoulder joint. An intact rotator cuff should contain the dye within the joint, while a rotator cuff tear will allow the dye to leak into surrounding tissues. By taking an x-ray after an injection, your doctor can see evidence of a rotator cuff tear.
- Ultrasound - operated by a skilled technician, can be as effective detecting a rotator cuff tear as these other methods. Depending on your doctor's preference, you may undergo an ultrasound study to diagnose a rotator cuff tear.

## Rotator Cuff Treatment

The first steps of rotator cuff treatment include:

- Physiotherapy - is the most important step in the treatment of a rotator cuff injury. Strengthening the rotator cuff muscles is important to maintain normal shoulder function. A physiotherapist can show you exercises to help alleviate and prevent a recurrence of your shoulder pain.
- Anti-Inflammatory Medications - anti-inflammatory medications can be taken regularly for a short period, and can be used to alleviate pain and when symptoms of a rotator cuff tear flare up.
- Cortisone Injections - Cortisone injections promote rapid healing and can limit the acute inflammatory process, allowing the patient to begin therapy. It is important to participate in the therapy and exercises even if the shoulder feels better after an injection. Physiotherapy will help prevent a recurrence of symptoms. This may help to relieve pain and strengthen the muscles around the joint.

## If Conventional Treatments Don't Work?

Physiotherapy is first attempted, especially in older patients or in patients who have chronic long-term injuries. In younger patients who have an acute, traumatic injury surgery is considered early on as there is less likelihood that physiotherapy will help. Where non surgical treatment have failed then surgery must be considered.

## Rotator Cuff Surgery

This is an arthroscopic procedure and takes place in a theatre under full anaesthesia. The surgery takes no more than 1 hour after which the patient is returned to the recovery area. Shortly afterwards the patient will be returned to their room.

Total stay in hospital is 5 days, after surgery you will need to wear an arm sling for a few days. Full recovery from shoulder surgery typically needs a great deal of intensive

physiotherapy. You will need to ask a Physiotherapist or sports traumatologist about setting a course of treatment for you.

Rotator cuff injuries heal slowly as the rotator cuff, like all tendons, gets little blood. All bodily tissues need blood to heal. Parts of the body that have a better blood supply heal faster than those with a poor supply of blood.

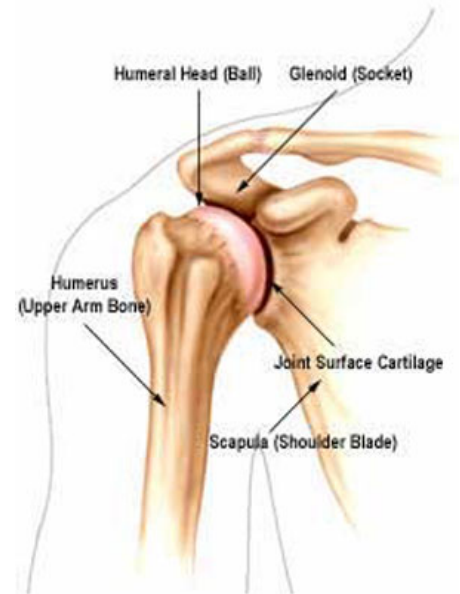
## 8 Total Shoulder Replacement

Shoulder replacement surgery is an option for treatment of severe arthritis of the shoulder joint. Arthritis is a condition that affects the cartilage of the joints. As the cartilage lining wears away, the protective lining between the bones is lost--when this happens, painful bone-on-bone arthritis develops. Severe shoulder arthritis is quite painful, and can cause restriction of motion. While this may be tolerated with some medications and lifestyle adjustments, there may come a time when surgical treatment is necessary.

### Indications for a Total Shoulder Replacement

Indications for a total shoulder replacement may include:

- Arthrosis - A shoulder prosthesis or full shoulder replacement may be indicated when elasticity of the bones has gradually disappeared; or the smooth surface has become rugged and uneven, and so mobility is greatly reduced and movement itself is painful. Also, when there is a history of bone fractures or dislocation.
- Rheumatism - Rheumatism is a cause of deterioration of shoulder cartilage. Even at a young age, this can lead to destruction of the joint and provoke bad shoulder function leading to the requirement of a shoulder replacement.
- Fractures - Certain types of fractures can lead to damage of small blood vessels in the shoulder joint. Because of the disruption of the



**Worn Shoulder Joint**

blood flow in the shoulder, the shoulder is slowly damaged.

- Avascular Necrosis - Avascular Necrosis is developed due to insufficient blood flow to the bone. The bone becomes exceptionally soft and weak, which can lead to deformation. In these cases a full shoulder replacement is the best solution.

### Symptoms of severe arthritis of the shoulder

Common symptoms of shoulder arthritis include:

- Pain with activities
- Limited range of motion
- Stiffness of the shoulder
- Swelling of the joint
- Tenderness around the joint
- A feeling of grinding or catching within the joint
- Worn Shoulder Joint



**An Artificial Shoulder joint**

### What is a Total Shoulder Replacement?

Total shoulder replacement surgery replaces damaged bone and cartilage with a metal and plastic implant. The shoulder joint is a ball-and-socket joint, much like the hip joint. The ball is the top of the arm bone (the humerus), and the socket is within the shoulder blade (scapula). This joint allows people an enormous range of motion at the shoulder.

When shoulder replacement surgery is performed, the ball is removed from the top of the humerus and replaced with a metal implant. This is shaped like a half-moon and attached to a stem inserted down the centre of the arm bone. The socket portion of the joint is shaved clean and replaced with a plastic socket that is cemented into the scapula.

### What is Total Shoulder Replacement Surgery Like?

Shoulder replacement surgery lasts about two hours and is carried out under general anaesthesia. The incision for the surgery is along the front of the shoulder joint and usually about four to six inches long.

The total stay in hospital is 9 days, some physiotherapy is provided however the patient may need further physiotherapy on their return home.

### After Total Shoulder Replacement Surgery

You will need to wear an arm sling for a few days. You should not attempt to use the arm except as specifically instructed by your doctor. Most physicians will begin some light physiotherapy immediately following surgery, but this may not be true in every case. Usually

within two to three months, patients are able to return to most normal activities and place an emphasis on strengthening the muscles around the shoulder and maintaining range of motion.

## **9 Planning your Journey**

Our staff will assist you in planning your journey. This is especially necessary when undergoing spinal surgery to ensure that you return home in comfort.

## **10 Before Surgery**

Please read this brochure carefully or information on how to best prepare for your surgery.

## **11 Once you have arrived**

When you arrive hospital staff will greet you and ensure that you are settled in the privacy of your own room in the family B&B unit. You will be asked your dietary preferences and be given a short guide to the hospital and its facilities.

## **12 Your Hospital Stay**

The next day after the preliminary consultation, your consultant surgeon will carefully assess your condition and will decide with you which surgery is best suited. There is a short pre-surgery questionnaire to complete and it is likely that some investigations will be done at this stage, such as a blood test, x-rays and Ct scans.

You will be fully briefed on what to expect and how to prepare for your operation. The surgeon will ensure that you are comfortable and explain all about your surgery. The anaesthetist will visit you and answer any questions you may have.

## **13 The Operation**

Surgery is performed under either epidural or general anaesthesia if you have a preference please tell the anaesthetist. The surgery is performed in a DHI partner specialist orthopaedic hospital by a specialist orthopaedic surgeon.

## **14 After Surgery**

If the surgery you have undergone requires physiotherapy then you will receive full physiotherapy by one of our team of 10 physiotherapists. If the surgery does not require immediate physiotherapy then you are welcome to contact the physiotherapy department and ask them to instruct you in a program of exercises to assist your restoration to peak physical condition. Within a short while you will be safely on the road to recovery!

## **15 Typical Scenario**

Day 1 – arrival and MRSA test

Day 2 – consultation + preoperative x-rays, Ct Scans + blood tests

Day 3 – Admission to hospital bed + surgery + possible overnight in ICU

Day 4 - Day In hospital (this may vary depending on procedure)

Day 8 – Post-operative check and departure

## **16 Fully Inclusive Surgery Option**

The DHI fully inclusive surgery package includes:

- MRSA test
- Surgery (all hospital, surgery & anaesthetist's fees)
- Return flights (UK, Denmark & Ireland), Eurostar or Ferry for two (door-to-door pickup is available in many areas of the UK).
- Complete Chauffer service (to & from airport, Eurostar or Ferry, hotel to hospital transfers)
- Depending on the area you live in a door to door cheaffer service is available
- B&B accommodation at St Rembert's Hospital for a friend or family member
- DHI Additional Medical Cover (terms & conditions apply)

## 17 Basic Surgery Option

The DHI basic surgery package includes:

- MRSA test
- Surgery (all hospital, surgery & anaesthetist's fees)

Optional extras available are:

- Airport pickup and transfer service (to & from airport, Eurostar or Ferry)
- B&B accommodation at St Rembert's Hospital for a friend or family member
- DHI Additional Medical Cover (terms & conditions apply)

## 18 How do I Book?

- Complete and return the enclosed pre-surgery enquiry form. It can be faxed directly to 00353 253 4208
- An online version can be found at [www.hip-resurfacing-surgery.com/index.php](http://www.hip-resurfacing-surgery.com/index.php)
- We will contact you to set a target date for treatment and confirm your travel details.
- We then dispatch your invoice and a confirmation letter explaining your full itinerary.

## 19 Methods of Payment

- Credit Card - Visa, MasterCard (add 3.5% card handling surcharge)
- Bank Transfer Direct Bank transfer - 4 weeks before travelling
- Cash payment at the hospital. (Euros only)
- Building Society Cheque or Bankers draft at the hospital in favour of "St Rembert's hospital" (Euros only)
- Building Society Cheque or Bankers draft or bank cheque in favour of "Direct Healthcare International Limited" (USD, GBP, or Euros)

## 20 MRSA Infection Control Policy

Our partner hospitals have some of the lowest rates of secondary infection in the world. In order to ensure your safety and the safety of others we ask that you undertake an oral smear test for MRSA. This test will be carried out at the hospital on the day of arrival

### What does the test involve?

The test is easy, painless and straightforward; a smear sample is taken from the nose and throat. This sample is then sent to the lab for testing.

## **What other precautions can I take?**

In Addition if you are undergoing orthopaedic surgery please:

- Visit your dentist beforehand to ensure that you are clear from mouth infections.
- We recommend you use uni-wash antiseptic shower gel the week before you travel (obtainable from your local chemist).
- Take a course of multi-vitamins with iron for 7 days prior to travelling for treatment.

## **21 Frequently Asked Questions**

### **Do I need a referral from my doctor?**

No, a doctor's referral is not necessary as we carry out a full clinical examination; x-rays are taken; as well as blood and urine tests. There is a consultation with the orthopaedic consultant the day before surgery. However, it is very helpful to have the support of your GP or doctor. Direct Healthcare International, where possible, prefer to work with your doctor or GP. This can only benefit the patient in the long run. Should your GP or doctor wish to know more about our organisation we would welcome a contact from them.

### **Would it help if I brought my MRIs, x-rays, etc with me?**

We undertake our own investigations, high definition x-rays and CT scans. MRI scans are not necessary, if you already have an MRI and it is less than 3 months old – by all means bring them with you.

### **Should I inform the doctor if there is anything unusual in my medical history?**

Yes - this should be declared in the pre-surgery enquiry form, which we will pass on to the surgeon, it is helpful to mention any major points again.

### **Will I have the opportunity to ask questions?**

Yes, the surgeon is quite open to questions and will explain everything in detail.

### **Can my partner attend the consultation?**

Yes, they are welcome to attend.

### **Will I need any aftercare?**

Our program is designed to incorporate sufficient physiotherapy thereby leaving little or no requirement for aftercare. Comparative studies have shown that our patients are sent home in better condition than those treated in other facilities such as the NHS, BUPA and Nuffield hospitals.

### **What condition will I be in when I return home?**

With major orthopaedic surgery, you will be able to walk easily with the aid of the stick or crutch provided. You should be capable of walking approximately 150 yards or more before getting tired. Depending on your physical condition, you may have some anti coagulant injections to take home with you and some stitches may need to be removed after you return home. If you are flying please ensure that you take a pair of compression stockings from the hospital for your return flight. Our customers service will ensure that you have

wheelchair assistance throughout your return journey even when you arrive at your airport destination.

### **Can you tell me more about your facility in Belgium?**

Please see the section marked “our partner hospital”.

### **How many people does your organisation treat a year?**

We have been in the healthcare service profession for over five years and successfully facilitate approximately 1400 treatments a year.

### **What steps are taken to prevent blood clots (thrombosis)?**

The hospital will administer low weight heparin 'B' to prevent thrombosis. You may also receive some of these drugs to take home with you.

### **I wish to fly shortly after my surgery is this safe?**

Yes flying even long haul is quite safe; as you are receiving low weight heparin 'B' to prevent thrombosis there should be less risk than usual. In addition compression stockings can be provided, please ask at the hospital.

### **Will I need a blood transfusion?**

For spine and hip surgery, it is less likely that blood will be needed; for knee surgery, it is quite possible. If you are unable to receive transfusion for religious reasons a “cell saver” machine is available.

### **If needed, is this included in price?**

Transfusion is included in the price as is the use of the “cell saver”.

### **What is the blood screening policy?**

European policy on filtration and testing of blood is very strict. The hospital is equipped with its own accredited laboratories. Blood samples can be screened day or night.

The ICU can locally provide blood-gas analysis and ionography under the supervision of the central laboratory, which is responsible for quality.

Practical arrangements describe:

- Indications
- Method of transfusion
- ABO and rhesus control
- Indications for:
  - CMV negative blood
  - Deleucocyted blood
  - Lymphocyte radiation
- Transfusion reactions and therapy

Blood units are supplied by the Blood Transfusion Centre, which is regulated by the Belgian Law dated 5th July 1994, pertaining to blood and derivatives of blood of human origin, in addition, the European guide to “qualification assurance of blood donation and preparation use” is strictly followed (edition of 8th January 2002 under code R 9515)

Articles 8 & 4 of the Belgian law state that blood must be screened for hepatitis B and C, HIV, syphilis and anti HBc antibodies.

## **What type of anaesthesia is used?**

The anaesthetist will discuss the type of anaesthesia used prior to surgery. If you have a preference, please state this to the anaesthetist or surgeon.

Loco-regional anaesthesia (spinal, epidural or combined) is used when possible. General anaesthesia can be used alone or in combination with a loco-regional technique.

## **Loco-regional**

With spinal anaesthesia, a small amount of local anaesthetic is injected through a small bevel needle into the cerebrospinal fluid surrounding the spinal cord. This gives a fast and profound anaesthesia in selected segments of your body.

With epidural anaesthesia, a narrow catheter is placed in the epidural space for postoperative analgesia.

With combined spinal epidural anaesthesia, after identification of the epidural space, a spinal needle is advanced into the intrathecal space, allowing injection of the spinal component. After this an epidural catheter is left in the epidural space for post-op analgesia.

## **General**

If you are undergoing general anaesthesia, you will be put asleep by IV-medication. A mask or a breathing tube then gives an anaesthetic gas for maintenance of anaesthesia.

You will receive pre-medication (a light sedative) before going to the Theatre. This relaxes you and minimizes the discomfort of the procedures (IV-line, loco-regional techniques) performed while being awake.

The loco-regional will be administered before the induction of general anaesthesia (if applicable) for reasons of safety.

## **What kind of Pain Management is there? (major orthopaedic procedures)**

The anaesthetist will also discuss with you an alternative method for pain relief. This is called the PCA (Patient Controlled Anaesthesia) pump. This device is programmed to deliver pain medication through the IV just by pressing a button. The pump is monitored and programmed so that there should never be any fear of overdosing.

Pain can sometimes be intermittent (comes and goes), or constant (continuous) and range from severe (10 on the scale), to moderate (5 on the scale), to mild (1 on the scale). Whatever the situation, there is no reason to suffer in pain. Your pain will get better each day as you heal. The strength and timing of the medication can be adjusted to help you recover quickly.

If you have an epidural catheter for pain management, you will have a dressing on your lower back where the epidural catheter has been inserted. The tube will be taped along your back and onto one shoulder. You will see a small machine on an IV stand monitoring the amount of epidural medication being administered and a button pinned to your hospital gown. Just press this button whenever you are experiencing pain. There is no need to

worry about overdosing. The machine is programmed to administer medication only if you are due for an injection. If you are experiencing severe pain, inform the nurse. The nurse will notify the anaesthetist who will then make an assessment and possibly provide you with more pain medication if indicated. You will be given a pill or injection that can quickly ease your discomfort.

### **Could you tell me a little more about the intensive care facilities?**

The hospital has a fully functioning 24 - hour accident & emergency department, paramedics, and fully equipped intensive care unit. Response time for a doctor to be at bedside day or night is under 2 minutes.

### **How long will I stay in Intensive care?**

For major orthopaedic procedures usually, less than 1 day, however, if you have any history of heart problems; are overweight; or have other risk factors, we may keep you in intensive care for a longer period. This is a perfectly normal precautionary procedure. With minor procedures you will be returned to your hospital bed in just a few hours.

### **Is there any additional cost associated with this?**

Providing the length of stay in intensive care is just a couple of days, there is no additional cost. Please see the DHI overrun insurance for details.

### **What if something goes wrong after I return home?**

DHI have a number of aftercare and emergency systems in place should they be needed. Please remember that these should only be used in the event of an emergency or urgent need. Patient seeking urgent advice should follow the steps laid out below. If the patient 's condition appears serious a local GP or accident and emergency hospital should be contacted in the first instance otherwise:

- Call DHI (preferably during office hours) if necessary use the 24hr response emergency phone number.
- The treating surgeon will be contacted and asked take direct contact with the patient or their physician.
- The patient may be asked to attend their GP if this is more practicable or their local hospital.
- A doctor can be called to attend at the patients home (UK only) in the event of any significant problems. The doctor can take a wound swab which will be tested in our labs, report and if necessary medicate.
- If the problem appears significant but not an emergency the patient may need to return to the operating facility for further examination and treatment.
- DHI also employs consultant surgeons and labs (within the UK) that will assist in the event that it is needed.

Please remember that DHI have successfully sent thousands of people for treatment. No significant or urgent medical problems have occurred. No patient has ever had a cross infection of any kind in one of our partner hospitals.

## **What is the risk of infection?**

Our partner hospital has successfully treated hundreds of our patients with no cases of cross infection. Should a patient be found to have an infection on arrival, they are isolated and treated accordingly. Should a case of secondary infection occur, it would manifest itself during the stay in hospital. Belgium has one of the lowest secondary infection rate is in Europe. Rates in the UK and Eire continue to remain at alarming levels. In the USA occurrences are on the increase. As recently as 2006 reports from within the UK and Eire health services, the news media, and senior consultants indicate that the problem remains acute in most hospitals. So far, all our clients have remained free of secondary infections.

Could you tell me a little more about the physiotherapy facilities?

The success of a surgical procedure such as a hip or knee replacement, a hip resurfacing, or spine surgery, largely depends on rehabilitation. To achieve the best and fastest results, rehabilitation needs to be started early, be intensive and task-specific (early standing and walking). A highly skilled team of 10 physiotherapists and 3 occupational therapists, under supervision of a medical doctor & specialist in Physical Medicine and rehabilitation, combines the latest rehabilitation techniques with an extensive experience and a personal approach. They also instruct you on the practical and ergonomic issues following these interventions. A brochure with a pre-surgery exercise program to follow at home, and all necessary information is provided.

## **Do you offer accommodation for my carer?**

Yes, please enquire for details.

## **What charges are not included?**

Any phone calls made during your hospital stay.

It would be nice to speak to someone who has experienced using your services, could you please provide a reference that I could reach by telephone?

Yes, we have many previous patients willing to act as referees. Please contact and we will provide some details.

## **I am not very mobile. Can you assist with wheelchairs?**

We recommend asking us to arrange wheelchair assistance if you have any mobility problems. Please ensure that we are informed at the office so that we can best assist you.

## **What can I do to prepare for Surgery?**

- For five days before surgery you may wish to take some vitamin & iron tablets and use an antiseptic cleansing shower gel (Hibiscrub)
- Complete and return the patient pre-surgery enquiry form
- Bring with you slippers, trainers or walking shoes, loose comfortable clothing, dressing gown or bath robe, personal toiletries, eye glasses, dentures, reading materials or anything to help you relax such as a personal walkman and music
- Bring phone numbers of people you may want to call
- Bring a small amount of money for small items such as telephone calls

- Passport
- Bring your European Health Insurance Card (formerly Form E111 obtainable from your local post office)
- Bring any medication and a list of any medicines that you have been taking

### **How long is the duration of stay?**

That depends on the procedure.

### **Where can I arrive and still be picked up by your chauffeur?**

You can arrive at the following places:

#### **Train stations:**

- Lille international (Euro star)
- Brussels Midi

#### **Airports:**

- Brussels National Airport, Zaventem
- Brussels South Airport, Charleroi
- Lille international Airport
- Liege Airport
- Antwerp Airport
- Amsterdam Schipol airport (may be an additional fee)

#### **Seaports:**

- Zee Brugge seaport
- Calais

### **Can I stay longer if required?**

Yes for major orthopaedic procedures there is additional stay available. We recommend an additional period of stay for women over 75, and men over 80, or if there are any mobility problems. The extra stay includes full physiotherapy and enables the patient to recover more fully before returning home. Please ask about the cost of the additional stay.

## 22 Our Belgian Partner Hospital

Equipped with the latest technology, the hospital has 197 beds, 40 physicians and over 420 employees, offering the very best in medical care and surgical procedures.

Each physician is specialist trained in one of the primary medical disciplines: anaesthesiology, surgery (general and vascular surgery; ear, nose and - throat; gynaecology and obstetrics;

ophthalmology; oral and facial surgery; orthopaedics and urology), dermatology, internal medicine (primary care, cardiology, gastroenterology, geriatrics, pulmonology and rheumatology), pathology, paediatrics, psychiatry and radiology.

The hospital has five operating theatres equipped with the newest technology. The emergency department and the 8-bed intensive care facility are staffed 24 hours a day with on site resident cover.

Nursing staff is dedicated to providing quality service in patient care. The Hospital offers extensive physical rehabilitation services in its modern fully equipped physiotherapy department. It also houses a state-of-the-art laboratory and a modern radiology department is available on site.

The Hospital places a strong emphasis on cleanliness and the quality of its food. All meals are prepared on site. A substantial lunch is provided, followed by a light evening meal - the menu is changed daily. For family and friends, there is a modern Scandinavian style canteen/café facility where hot meals are prepared and served daily. The hospital has a laundry service; a hairdressing salon and massage are available for friends and family staying there.

During your stay, you will be cared for by a number of physicians, nurses and allied professionals who feel that it is their responsibility to help you feel as welcome, content and comfortable as possible.



## 23 CV Dr. Carsten Niels Schoellner

DOB: 12.02.64

Birth Place: Heidelberg, Germany

Married with two Children

1970 - 1983 Roxel School, Munich and Cologne, Germany

1983-1991 Studied Medicine at the University in Gent, Belgium

Jul 92 - Sep 93 Assistant traumatology with Prof. Pichlmaier en Prof. Rehm, Academic Hospital, Cologne, Germany

Oct 93 - Mar 96 Assistant Orthopedics with Prof. Dr. med. D. Schoellner, "Krankenhaus der Augustinerinnen" Cologne, Germany

Apr 96 - Sep 96 Assistant Orthopedics with Prof. Dr. med. P Kaps, "Krankenhaus der Augustinerinnen" Cologne, Germany

Oct 96 - Dec 96 Assistant Orthopedics with Prof. Dr. med. R Ferdini, "Johannes-Etienne" Hospital, Neuss, Germany

Jan 97 - Apr 97 Assistant Orthopedics with Prof. Dr. med. D. Schoellner, "Krankenhaus der Augustinerinnen" Cologne, Germany

May 97 - Oct 97 Assistant Orthopedics with Prof. Dr. Med.D. Schoellner, Prof. Dr med. A. Karbowski, "Krankenhaus der Augustinerinnen" Cologne, Germany

Nov 97- Oct 01 Assistant Orthopedics with Prof. Dr. med. J Heine, Academic hospital Mainz, Germany

Nov 01 – Mar 06 Staff Member under Prof. Dr. med. J Heine, Academic hospital Mainz, Germany



### Supplementary Studies

Chirotherapy

Rheumatology

Orthopaedic Echography of infant hips

### Supplementary activities

1987 and 1988: leading dissections with Prof. Vakeat, University Gent

### Study activities

Class in Kinetherapy at the Cologne University (1998-1999)

Class in Rheumatology at the Helene-Dicke-Schule, Mainz, for Physiotherapy (1998-1999)

### Belgian Doctorate Thesis

"The Mucocutaan Lymphnodi-Syndrome" under Dr. Degomme, Brugge 1991

### German Doctorate Thesis

"Die Digitalisierte Flächenmessung zur Erfassung periartikulärer Ossifikationen bei Hüfttotalendoprothesen" ('97)

### Habilitation:

“Die Sockelpfanne: Technische Entwicklung, experimentelle Erprobung und klinische Anwendung in der Hüfttotalenoprothetik. Eine prospective Multicenter –studie” (‘04)

## **Congress Organisation**

3 country congress “ESWT” in Mainz Duitsland 2000

Revision meeting “Hip” in Mainz, Germany 2004

11 Workshops “Pedestal cup” from 1994 - 2004

## **Further education**

“Hindfoot Instructional Course” Summer University 20

2001, Innsbruck, Austria

Instructional course Shoulder, hand and elbow Arthroscopy, 03-04.  
2004, Giessen, Germany

## **Hospitations**

Leids Universety Center (Prof. Dr. Rozing)

Orthop. University Clinic Bochum (Prof. Dr. Kramer)

Orthop. University Clinic Charite, Berlin (Prof. Dr. H. Zippel)

Orthop. University Clinic, Magdeburg ( Prof. Dr. Neumann)

Krankenhaus der Barmh, Brüder, München (Prof. Plötz)

St. Josestift, Sendenhorst (Prof. Dr. R. Mielke)

Caritas-Krankenhaus Bad Mergentheim (Prof. Springorum)

Gersthof-Krankenhaus, Wenen, Austria (Prof. Ritschl)

## **Special Projects**

Since 1993 Pedestal Cup study

Multicenterstudy on extracoporal shockwaves

## Curriculum Vitae - Dr Dirk M. M. Dauwe

Nationality            Belgian  
 Date of birth         24-02-1963  
 Address                St. Remberts Hospital  
                               Orthopaedic Department  
                               St. Rembertlaan 21  
                               Torhout



### Qualifications and training

General Medicine (1981-1988)	University of Louvain, Belgium :
Great distinction	
Orthopaedic Training (1988-1994)	Prof. Dr. J. Gruwez Prof. Dr. G. Fabry
Belgium	- Louvain            University of Louvain - Bruges             AZ St. Lucas - Kortrijk            AZ Groeninghe - Knokke             AZ O.L.V. Ter Linden
Great Britain –	University of Edinburgh, Victoria Hospital, Kirkcaldy, Scotland
U.S.A.	Fellowship ('94-'95)  University of Florida, General Hospital, Tampa, Florida, Dr. R.W. Sanders University of Missouri, Columbia, Missouri, Dr. R.W. Gaines Tennessee Spine Center, Nashville, Tennessee, Dr. Mc Cord University of New York, Hospital for Special Surgery, New York, Prof. Dr. O. Boachie Tropical Diseases (1984-1985) Highest Distinction History of Medicine (1985-1986)            Highest Distinction

### Previous and Current Employment

Genk – Waterschei (1994)	Orthopaedic Surgery & Traumatology, Dr. H. Lenskens Dr. L. Oprins
Torhout (1995 - )	Orthopaedic Surgery & Traumatology - Head of the Department Association with Dr. Fr. De Gendt, Dr. Ch. Waterloos and Dr Carsten Niels Schoellner Medical co-author with Zimmer Orthopaedics to jointly develop the total hip and total knee prosthesis and to pursue its clinical investigation (since 2003).

President of the Medical Board of St. Rembert's Hospital  
(since 2002).

## **Surgical Experience**

- 100 total hip prostheses/year
- 120 total knee prostheses/year
- 40 spinal surgeries/year
- over 200 arthroscopies of the knee and shoulder (meniscal tears, cartilage-damage, cruciate ligament tears, etc.)
- many other orthopaedic and traumatological operations

## **Courses and Conferences**

Several a year: national and international

## **Teaching responsibilities**

For General Practitioners (HIBO)

For Physiotherapists

## **Publications**

"Evaluation of wrist arthroscopy in 129 cases", D. Dauwe, Y. Fortems, L. De Smet, G. Fabry

"A Comparative study of intramedullary and extramedullary alignment systems in total knee arthroplasty", D. Dauwe, J. Bellemans, E. Pinxten, M. Urlus, J. Victor

"Spontaneous rupture of patella tendon" , D. Dauwe, E. Meire, G. Molenaers

"Management of the infected total knee arthroplasty, D. Dauwe, J. Victor, M. Urlus, J. Bellemans, J. Stuyck

"Septic Arthritis of a lumbar facet joint and a sternoclavicular joint",

D. Dauwe, J. Van Oyen, I. Samson, M. Hoogmartens

"Spontaneous rupture of the flexor carpi radialis tendon secondary to STT osteoarthritis", C. Verellen, D. Dauwe, L. De Smet, G. Fabry

"The value of wrist arthroscopy", L. De Smet, D. Dauwe, Y. Fortems, B. Zachee and G. Fabry

"Cartilaginous and ligamentous degeneration of the wrist : an anatomical and radiological study in an elderly population", Y. Fortems, D. Dauwe, L. De Smet, G. Fabry

"The value of prearthroscopic traction radiographs of 'stretch test' in the diagnosis of chronic wrist pain", Y. Fortems, D. Dauwe, I. Mawhinney, T. Lawrence, I. Trail, J. Stanley

"Geisoleerde verlamming van de m. serratus anterior", E. Wouters, D. Dauwe, M. Demuyck

"Isolated complete rupture of Biceps Femoris Tendon", Y. Fortems, J. Victor, D. Dauwe, G. Fabry

"Incidence of cartilaginous and ligamentous lesions of the radiocarpal and distal radio-ulnar joint in an elderly population", Y. Fortems, L. De Smet, D. Dauwe, D. Stoffelen, G. Deneffe, G. Fabry

"Arthroscopic treatment of TFCC lesions of the wrist", L. De Smet, A. De Ferm, A. Steenwerckx, D. Dauwe, B. Zachee, G. Fabry

## 25 Curriculum Vitae - Dr Frank De Gendt

Nationality: Belgian  
Date of birth: 21-05-1961

**Current position:** Orthopaedic surgeon  
St Rembert's Hospital  
Orthopaedics Department  
St Rembertlaan 21  
Torhout



### Qualifications and training

General Medicine - 1979-1986

University of Louvain, Belgium : 6 distinctions

Belgian Order of Medicine

10<sup>th</sup> July 1986

Orthopaedic Training -1986-1992

Prof. Dr. Boute (Brussels)

Prof. Dr. Ling (Exeter)

Prof. Dr. Farby (Louvain)

Prof. Dr. De Brouwer (Antwerp)

Prof. Dr. F. Mulier (Louvain)

Belgium

University of Louvain - University Hospital

St. Etiennekliniek, Brussels

University Hospital, Pellenberg

A. Z. Jan Palfijn Hospital, Antwerp

Heilige Hartkliniek Hospital, Louvain

United Kingdom

Royal Devon & Exeter Hospital (trauma hospital)

Princess Elisabeth Hospital (hip surgery)

### Previous and Current Employment

Fabiola Hospital, Dendermonde - Orthopaedic Surgery & Traumatology

Nouvelle Clinique de la Basilique, Brussels - Orthopaedic Surgery & Traumatology

Since 1994 - St. Rembert's Hospital, Torhout - Orthopaedic Surgery & Traumatology

### St Rembert's Hospital - Surgical Experience

- 100 total hip prostheses/year
- 150 hip resurfacing/year
- 80 total knee prostheses/year
- 60 back surgeries/year
- 200 arthroscopies of the knee and shoulder (meniscus tears, cartilage-damage, cruciate ligament tears, etc.)

- Many other orthopaedic and traumatological operations

## **Courses and Conferences**

June 1988, England - Basic AO

Jan to Dec 1990, Switzerland - Progressed AO Davos

June 1992, France - Back pathology and back surgery

Aug to Oct 1992, Belgium - Back pathology and back surgery

Oct 1993, Germany - Spine surgery Bad Willungen

## **Publications**

"Treatment of Scoliosis with electro stimulation: a critical analysis", Dr. De Gendt

A member of the team of surgeons working with Zimmer Orthopaedics to jointly develop the total hip and total knee prosthesis and to pursue its clinical investigation (since 2003)