Orthopaedic is that field of medicine that deals with injuries, diseases and other conditions that bring significant charges in musculoskeletal system that includes bones, joints, muscles, tendons and ligaments. We dress here a list of the most frequent surgical procedures done in medical tourism or surgery abroad.

HIP REPLACEMENT

Procedure:

Total hip replacement is an orthopaedic surgical procedure that replaces a diseased joint with an artificial joint (it’s called also arthroplasty). This new artificial joint relieve your pain, increase your motion and help you get back to enjoying normal life.

Preparation:

A letter from your general practitioner (GP) or your specialist doctor in your country is recommended, to know your medical history, any previous treatment received or any other relevant medical details.

The following tests are carried out before coming in Tunisia: Blood tests, urine test, X-ray of the hip joint.
You need to carry out the infection foci tests: oral, dental and urine test. If there is any evidence of infection, you need to treat it before your travel.

**Anaesthesia:**

Total hip replacement is carried out under general anaesthesia or spinal anaesthesia.

**Duration:**

Total hip replacement surgery take about 1 to 2 hours. A revision of an old hip replacement can take more than 2 hours.

**Post surgery care:**

You will be given pain killer to control the pain, blood thinning medication.

Weight bearing is generally allowed 24 to 48 hours after surgery, except particular conditions.

Drains are removed in 3 to 5 days.
Physiotherapy starts 24 hours after surgery.

You will stay 5 to 7 days in the clinic after which you will be discharged to your comfortable flat
near the clinic, where you will get daily visits from your physiotherapist and your nurse.

A minimum period of stay of two weeks is required after the surgery.

**Hip replacement risks and possible complications:**

- **Infection**: is rare, but possible. Could be deep (joint infection) or superficial (skin infection). If you notice one or more of the following symptoms, report it to your doctor as soon as possible: persistent fever, shaking shills, increased redness, tenderness or swelling of the hip wound, increasing pain in both rest and activity.

- **Blood clots**: (deep vein thrombosis): more common, can occur in the leg veins or pelvis. Your surgeon may prescribe you a prevention program including light exercises, and blood thinning medication. Notify your doctor if you notice one or more of the following symptoms: pain in your calf and leg, tenderness or redness of your calf, swelling of your thigh, calf or foot. These are some of the warning signs that a blood clot has travelled to your lung: shortness of the breath, chest pain, acceleration of the cardiac rhythm.

**Hip replacement recovery:**

Most patient begin walking with weight bearing 24 hours after surgery. Your physiotherapist will assist you and teach you specific exercises to strengthen your hip and restore movement walking and other daily activities. Some discomfort with activity and at night is common for several weeks. You need to follow your surgeon instruction for a good and quick recovery. Avoid getting the wound wet until it has thoroughly healed. Stitches are removed in 15 days after surgery. A follow-up hip X-ray is needed after 6 weeks, 3 months, 6 months and 12 months after surgery. Make sure you visit your GP on your country for your hip replacement follow-up. Your surgeon will still be in contact with your surgeon by mail or by phone.
**Cost of total hip replacement:**
The cost includes: surgery, prosthesis, pre and post surgery consultations, blood tests and X-rays, hospital fees, hotel stay, physiotherapy and airport transfers.

- First hip replacement: from 5000 Euros
- Revision of hip replacement: from 6500 Euros

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**KNEE REPLACEMENT**

*Procedure:*

Total or partial replacement of knee joint is very successful surgery for patient with degenerative or inflammatory arthritis (osteoarthritis) of the knee.

It's a procedure consisting in the relining of the knee joint with artificial parts called prostheses or implants.

In total knee arthroplasty, there are three components that replace the original joint parts: femoral component, tibial component and patellar component.

In partial knee arthroplasty, only one part of the femoral joint and of the tibial joint are replaced.

*Preparation:*

A letter from your GP or your specialist doctor in your country is recommended to know your medical history, and previous treatment received or any other relevant medical details.

The following tests are carried out before coming in Tunisia: Blood tests, urine test, X-ray...
knee joints.

You need to carry out the infection foci tests: oral, dental and urine test. If there are evidence of infection, you need to treat it before your travel.

*Anaesthesia:*

Joint knee replacement is carried out under spinal anaesthesia.

*Duration:*

Total knee replacement surgery take about 2 hours.
Partial knee replacement take about 1 hour to 1 hour and half.
Revision of a knee replacement may take more than 2 hours.

*Post surgery care:*

You will be given pain killer to control pain, blood thinning medication.
Weight bearing is generally allowed 24 hours after surgery, except particular conditions.
Drain are removed in 3 days.
Physiotherapy starts immediately after surgery (continuous passive motion).
You will stay 5 to 7 days in the clinic after which you will be discharged to your hotel or a comfortable flat near the clinic, where you will get daily visits from your physiotherapist and your nurse. A minimum period of two weeks is necessary after surgery.
Knee replacement risks and possible complications:

The complication rate following knee replacement is low.

- Infection: (idem hip replacement)
- Blood clots: (idem hip replacement)

Knee replacement recovery:

Most patient begin walking with weight bearing 24 hours after surgery. Your physiotherapist will assist you and teach you specific exercises to strengthen your thigh and restore movement for walking and other dialling activities.
You may fell some numbness around the wound, you may also experience stiffness especially with excessive bending.
Take special precaution to avoid falls and participate in regular light exercise to maintain strength and mobility of the knee.
Total stay in Tunisia will be for 2 or 3 weeks.
Physiotherapy is necessary for a minimum period of 6 weeks.
Make sure on your return you visit your GP and your physiotherapist for follow-up program.
You still be in contact with your surgeon by mail or by phone.

Knee replacement cost:

The cost includes: surgery, prosthesis, pre and post surgery consultations, blood tests and X-rays, Hospital fees, hotel stay, physiotherapy and airport transfers.

- Total knee replacement: from 5200 Euros
- Partial knee replacement: from 4800 Euros
ORTHOPAEDIC SURGERY

- Revision of knee replacement: from 6500 Euros

FOOT SURGERY:

*Foot problems:

- The average person takes 8000 to 10000 steps day. Those cover several miles, and they add up to about 115000 miles in a life time; more than four times the circumference of the globe.
- Your feet mirror your global health. Such conditions as arthritis, diabetes, nerve and circulatory disorders can show their initial symptoms in the feet, so foot ailments can be your first sign of more serious medical problems.
- About 75% of people will experience foot health problems of varying degrees of severity at one time of their life.
- Women have about four times as many foot problems as men; lifelong patterns of wearing high heels often are the culprit.

*More frequent forefoot disorders:

1- *Bunions:*

Bunions are primarily a hereditary condition and most often progressively worsen throughout the life. They can affect anyone, although they are most common in women.
Bunions will usually be visibly present for many years before they become painful. A change of shoes activity, or body weight can cause previously non-painful bunions to become painful. A bunion occurs due to multiple factors which result in a mal-alignment of the bones with the big toe drifting toward the second toe. Additionally, there is an enlargement of the “bump” on the inner side of the foot, next to the big toe. As a bunion deformity progresses, the “bump” or bony enlargement increases in size. In addition, the big toe can rotate, and continues to move towards, often over-lapping or under-lapping the second toe.

When should I have my bunions corrected?
If you have any of the following problems, you feet should be evaluated:
- Calluses on the inside of the big toe
- Pain around the big toe when wearing certain shoes
- Painful calluses on the bottom of your feet
- The big toe pushing on the second toe
- Difficulty of wearing shoes or participating in activities, sports or dancing
- Increasing need to wear wider shoes

2- Hammertoes:

What’s a hammertoe: a name given to contracted, curly toes that have the shape of a hammer. These deformities can become quite uncomfortable.

Frequently the affected toe can be excessively long compared to the adjacent toe.

*How do I get hammertoe?*

Individuals get “hammering of digits” mainly due to biomechanical abnormalities during walking. Although there is an increase in occurrence with those who have flat feet, contracted toe can show up in all types of feet. Hammertoes are also increasingly common with age. Poor shoes and genetics play a role in the development of these deformities.
**How do I get rid of my hammertoes?**
Most people start treating themselves because of painful corns on top of the toe. They try corn pads, corn removers, cushioning pads, pedicures etc. The problem is structural deformity within the toe and thus the above mentioned treatments are temporary and affect only the skin.

**3- Calluses:**

Calluses are thickened, dead tissue involving the outer layer of the skin (epidermis). They are similar to corns, with the difference being their location. Calluses are located on the soles of the feet, particularly the “balls”, while corns are located on the toes. Often a callus is mistaken for a wart. A callus (like a corn) is caused by excessive pressure from underlying bones. The metatarsal bones, which are the long bones forming the “balls” of the feet, are the usual cause. These metatarsal bones can be long, rotated, enlarged or lowered in relation to the other metatarsal bones, causing excessive pressure. Abnormal weight distribution can also cause calluses. Footwear can aggravate the condition, however heredity factors and structural problems are the major cause if this bony abnormality.

To remove the callus tissue, we can first trim it with a pumice stone or regular sandpaper. Commercial acid medication or using sharp tools are not recommended to remove calluses. Shoes with thicker cushion sole may be beneficial in absorbing abnormal pressure.

If the symptoms persist, there are alternatives that permanently prevent the recurrence of the callus or corns. So the last solution may be the surgical correction of underlying bone problems like bunion, hammertoe or prominence of metatarsal bones.

**4- Severe forefoot deformities:**

Some inflammatory diseases like rheumatoid arthritis, cause complex associated foot problems such: bunions, hammertoes, and modification of the hole forefoot architecture. This lead to severe foot deformities that need many surgical corrections in one time.
Forefoot surgical procedures:

- **Bunion** (*hallux valgus*) surgery:

  - **Procedure:** We frequently use scarf technique. It associates an external release of the first metatarsal head, a bunionectomy and a longitudinal osteotomy of the first metatarsal bone. Sometimes an osteotomy of the first phalanx of the big toe is necessary.

  To stabilise osteotomies we use titanium screws and staples. This is a well proved technique that produce excellent results. The surgery may concern one foot or both feet in one time.

  - **Preparation:**

    A letter from your GP or your specialist doctor in your country is recommended to know your medical history and previous treatment received or any other relevant medical details.

    You have to carry out a photo and an X-ray of the concerned foot before your travel.

  - **Anaesthesia:**

    Bunion surgery is carried out under spinal anaesthesia.
- **Duration:**

One side bunion surgery takes about 45 min

Two side bunion surgery takes about 1 hour and a half

- **Post surgery care:**

You will be given pain killer to control the pain, and blood thinning medication.

You will stay 2 or 3 days in the clinic.

Weight bearing is allowed 24 hours after surgery with a special footwear.

A minimum period of 5 to 7 days is necessary in Tunisia after surgery.

- **Bunion surgery risks and possible complications:**

Complications rate after bunion surgery is very low.

* Infection is very rare

* Blood clots (deep vein thrombosis): are possible but rare.

Your surgeon may prescribe you a prevention program including blood thinning medication. Notify your doctor if you notice any adverse effects.
one or more of the following symptoms: pain in your calf or leg, tenderness or redness of your calf, swelling of your thigh, calf or foot.

* The more frequent problem after bunion surgery is swelling that may persist several weeks or months. For this reason, when resting you have to keep your Foot up at the same height as your waist (or when sitting you may rest your foot on a chair, small Table or pillows). Using an ice pack over the bandages during the first 3 days after surgery is also very useful.

- **Bunion surgery recovery:**

  Weight bearing is allowed 24 hours after surgery. with special footwear.

  First bandage is changed 5 days after surgery.

  You’re your own physiotherapist! You have to do slow movements of big toe joints with your hands.

  For the first month, you must walk for only short distances wearing your surgical shoes. It’s not necessary to stay in bed.

  A follow-up X-ray is needed 6 weeks after surgery.

  Make sure you visit your GP on your return to your country.
Your surgeon still be in contact with you by mail or by phone.

*Cost of surgical forefoot procedures:*

The cost includes: surgery, screws and staples, pre and post surgery consultations, blood tests and X-rays, hospital fees, hotel stay, physiotherapy, airport transfers.

- Bunion surgery: one side: from 1500 euros

- Bunion surgery: two sides: from 2300 euros

- Severe forefoot deformity: one side: from 2500 euros

- Severe forefoot deformity: two sides: from 3500 euros