



**Anatomy:** dissection, knowledge of the construction and composition of the body

**orthopedics:** the specialization that focuses on the treatment of abnormalities, diseases and traumatic damage to the musculoskeletal system

**Surgery:** medical science

**Analgesic:** painkiller

**Anesthesia:** the desensitization (by narcosis, administration of an anesthetic or analgesic)

**Artroplasty:** surgery to improve a deformed joint

**Arthritis:** degenerative joint disease, this is wear and tear of the joint due to cartilage loss

**Degeneration:** degeneration, wear

**Cartilage:** smooth, shimmering layer covering the ends of the bones

**THP:** Total hip prosthesis

**Artificial knee:** Total knee replacement

**Sport hip:** Is often used as a synonym for resurfacing hip replacement. The term sport hip, however, is not well chosen because one can also exercise with a classic hip replacement.

**Blood transfusion:** giving a quantity of red blood cells that ensure the transport of oxygen in the body.

**Resurfacing:** type of hip replacement, in contrast to the classic total hip replacement, the neck of the femur is retained

**Femur:** thigh bone

**Pelvis:** consists of 2X3 bones (ilium, ischium and pubis)

## Dictionary & abbreviations

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**Sacrum:** A triangular bone in the lower back formed from fused vertebrae and situated between the two hip bones of the pelvis

**Coccyx:** A small triangular bone at the base of the spinal column in humans

**Acetabulum:** The socket of the hip bone, into which the head of the femur fits.

**LMWH :** Low Molecular Weight Heparin, syringes that you get for 6 weeks in the subcutaneous fat fold to prevent phlebitis after a THP

**Phlebitis :** venous inflammation resulting in thrombosis

**Trombosis:** formation of a blood clot or blood clot in a blood vessel

**Vein:** carrying in oxygen-depleted blood towards the heart

**Artery:** by which blood (which has been oxygenated) is conveyed from the heart to all parts of the body

**Luxation :** dislocation; during hip dislocation, the hip head comes out of the hip socket

**Infection :** contamination of an organism (human) with germs; infection  $\neq$  inflammation

**Germs:** collective name for bacteria, viruses, fungi

**Bacteria:** single-cell microorganism of the order of 0.1-10 $\mu$ m

**Virus:** infectious biological unit without cell structure in contrast with bacteria

**Anti-inflammatories:** NSAID

**Inflammation:** tissue reaction to a harmful stimulus, this is classically characterized by 5 signs: redness, swelling, heat, pain and impaired function. Everyone who undergoes surgery will do some kind of inflammatory reaction as a result of the operation itself. This is completely normal and is treated with ice application and adjusted medication that you will receive the first days after the operation to minimize the nuisance of the inflammation.

**NSAID:** Non Steroïdal Anti Inflammatory Drug; this means that the medicine works anti-inflammatory but does not belong to the cortisone family.

**Cortisone:** a natural substance that normally occurs in the body and is produced by the adrenal gland; also exists as a medicine and works anti-inflammatory

**PAO:** Para-articular ossification of bone formation in the vicinity of the joint

**Epidural anesthesia:** numbing by injecting an anesthetic into the epidural space

**Epidural space:** the space between the dura mater and the side of the spinal canal

**Dura mater:** the outer, hard spinal cord membrane

**Narcosis :** reversible state of general anesthesia and unconsciousness, deliberately induced by medication

**Nausea :** sickness

**TED socks :** Trombo Embolism Deterrent socks, elastic socks worn by patients after an operation to prevent thrombosis or an embolism.

## Dictionary & abbreviations

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**Aseptic necrosis or osteonecrosis :** localized bone death due to poor blood supply to an area of bone

**Osteofyt:** small, irregular bone growth in the vicinity of a joint secondary to osteoarthritis

**Dysplasia :** abnormal development

**Congenital hipdysplasia:** congenital malformation of the hip joint with a tendency to develop poorly

**CDH:** Congenital Dysplasia of the Hip

**Snapping hip:** hip joint that gives a crackling sound when a tendon glides over a bone end

**Infusion:** intravenous administration of fluid and / or medication, without pressures other than gravity

**Intravenous:** in a vein

**Brackets:** The skin is closed with hooks that can be easily removed 14d after the procedure

**ECG:** Electrocardiogram. Registration of the electrical activity of the heart

**RX Thorax:** radiography of the lungs

**Lungembolism:** an embolism that is stuck (blood clot) in a blood vessel of the lungs

**Recovery:** awakening room where you are observed a few hours after the surgery before returning to your room

**Drain of Redon:** flexible plastic hose that is left behind in an operating area, with a vacuum bottle at the other end.

**Coxarthrosis:** wear of the hip joint

**Joint capsul:** casing of the joint

**Labrum:** Spherical shore around the hip bowl

**Synovium:** synovial membrane; a membrane that coats the joint capsule and secretes synovia

**Synovia:** Joint liquid

**Trochanter:** leg extension of the femur

**Revision:** re-surgery

**rheumatism:** an inflammatory process of muscles and joints

**Artificial pan:** acetabular component of the hip replacement that is clamped in the pelvis

**Prosthesis stem:** femoral component of the hip prosthesis that is clamped in the femur

**Stainless steel:** The term steel refers to a family of alloys consisting of iron and carbon. By, among other things, varying the carbon content, steels with many different properties can be manufactured. When Chromium is associated with levels higher than 12%, it will disappear typically rusting and stainless steel will be obtained. Again there are different types of stainless steel. For surgical implants, the 316L alloy is mainly used, which also contains Nickel and Molybdenum in addition to Chromium. The L means that the carbon content is kept low for better resistance to corrosion.

**Cobalt alloys:**

In the 1930s these alloys were introduced to manufacture orthopedic implants because they were more resistant to corrosion than the stainless steels at that time.

**Titanium alloys:** An alloy that has been used since the sixties for the production of prosthetic material. This material was originally introduced because it is extremely resistant to corrosion and because it does not contain Cobalt, Chromium or Nickel. In other words, it is extremely biocompatible. Later on, another advantage became clear: the stiffness of titanium alloys is half of Cr / Co alloys or stainless steel and thus comes closer to the stiffness of bone. This also prevents the phenomenon of stress-shielding.

**Biocompatible:** this means that there are no rejection reactions by the body

**Bioinertic:** this means that there are no rejection reactions by the body

**Beencement:** The most frequent form is PMMA bone cement. PMMA stands for Polymethyl Methacrylate. This is a polymer with the same basic composition as Plexiglas. PMMA was discovered as biocompatible material when the plexiglass, which was used for windscreens of aircraft, came into the eyes of pilots and did not cause an immune response of the body. The first applications were in dentistry. In the 1960s it was introduced to fix orthopedic implants in the bone. It was mainly the orthopedic surgeon Sir John Charnley who announced the use of cement worldwide.

**Ultrahigh Molecular Weight PolyEthylene:**

UHMWPE is a thermoplastic polymer that is bioinertic in large form. The medical application of PE is only a small fraction of the much larger industrial application. UHMWPE was commercially introduced in 1955 and used for the first time in hip prostheses in 1963.