

Understanding Orthopedic Surgery: Procedures, Risks and Recovery

Lilach Soreq*

Department of Physical Therapy, Beni-Suef University, Beni Suef, Egypt

Short Communication

Received: 20-Feb-2023,

Manuscript No. JMAHS-23-94235;

Editor assigned: 23-Feb-2023, Pre QC No. JMAHS-23-94235 (PQ);

Reviewed: 09-Mar-2023, QC No.

JMAHS-23-94235; **Revised:** 16-

Mar-2023, Manuscript No.

JMAHS-23-94235 (R); **Published:**

27-Mar-2023, DOI:

10.4172/2319-9865.12.1.007.

***For Correspondence:**

Lilach Soreq, Department of

Physical Therapy, Beni-Suef

University, Beni Suef, Egypt

E-mail: l.soreq@ucl.ac.uk

Citation: Soreq L, Understanding

Orthopedic Surgery: Procedures,

Risks and Recovery.

2023;12:007.

Copyright: © 2023 Soreq L. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

ABOUT THE STUDY

Orthopedic surgery or orthopedics is the branch of surgery concerned with musculoskeletal conditions. Orthopedic surgeons treat musculoskeletal trauma, spine diseases, sports injuries, degenerative diseases, infections, tumours, and congenital disorders using both surgical and nonsurgical methods. This type of surgery can help patients with conditions such as fractures, arthritis, and sports injuries. In this article, we will discuss the most common orthopedic procedures, risks associated with surgery, and the recovery process.

Common orthopedic procedures

Joint replacement surgery: This procedure replaces a damaged joint with an artificial one. The most common joints that are replaced are the hip, knee, and shoulder. When less invasive therapies fail to relieve severe joint pain or dysfunction, joint replacement is considered as a treatment option ^[1]. It is a type of arthroplasty that is frequently

indicated for various joint diseases such as osteoarthritis and rheumatoid arthritis. Joint replacement surgery has become more common, with knees and hips being the most commonly replaced.

Arthroscopy: This is a minimally invasive procedure that allows the surgeon to visualize and operate on the joint using small incisions and a camera. The advantage of this procedure over traditional open surgery is that the joint does not have to be completely opened up. Only two small incisions are made for knee arthroscopy, one for the arthroscope and one for the surgical instruments to be used in the knee cavity. Because there are fewer traumas to the connective tissue, this reduces recovery time and may increase the rate of success. Because of the smaller incisions, it has gained popularity due to evidence of faster recovery times and less scarring. Irrigation fluid (usually 'normal' saline) is used to dilate the joint and create a surgical space [2].

Fracture repair: This procedure involves the realignment of broken bones and the use of plates, screws, and pins to hold them in place. In general, bone fracture treatment involves a doctor reducing (pushing) displaced bones back into place with or without anaesthesia, stabilising their position to aid union, and then waiting for the bone's natural healing process to occur. Adequate nutrient intake has been shown to have a significant impact on fracture repair integrity. Healing is influenced by age, bone type, drug therapy, and pre-existing bone pathology. The role of bone healing is to produce new bone without leaving a scar, which would be a structural weakness or deformity in other tissues.

Spinal fusion: This procedure joins two or more vertebrae in the spine using bone grafts and metal rods or screws. There are several types of spinal fusion techniques, and each one involves the use of bone grafting either from the patient (autograft), a donor (allograft), or artificial bone substitutes to help the bones heal together. Additional hardware (screws, plates, or cages) is frequently used to hold the bones in place while the graft connects the two vertebrae. Fluoroscopy, navigation systems, and robotics can all be used to guide the placement of hardware. Spinal fusion is most commonly used to relieve pain and pressure caused by mechanical pain in the vertebrae or on the spinal cord caused by the wear and tear of a disc. It is also used as a backup procedure for total disc replacement surgery (intervertebral disc arthroplasty) if patient anatomy precludes replacement of the disc [3].

Soft tissue repair: This procedure is used to repair torn ligaments or tendons. Soft tissue repair is a common procedure in orthopedic surgery for repairing torn ligaments or tendons [4,5]. This type of surgery can help patients with conditions such as rotator cuff tears, Achilles tendon ruptures, and Anterior Cruciate Ligament (ACL) tears. In this article, we will discuss the types of soft tissue repair procedures, risks associated with surgery, and the recovery process.

Risks associated with surgery

All surgeries come with risks, and orthopedic surgery is no exception. Some of the risks associated with orthopedic surgery include:

1. **Infection:** The risk of infection is higher in orthopedic surgery due to the large incisions and the use of implants.
2. **Blood clots:** Patients who undergo joint replacement surgery are at a higher risk of developing blood clots in the legs.
3. **Nerve damage:** There is a risk of nerve damage during surgery, which can lead to numbness or weakness in the affected area.
4. **Anesthesia complications:** Patients may experience complications related to anesthesia, such as nausea or allergic reactions.

Recovery process

The recovery process for orthopedic surgery varies depending on the procedure. However, there are some general guidelines that patients can follow:

1. **Pain management:** Patients will be given pain medication to manage their discomfort. It is important to take this medication as directed.
2. **Physical therapy:** Depending on the procedure, patients may need to undergo physical therapy to regain strength and mobility in the affected area.
3. **Follow-up appointments:** Patients will need to attend follow-up appointments with their surgeon to monitor their progress and ensure that they are healing properly.
4. **Lifestyle changes:** Patients may need to make lifestyle changes, such as avoiding certain activities or losing weight, in order to reduce the risk of complications and improve their overall health.

Orthopedic surgery can be a life-changing procedure for patients with skeletal and joint problems. However, it is important to understand the risks associated with surgery and to follow the recovery process carefully. By working closely with their surgeon and following their recommendations, patients can achieve a successful outcome and regain their quality of life.

REFERENCES

1. Cucinotta D, et al. WHO declares COVID-19 a pandemic. *Acta BioMed.* 2020; 91:157-160.
2. Sahu P. Closure of universities due to coronavirus disease 2019 (COVID-19): impact on education and mental health of students and academic staff. *Cureus.* 2020;12:e7541.
3. UNESCO. COVID-19 educational disruption and response. 2020.
4. Plummer L, et al. Teaching online during the COVID-19 pandemic: a phenomenological study of physical therapist faculty in Brazil, Cyprus, and the USA. *Educ Sci.* 2021;11:130.
5. El-Sayad G, et al. How higher education students in Egypt perceived online learning engagement and satisfaction during the COVID-19 pandemic. *J Comput Educ.* 2021;8:527-550.