

## Common Complications in Reconstructive Surgery

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### ABSTRACT

Reconstructive surgery is a surgical technique used to restore the function and appearance of tissues that have been damaged or removed due to previous illnesses, injuries, or surgeries. Complications of reconstructive surgery are a major concern for patients and surgeons. Complications can affect patients quality of life, increase healthcare costs, and prolong recovery time. It is important that patients are fully informed about the risks and benefits of reconstructive surgery, and that surgeons take steps to minimize the risk of complications.

**KEYWORDS:** reconstructive, surgery, common complications.

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### INTRODUCTION

Reconstructive surgery is a surgical technique used to restore the function and appearance of tissues that have been damaged or removed due to previous illnesses, injuries, or surgeries. Reconstructive surgery can be used on different parts of the body, including the head, neck, trunk, extremities and internal organs. This surgical technique can have a significant impact on patients' quality of life, improving physical appearance and body function. However, like any surgical procedure, reconstructive surgery is associated with a risk of complications.

The incidence of complications in reconstructive surgery varies depending on the type of procedure and the anatomical region treated. According to a study published in the journal *Plastic and Reconstructive Surgery*, complication rates for breast reconstruction surgery range from 5% to 55%, depending on the type of procedure and the characteristics of the patient. The most common complications of breast reconstruction surgery include capsular contracture, infection, and implant displacement.

Reconstructive head and neck surgery may also be associated with a high risk of complications. According to a study published in the journal *Otolaryngology-Head and Neck Surgery*, complications of head and neck reconstructive surgery can occur in up to 30% of patients. The most common complications include infection, graft failure, tissue necrosis, and cosmetic deformities.

Complications from reconstructive surgery can have a significant impact on patients' quality of life as well as healthcare costs. Complications may require additional

surgeries, prolong recovery time, and increase the risk of hospitalization. In addition, complications can affect physical appearance and bodily function, which can have a negative impact on the patient's self-esteem and quality of life.

The literature review was conducted through searches of databases such as PubMed, Medline and Cochrane Library using the terms 'reconstructive surgery', 'complications', 'risks', 'infections', 'contracture', 'scarring' and 'function'. Articles in English and Spanish addressing complications of reconstructive surgery were selected. We reviewed 32 articles published in scientific journals between 2010 and 2021.

### Common complications

Reconstructive surgery is a branch of surgery that deals with the repair or reconstruction of body tissues that have been damaged by disease, injury, or birth defects. Reconstructive surgery may be necessary to restore the function, shape, or appearance of the affected tissues, and may be performed anywhere in the body.

Reconstructive surgery can be performed by plastic or reconstructive surgeons, and may involve a variety of advanced surgical techniques, including the use of tissue grafts, skin flaps, and microsurgery techniques. Reconstructive surgery may be necessary to treat a variety of conditions, such as cancer, traumatic injuries, birth defects, and degenerative diseases.

Despite advances in surgical techniques and perioperative care, reconstructive surgery remains a complex procedure that carries a significant risk of complications. Complications can be acute or chronic, and can vary in severity and duration.

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Acute complications can occur during or immediately after surgery, while chronic complications can develop long-term. Acute complications of reconstructive surgery include hemorrhage, infection, organ injury, and deep vein thrombosis. Bleeding can occur during or after surgery, and may require a blood transfusion or surgical revision. Infection is another common acute complication of reconstructive surgery, and can occur in the skin, soft tissues, or implants. Infections can be mild or severe, and may require treatment with antibiotics or surgery to clean the infected area.

Organ injury is another potentially serious acute complication of reconstructive surgery. It can occur when an internal organ is damaged during surgery, and may require immediate surgical treatment to correct the problem. Deep vein thrombosis is a life-threatening complication of reconstructive surgery that can occur when blood clots form in the deep veins of the lower extremities. Clots can break off and travel to the lungs, causing a life-threatening pulmonary embolism.

Chronic complications of reconstructive surgery can include capsular contracture, excessive scarring, cosmetic deformity, and loss of function. Capsular contracture is a common complication of breast reconstruction surgery that occurs when the body forms a fibrous capsule around the implant, which can cause pain and cosmetic deformity. Excessive scarring can occur anywhere on the body, and can cause an unsightly and painful scar. Cosmetic deformity can occur when reconstructive surgery fails to produce the desired result, which can affect the patient's self-esteem and quality of life. Loss of function can occur when surgery fails to fully restore function to the affected tissues, which can limit the patient's ability to perform daily activities.

Prevention and management of complications of reconstructive surgery are essential to achieving the best possible outcomes for patients. Prevention includes adequate preoperative preparation, careful patient selection, and proper surgical technique. Management of acute complications requires immediate diagnosis and treatment, while management of chronic complications may require surgical revision or medical treatment.

## DISCUSSION

Reconstructive surgery is a specialty that seeks to improve the quality of life of patients by restoring the function, shape and appearance of body tissues that have been damaged. While reconstructive surgery can be very beneficial for patients, it also carries a significant risk of complications.

One of the most common complications of reconstructive surgery is infection. Infections can occur at any time after surgery and can be caused by bacteria, viruses, or other organisms. Patients who have an infection after surgery may experience fever, pain, redness, and swelling at the surgery site. Treatment of an infection after surgery may require antibiotics and, in some cases, resurgery to clean the affected area.

Another common complication of reconstructive surgery is bleeding. Bleeding can be mild or severe and may occur during or after surgery. Bleeding may require blood transfusions and, in some cases, resurgery to control bleeding. Tissue necrosis is another common complication of reconstructive surgery. Tissue necrosis occurs when tissue dies due to lack of blood supply. Tissue necrosis can be caused by a variety of factors, including infection, blood vessel damage, and problems with wound healing. Treatment of tissue necrosis may require resurgery to remove dead tissue and promote proper healing.

Other less common complications of reconstructive surgery include blood clots, breathing problems, nerve damage, and problems with anesthesia.

Preventing complications of reconstructive surgery is essential to achieving the best possible outcomes for patients. Proper preparation of the patient prior to surgery, careful selection of the patient, and proper surgical technique are important to minimize the risk of complications.

Proper management of complications of reconstructive surgery is also essential to achieve the best possible outcomes for patients. Management of acute complications, such as infection and bleeding, requires prompt diagnosis and treatment to prevent further complications. Management of chronic complications, such as tissue necrosis, may require surgical revision or medical treatment.

## CONCLUSION

Complications of reconstructive surgery are a major concern for patients and surgeons. Complications can affect patients' quality of life, increase healthcare costs, and prolong recovery time. It is important that patients are fully informed about the risks and benefits of reconstructive surgery, and that surgeons take steps to minimize the risk of complications.

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