

# **Before You Consider Cosmetic or Plastic Surgery**

The Aesthetic Center by Kaiser Permanente offers a full range of services to help improve your appearance. Surgeries are one of the solutions, but we also offer alternative means to take care of loose skin and fatty deposits. Diet and exercise programs may help reduce excess body fat and improve the contour of your body. However, these alternative treatment methods also have risks and potential complications.

The Aesthetic Center by Kaiser Permanente wants you to know cosmetic surgery and plastic surgery are like any other major surgical procedures. Every surgical procedure involves a certain amount of risk and it is important that you understand these risks and the possible complications associated with them. In addition, every procedure has limitations. An individual's choice to undergo a surgical procedure is based on the comparison of the risk to potential benefit. A patient's obesity (BMI over 30) may have a negative impact on cosmetic outcome as well as higher risk when undergoing surgery.

Although the majority of patients do not experience these complications, your Kaiser Permanente plastic surgeon would be glad to discuss them with you to make sure you understand all possible consequences.

The following is a list of general risks associated with surgery you should be aware of so that you may know what to watch for. The risks should not alarm you nor should you dismiss their importance. Please take a few moments to review these risks and ask a Kaiser Permanente surgeon to provide more details or clarification.

## **General Risks of Surgery**

#### **Pain**

You will experience pain after your surgery. Pain of varying intensity and duration may occur and persist after surgery. If you are a chronic pain patient followed by a Pain Therapy Practitioner, you may be asked to see this practitioner preoperatively to assist you in the management of your pain disorder in the post-operative period. Chronic pain may occur very infrequently from nerves becoming trapped in scar tissue or due to tissue stretching.

There are nerve endings that may become involved with healing scars from surgery. While there may not be a major nerve injury, the small nerve endings during the healing period may become too active producing a painful or oversensitive area due to the small sensory nerve involved with scar tissue. Often, massage and early non-surgical intervention resolves this. It is important to discuss post-surgical pain with your surgeon.

#### Seroma

Fluid may accumulate between the skin and the underlying tissues following surgery, trauma or vigorous exercise which is referred to as a seroma. A seroma can be the most common complication following an Abdominoplasty. You may notice an increase in your abdominal girth, localized swelling or a shape change that should alert you that a seroma may have occurred in your post-operative period. Seromas should be addressed to prevent an unfavorable outcome. Should this problem occur, notify your surgeon and additional procedures for drainage of fluid may be required.

#### Bleeding

It is possible, though unusual, to experience a bleeding episode during or after surgery. Should post-operative bleeding occur, it may require emergency treatment to drain accumulated blood or you may require a blood transfusion, though such occurrences are rare. The collection of blood that can occur under your skin following surgery is referred to as a hematoma. Increased activity too soon after surgery can lead to increased chance of bleeding and additional surgery. It is important to follow postoperative instructions and limit exercise and strenuous activity for the instructed time. Non-prescription "herbs" and dietary supplements can increase the risk of surgical bleeding. Hematoma can occur at any time, usually in the first three weeks following injury to the operative area. If blood transfusions are necessary to treat blood loss, there is the risk of blood-related infections such as hepatitis, although this is very rare. Your surgeon may provide medications after your surgery to prevent blood clots. Medications that are used to prevent blood clots in veins can produce bleeding and decreased blood platelets.

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## **Healing Issues**

Certain medical conditions, dietary supplements and medications may delay and interfere with healing. Patients with massive weight loss may have a healing delay that could result in the incisions coming apart (partial wound dehiscence), infection, and tissue changes resulting in the need for additional medical care, surgery, and prolonged hospitalizations. Patients with diabetes or those taking medications such as steroids on an extended basis may have prolonged healing issues.

Smoking will cause a delay in the healing process, often resulting in the need for additional surgery. It is vital that patients quit smoking at least four weeks prior to surgery and keep from smoking until four weeks after surgery. There are general risks associated with healing such as swelling, bleeding, possibility of additional surgery, prolonged recovery, color changes, shape changes, infection, not meeting patient goals and expectations, and added expense to the patient. There may also be a longer recovery due to the length of surgery and anesthesia.

Patients with significant skin laxity (patients seeking facelifts, breast lifts, abdominoplasty, and body lifts) will continue to have the same lax skin after surgery. The quality or elasticity of skin will not change and recurrence of skin looseness will occur at some time in the future, quicker for some than others. There are nerve endings that may become involved with healing scars from surgery such as suction-assisted lipectomy, abdominoplasty, facelifts, body lifts, and extremity surgery. While there may not be a major nerve injury, the small nerve endings during the healing period may become too active producing a painful or oversensitive area due to the small sensory nerve involved with scar tissue. Often, massage and early non-surgical intervention resolves this. It is important to discuss postsurgical pain with your surgeon.

#### Infection

Infection, although uncommon, can occur after surgery. Should an infection occur, additional treatment including antibiotics, hospitalization, or additional surgery may be necessary. It is important to tell your surgeon of any other infections, such as a history of MRSA infections, an open wound, recent upper respiratory infection/pneumonia, ingrown toenail, insect bite, tooth abscess, or urinary tract infection. Infections in other parts of the body, may lead to an infection in the operated area. Post-operative infections often result in more extensive scarring and predispose to revision surgery.

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The return of bowl function following surgery is important. An ileus are disruptions in bowl function caused by the failure of peristalsis or hypomobility of your bowls/ gut resulting in a lack of defecation and possibly repeated vomiting Medications like pain medications given to you at the time of surgery can contribute to the development of an ileus in the post-operative period. An ileus can result in abdominal distention, vomiting, inability to absorb oral medications and possibly hospitalization. Repeated vomiting could result in an aspiration pneumonia and respiratory failure.

## **Delayed Healing**

Wound disruption or delayed wound healing is possible. Some areas of the skin may not heal normally and may take a long time to heal. Areas of skin may die. This may require frequent dressing changes or further surgery to remove the non-healed tissue. Individuals who have decreased blood supply to tissue from past surgery or radiation therapy may be at increased risk for wound healing and poor surgical outcome. Smokers have a greater risk of skin loss and wound healing complications.

#### **Firmness**

Excessive firmness can occur after surgery due to internal scarring. The occurrence of this is not predictable. Additional treatment including surgery may be necessary.

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#### **Skin Loss**

Partial or full thickness skin loss or tissue necrosis can occur following certain surgeries. This can be most common in what are referred to as "water shed areas' where blood perfusion can be less than optimal. Medical conditions and medications can also compromise blood flow. Should you develop tissue necrosis or skin loss additional surgical procedures are likely to be required for debridement and to close the wound. Once healed revisional surgery may be required.

## Scarring

All surgery leaves scars, some more visible than others. Although good wound healing after a surgical procedure is expected, this surgery will result in long, prominent scars that are permanent. Abnormal scars may occur within the skin and deeper tissues. Scars may be unattractive and of different color than the surrounding skin tone. Scar appearance may also vary within the same scar. Scars may be asymmetrical (appear different on the right and left side of the body). There is the possibility of visible marks in the skin from sutures. These scars may become raised, red, or discolored in the first few weeks - months, but usually settle down over time. However, some patients are prone to "hypertrophic" or "keloid" scars i.e. prominent, raised, red scars that do not settle. Further treatments with medications and/or surgery may be required.

#### **Fat Necrosis**

Fatty tissue found deep in the skin might die. This may produce areas of firmness within the skin. Additional surgery to remove areas of fat necrosis may be necessary. There is the possibility of contour irregularities in the skin that may result from fat necrosis.

## Possible Hernia Repair

At the time of your surgery, your surgeon may identify a hernia (i.e. incisional, groin, umbilical, etc.) It is your best interest that your hernia be repaired at the time of your abdominoplasty if possible.

## **Major Wound Separation**

Wounds may separate after surgery. Should this occur, additional treatment including surgery and even hospitalization may be necessary.

## **Revision Surgery**

Every effort is made for you to have a favorable outcome but, unforeseen events can occur that may require revsional surgery. Patients with multiple medical problems, massive weight loss patients, smokers, patients that develop infections in the post-operative period and other high-risk patients have a greater propensity to require revisional surgery. Issues that could need to be addressed in the post-operative period include but are not limited to dog ears, asymmetry, contour irregularities, folds, wrinkles, loose skin, umbilical malposition or loss, and pubic distortion.

## Venous Thrombosis (Clot) and Sequelae

Thrombosed veins, which resemble cords, occasionally develop around IV sites, and usually resolve without medical or surgical treatment. Abdominoplasty can be associated with an increased risk for Deep Venous Thrombosis (DVT (DVT) and Pulmonary Embolus (PE)). Often a screening process is conducted to determine if you are at increased risk for DVT/ PE. Measures can be taken at the time of your abdominoplasty to prevent such events from occurring. It is important to discuss with your surgeon if you or your family have a history of DVT/ PE. Certain high estrogen pills, obesity, history of cancer, history of inflammatory bowel disease, etc. may increase your risk of thrombosed veins and the development of DVT/PE.

## **Skin Sensitivity**

Itching, tenderness, or exaggerated responses to hot or cold temperatures may occur after surgery. Usually this resolves during healing, but in rare situations it may be chronic.

#### **Sutures**

Most surgical techniques use deep sutures. You may notice these sutures after your surgery. Sutures may spontaneously poke through the skin, become visible or produce irritation that requires suture removal.

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## **Cardiac and Pulmonary Complications**

Pulmonary complications may occur secondarily to blood clots (pulmonary emboli), fat deposits (fat emboli), pneumonia, or partial collapse of the lungs after general anesthesia. Pulmonary emboli can be life-threatening or fatal in some circumstances. Inactivity and other conditions may increase the incidence of blood clots traveling to the lungs causing a major blood clot that may result in death. It is important to discuss with your physician any past history of swelling in your legs or blood clots that may contribute to this condition. Cardiac complications are a risk with any surgery and anesthesia, even in patients without symptoms. If you experience shortness of breath, chest pains, or unusual heart beats, seek medical attention immediately. Should any of these complications occur, you may require hospitalization and additional treatment.

## **Damage to Deeper Structures**

There is the potential for injury to deeper structures including nerves, blood vessels, lymphatics, muscles, and lungs (pneumothorax) during any surgical procedure. The potential for this to occur varies according to the type of procedure being performed. Injury to deeper structures may be temporary or permanent.

#### Shock

In rare circumstances, your surgical procedure can cause severe trauma, particularly when multiple or extensive procedures are performed. Although serious complications are infrequent, infections or excessive fluid loss can lead to severe illness and even death. If surgical shock occurs, hospitalization and additional treatment would be necessary.

#### Surgical Anesthesia

Both local and general anesthesia involves risk. There is the possibility of complications, injury, and even death from all forms of surgical anesthesia or sedation.

## **Allergic Reactions**

In rare cases, local allergies to tape, suture material and glues, blood products, topical preparations or injected agents have been reported. Serious systemic reactions including shock (anaphylaxis) may occur in response to drugs used during surgery and prescription medicines. Allergic reactions may require additional treatment. It is important to notify your physician of any previous allergic reactions.

#### **Drug Reactions**

Unexpected drug allergies, lack of proper response to medication, or illness caused by the prescribed drug are possibilities. It is important for you to inform your physician of any problems you have had with any medication or allergies to medication, prescribed or over the counter, as well as medications you now regularly take. Provide your surgeon with a list of medications and supplements you are currently taking.

## **Surgical Wetting Solutions**

There is the possibility that large volumes of fluid containing dilute local anesthetic drugs and epinephrine that is injected into fatty deposits during surgery may contribute to fluid overload or systemic reaction to these medications. Additional treatment including hospitalization may be necessary.

#### Fat/Air Embolism

In rare cases, fat particles or air can enter the vascular system and can travel to the heart, lungs or brain. This can result in significant complications including death.

## Persistent Swelling (Lymphedema)

Persistent swelling can occur following surgery.