Incisional Hernia

What is a hernia? A hernia is a protrusion of an internal organ - usually intestine or fatty tissue inside the abdomen - through an opening in the muscular wall of the abdomen. Common hernias include inguinal and femoral (groin), umbilical (navel), and incisional (occurring through previous surgical incisions). This discussion will focus on incisional hernias, although many principles pertain to all of the above.

Incisional hernias by definition occur through a previous surgical incision. Incisional hernias are most commonly seen following Cesarean section, hysterectomy, and other gynecological operations; colon resections and other gastrointestinal surgery; and explorations for traumatic injuries. However, they may occur following any abdominal operation. The development of an incisional hernia does not imply that the previous operation was not performed properly. There are several factors in any abdominal surgery which can increase the risk of development of an incisional hernia. They include: wound infection, extensive postoperative coughing due to lung problems, obesity, nutritional impairment, or systemic conditions, such as diabetes, cancer, advanced age and others. In most cases of incisional hernia however, there is no apparent specific cause in the patient's history. Mechanically, incisional hernias are caused when the muscular and connective tissues of the abdominal wall do not heal properly when sutured together. It is not a sudden tearing or rupture, but rather a gradual thinning and separation of the tissues over months of healing.

Most incisional hernias present as a bulge at or near a surgical scar. It may be directly under the scar, or it may be to one side of the old incision. In many cases, there may be more than one bulge, as incisional hernias may be single or multiple. Many incisional hernias are painless, while others may present with varying degrees of discomfort. Outright pain is less common. Incisional hernias are usually not evident within weeks or a few months after the healing after an operation, but rather usually present six months or a year later. While less likely, it is possible for incisional hernias to first present many years or even decades after an operation.

Incisional hernias are different from naturally occurring hernias in that the indication for surgical repair is not just their presence alone. Rather, the common indications for repair are either noticeable enlargement over time, which is common, or disabling discomfort or pain, which is less common. Incarceration or strangulation is less common with incisional hernias than in naturally occurring hernias, and as such incisional hernias do not provide a common indication for surgery. There is no effective non-surgical treatment for incisional hernias. In the case of very large incisional hernias, an elastic abdominal binder may provide some temporary relief of discomfort. It is questionable whether or not it can slow the inevitable enlargement process. Clearly, taking medication will not improve an incisional hernia.
There are two basic methods for repairing incisional hernias - open and laparoscopic. Each method has its advantages and disadvantages, as well as preferences among surgeons. We use both methods, depending upon the circumstances. Generally, small incisional hernias may be repaired open, with or without mesh. Laparoscopic repairs all utilize mesh. Larger incisional hernias are more commonly repaired laparoscopically. Incisional hernia repair is usually performed using general anesthesia.

In the open technique, the incision for the hernia repair will usually follow the old scar. Depending on the hernia, either a portion of the scar may be opened or the incision may be extended beyond the previous scar. Occasionally, it is more effective to make a separate, new incision. The hernia sac and its contents will be returned to the abdominal cavity and the defect in the abdominal wall will be repaired. Smaller incisional hernias can be repaired with sutures. Larger or multiple hernias are best repaired with the addition of non-absorbable mesh. If the hernia is large, a drain may be placed in order to decrease the possibility of seroma formation. In most cases, the drain will be removed prior to discharge from the hospital. The time for the operation varies with the size of the hernia, ranging from less than an hour for smaller hernias to 2 or 3 hours in the case of very large hernias.

In laparoscopic repairs, the old incision is not opened. Rather, small tubes, called trocars, are inserted into the abdomen. The laparoscope (a video camera) and specialized instruments are placed through the ports to perform the operation. Inside the abdomen, the contents of the hernia, bowel or fat, are returned to the abdominal cavity. A piece of mesh is chosen to fit the hernia defect in the abdominal wall. The mesh is placed into the abdomen through one of the trocars. It is attached to the underside of the abdominal wall by both sutures and tacks and completely covers the hernia defect. The trocars are removed and the half-inch incisions closed. The hernia sac itself is left in place, and will eventually shrivel and essentially disappear. Often, it can fill with clear fluid (seroma), which will usually reabsorb on its own and does not usually require needle-aspiration.

With smaller incisional hernia repairs, you may return home a few hours after the surgery. Larger hernia repairs, either open or laparoscopic usually require a hospital stay of 2 to 4 days. Long-acting local anesthetic will keep you comfortable the first 4 to 6 hours. Once it wears off, you may have some discomfort. The amount of discomfort after incisional hernia repair varies with the size of the hernia, and thus the extent of the surgery.

Oddly, postoperative pain or discomfort does not vary much between open and laparoscopic repair. Both are about equally sore for 2-3 days, and then minimally after that. It also varies a great deal from patient to patient. The majority of patients have very modest pain. Only a smaller percentage have more significant post-op pain. Whatever level of discomfort is experienced, it goes away rapidly. Most patients take pain medicine while in the hospital, but once out, many just take some over-the-counter medicine like Tylenol, Advil, Motrin, generic ibuprofen, etc.
The dressing should be kept dry and remain in place for 24 hours. After one day, it should be removed, and then you may shower and wash right on the surgical site. Complete immersion such as in a bath or swimming should not be done until after your first post-op office visit 10-14 days after the operation.

Most patients are back to work in 1-2 weeks, except for larger hernias. You may walk as much as you like immediately after surgery, including stairs, although you should climb slowly and infrequently the first few days. You may drive within 2 or 3 days, once you are no longer using narcotic pain medication and once you feel loose and comfortable to be able to safely control a car. You may lift up to 20 lbs, if you can do so comfortably and without straining. A post-op office visit should be made for about 10 to 14 days after surgery. After that visit you may travel, including overseas.

Once you are a month to six weeks after the operation, you may gradually progress to full unlimited activities, including sports and heavier lifting, as if the operation never happened. You might notice some tightness or light pains if you overdue it, so just listen to your body and progress as you feel comfortable - use common sense!

There is a possibility of a recurrent incisional hernia, in about 1% to 10% if cases. The same factors cited on page 1 as causes of incisional hernias can increase the risk of recurrent hernia. The technical type of hernia repair plays a role as well, but probably not as much as the factors already mentioned above. There is usually no permanent restriction on your activities as a result of having an incisional hernia repaired.

Finally, incisional hernia surgery is not minor surgery. As with any operation, it has potential risks. These risks include, but are not limited to: death, heart attack, stroke, blood clots, pneumonia, or other catastrophic complications of the vital organs, bleeding, either major bleeding, infection, scarring, wound healing problems, and injury to internal organs (bowel, bladder, etc) that may be contained within the hernia sac. In rare cases, mesh used in the repair may become infected, necessitating mesh removal.

If you are comfortable we have fully discussed the above issues to your satisfaction, please sign and date below.

Thank you.

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