# NAGAN, ARREGUI, DAVIS M.D.'S INC.

# PATIENT INFORMATION ON LAPAROSCOPIC & OPEN HERNIA REPAIR

# About Your Hernia, Laparoscopic & Open Repair:

Laparoscopic Hernia Repair is a technique to fix a tear or hole in the abdominal wall (muscle) using small incisions, telescopes and a patch (mesh). It offers a quicker return to work and normal activities with decreased pain. Open Hernia Repair is performed with an incision over the site of the hernia. The hernia or hole in the abdominal

wall is repaired with mesh or by closing the defect with sutures.

#### What Is A Hernia?

When a hernia occurs, the inside layers of the abdominal wall have weakened, resulting in a bulge or tear. Just as an inner tube pushes through a damaged tire, the inner lining (peritoneum) of the abdomen pushes through the weakened area of the abdominal wall to form a small balloon-like sac. A loop of intestine or abdominal tissue can then push into the sac. The hernia can cause severe pain and other potentially serious problems that could require emergency surgery.

- Both men and women can get a hernia.
- You may be born with a hernia (congenital) or acquire one over time.
- A hernia does not get better over time, nor will it go away by itself. The defect, or hole will stay the same size or become larger.

#### How Do I Know If I Have A Hernia?

• The most common areas where a hernia can occur are in the **belly button (umbilical)**, groin (inguinal), and the site of a previous operation site (incisional).

It is usually easy to recognize a hernia. You may notice a bulge under the skin. You may feel pain when you lift heavy objects, cough, strain during urination or bowel movements or during prolonged standing or sitting.

• The pain may be sharp and immediate or may be a dull ache that gets worse toward the end of the day. Severe, continuous pain, redness and tenderness are signs that the hernia may be entrapped (incarcerated) or strangulated. These symptoms should prompt you to contact your physician immediately.

### Why Do People Get Hernias?

• The wall of the abdomen has natural areas of potential weakness. Hernias can develop at these or other areas due to heavy strain on the abdominal wall, aging, injury, an old incision, or a weakness present from birth. Anyone can get a hernia at any age. Most hernias in children are congenital. In adults hernias can be caused by a natural weakness, strain from heavy lifting, persistent coughing, or difficulty with bowel movements or urination.

#### What Are The Treatment Options?

• Most hernias require a surgical procedure. These operations are now done in one of two ways:

**1.** The traditional approach is done from the outside through an incision in the groin or the area of the hernia. The incision will extend through the skin & fat under the skin, to allow the surgeon to get to the level of the defect. The surgeon may choose to use a small piece of surgical mesh to repair the defect or hole. This technique can be done with a local anesthetic and intervenous sedation or by using a spinal or general anesthetic.

2. The second approach is a laparoscopic hernia repair. A laparoscope (a tiny telescope) connected to a special camera is inserted through a small hollow tube (trocar) to allow the surgeon to view the hernia and surrounding tissue on a video screen. Other incisions are made that allow the surgeon to introduce instruments (forceps & scissors) to

operate on the inside without making a large incision. The hernia is repaired from behind the abdominal wall. A piece of surgical mesh or screen is placed over the hernia defect and held in place with small surgical staples or by the patient's own tissues. This operation is usually performed with general anesthesia.

# Is Everyone A Candidate For Laparoscopic Hernia Repair?

• Only after a thorough examination can your surgeon determine whether a laparoscopic hernia repair is right for you. The procedure may not be best for some patients who have had previous abdominal surgery or underlying medical conditions.

# What Are The Complications Of Laparoscopic Hernia Repair?

Any operation may be associated with complications. The primary complications of any operation are bleeding and infection, which are uncommon with laparoscopic hernia repair (less than 1%).

- There is a slight risk of injury to the urinary bladder, the intestines, blood vessels, nerves or the sperm tube going to the testicle.
- Difficulty urinating after surgery is not unusual and may require an insertion of a temporary catheter into the urinary bladder.
- Any time a hernia is repaired it can come back. The long-term recurrence rate for laparoscopic repairs are 0.5 %.
- Your surgeon will help you decide if the risk of a laparoscopic hernia repair is less than the risk of leaving the condition untreated.

# What Happens If The Operation Cannot Be Performed By The Laparoscopic Method?

• In a small number of patients the laparoscopic method is not feasible because of the inability to visualize or handle the organs effectively. Factors that may increase the possibility of converting to "open" procedure may include obesity, history of prior abdominal surgery causing dense scar tissue, or bleeding problems during the operation. The decision to perform the open procedure is a judgment made by your surgeon either before or during the actual operation. The decision to convert to an open procedure is based strictly on patient safety.

### What Are The Complications Of An Open Hernia Repair?

• Serious complications are rare. These include infection of the mesh, injury to the intestine, spermatic cord or blood vessel, bleeding and chronic nerve pain. Minor complications include minor bleeding, seroma (collection of fluid under the skin), hematoma (collection of blood under the skin), extensive bruising, transient testicular pain, and difficulty urinating post operatively.

#### What Preparation Is Required?

• Most hernia operations are performed on an outpatient basis, meaning the patient will go home on the same day that the operation is performed. If the patient develops any type of a complication post-operative, the patient will remain in the hospital, usually over night, then released the following day if the complication has subsided.

• Prior to the operation, you will refrain from eating, drinking, and chewing after midnight on the night before your operation unless otherwise instructed. You should refrain from smoking 24 hours before your operation, due to the

high level of carbon monoxide smoking delivers to your bloodstream. People who smoke prior to general anesthesia are more than 20 times likely to have episodes of inadequate oxygen supply to the heart (which could be interpreted as a heart attack) than non-smokers.

• If you are having the Open Hernia Repair under local anesthetic fasting is not necessary. A light breakfast (toast or cereal) or light lunch is permitted.

· You should bathe or shower the night before or the morning of your surgery. If you are having

laparoscopic surgery, please clear the umbilicus (belly button) with a Q-tip using soap and water.

• Your surgeon will instruct you if any type of bowel preparation is needed before surgery.

• Some preoperative testing may be required depending on your medical condition and the type of anesthesia needed for your operation. Depending on your medical condition a consult or clearance may be needed from your cardiologist, pulmonologist, or family physician before your operation can be performed.

• If you take medication on a daily basis, our surgeons request that only heart and blood pressure medications be taken on the morning of your operation with a sip of water, unless otherwise instructed. If you take aspirin, blood thinners, or arthritis medication the surgeon will discuss the proper timing of discontinuing these medications before your operation.

• If you are on insulin, take half of your usual morning dose the day of surgery, unless otherwise indicated by your doctor. Your blood sugar will be checked at the hospital before your surgery.

• If you take antibiotics prior to a dental procedure, please alert your surgeon. You may also need an antibiotic prior to your operation.

#### What Should I Expect After Surgery?

• Narcotic pain pills are prescribed with one refill. Most patients take less than 10 tablets, some take more and others require refills. Everyone experiences different degrees of pain. Most have significant pain for 2-4 days. The pain is local or testicular. If done with a laparoscopy some experience shoulder pain. The pain gradually diminishes over several days. If the pain worsens or fever develops, this can be a sign of infection and you should call the office immediately.

• Make sure to eat when you take your pain medication since the medicine can cause nausea on an empty stomach. If nausea occurs and does not subside please call the office nurse, and have pharmacy phone number ready.

• No driving for 3-5 days after surgery. Pain medication can cause drowsiness, once you stop the medication and the pain is gone, you may drive.

• No activity or lifting restrictions after surgery. Your level of activity should be determined by your comfort level. Do get up and move around, as this will help resolve the soreness.

• You may shower, bathe and swim (no lakes please) the day after surgery.

• If surgery was done laparoscopically, air is injected into the abdomen, which could cause you to develop pains, heaviness in the chest, or discomfort in the shoulders. You may take over-the-counter medication such as Mylicon or Maalox, if you feel excessive abdominal bloating or gas.

• If you become constipated, you can take over-the-counter medication such as Milk of Magnesia, fleets enema, Dulcolax suppository or tablets, mineral oil, or warm prune juice.

• If you develop a temperature of over 101° or you notice redness or yellowish drainage from your incision site, call the office to be seen as soon as possible. Your incision may ooze for a day or two. As long as it is oozing, keep it covered with a band-aid or dry gauze dressing. If severe bleeding occurs, apply pressure to the area and call the office immediately.

• It is normal to have swelling and bruising of the groin and scrotum for the first 1-3 weeks after inguinal hernia surgery. You could develop a hematoma, which is caused by bleeding under the skin that can cause a hard lump and some drainage at the incision site. This will dissolve in 2-6 weeks time.

<u>Call the office to make your follow-up appointment:</u>