Laparoscopic Splenectomy

A laparoscopic splenectomy is the removal of the spleen. In this procedure the spleen is removed through smaller incisions. This procedure is minimally invasive. The spleen is an organ that is located in the left upper part of your abdomen (belly).

- The spleen is part of the immune system. The immune system prevents infections. It keeps you healthy.
- The spleen serves as a site for clearing bacteria (germs) from the blood. It also produces antibodies that fight against germs.
- The spleen removes normal and abnormal blood cells from the blood stream. Normal blood cells are removed when they are wearing out.
- The spleen helps regulate the blood flow to the liver.
- Under certain conditions, the spleen can become a major producer of blood cells.

Normally the spleen is small and performs the work listed above. Sometimes the spleen enlarges. This can occur when the blood backs up into the spleen. This can happen during heart failure. This means the heart is not working well enough to pump the blood normally. This causes increased blood pressure in the spleen. Diseases where there are increased numbers of red blood cells like leukemia, cirrhosis of the liver, or diseases that cause growth of cells into the spleen can also enlarge the spleen. The diseases may be benign (not cancerous) or malignant (cancerous). Sometimes the spleen has to be removed. If the spleen is too large it may not be able to be removed by laparoscopic surgery. Your physician will discuss what will work best for you.

The spleen is necessary for immune protection (it is part of the immune system). If not an emergency procedure, patients should receive antipneumococcal, meningococcal, and Haemophilus influenzae vaccinations at least one week before the surgery. Your caregiver will advise you on this.

PROCEDURE

Laparoscopic means that the procedure is done using a laparoscope. The laparoscope is a thin, lighted, pencil-sized tube. It is like a telescope. Once you are anesthetized, your surgeon inflates your abdomen (belly) with a harmless gas (carbon dioxide). This makes your organs easier to see. The laparoscope is inserted into your abdomen through a small incision (port). This allows your surgeon to see into the abdomen. Many surgeons attach a video camera to the laparoscope to enlarge the view. Other small instruments also are inserted into the abdomen through other small openings (portals). The portals allow the surgeon to perform the operation. During the procedure, the spleen is removed through one of the ports. Sometimes the port may have to be enlarged if the spleen cannot removed through it. The spleen may be placed into a bag inside the abdomen. This makes it possible to remove the spleen in one piece.

After the procedure, the gas is released from inside your abdomen. Your incisions are closed with sutures (stitches). Because these incisions are small (usually less than one-half inch), there is usually minimal discomfort following the procedure. The recovery time is shortened as long as there are no complications. You will rest in a recovery room until you are stable and doing well. Patients will usually stay in the hospital for one night. Following your rest you may be allowed to go home, as long as there are no complications.

RISKS AND COMPLICATIONS

Some problems that can occur following this procedure include:

- Infection. A germ starts growing in one of the wounds. This can usually be treated with antibiotics.
- Bleeding following surgery can be a complication of almost any surgery. Your surgeon takes every precaution to keep this from happening.
- Damage to other organs may occur. If damage to other organs or excessive bleeding should occur, it may be necessary to convert the laparoscopic procedure into an open abdominal procedure. This means your surgeon may have to enter your abdomen using an incision. Scarring (adhesions) from previous surgeries or disease may also be a cause to change this procedure to an open abdominal operation.
- Overwhelming post-splenectomy infection (OPSI). A rapidly fatal infection due to the absence of the spleen's protection against certain bacteria.