Understanding Robotic Paraesophageal Hernia Repair: Procedure, Recovery, and Hospital Stay

A paraesophageal hernia is a type of hiatal hernia where part of the stomach pushes up through the diaphragm next to the esophagus. Unlike typical hiatal hernias, paraesophageal hernias can lead to serious symptoms and complications, such as chest pain, difficulty swallowing, Reflux, or stomach incarceration. Robotic paraesophageal hernia repair is a minimally invasive surgical approach used to treat this condition. Below, we'll explore what to expect from the robotic procedure, including the recovery process and hospital stay.

What is a Robotic Paraesophageal Hernia Repair?

Robotic paraesophageal hernia repair is a minimally invasive surgery that uses robotic minimally invasive surgery to help the surgeon repair the hernia with greater precision and control. The surgeon uses a robotic system to guide surgical instruments through small incisions during this procedure. The robotic approach provides high-definition, 3D imaging of the area. It allows the surgeon to perform delicate movements, making it possible to repair the hernia and restore normal anatomy with minimal trauma.

The Procedure: What to Expect

Robotic paraesophageal hernia repair is performed under general anesthesia. Here's an overview of the steps involved in the procedure:

- 1. **Incisions and Robotic Access:** The surgeon makes several small incisions in the abdomen through which robotic arms and a high-definition camera are inserted. Another incision is used to for a special retractor used to move the liver out of the way. The robotic arms are equipped with specialized instruments that the surgeon controls from a console.
- 2. **Reduction of the Hernia:** The surgeon carefully moves the stomach and any other organs that may have herniated back into their regular positions in the abdomen.
- 3. **Repair of the Diaphragm:** The hernia opening in the diaphragm is repaired, often with sutures to strengthen the area. In some cases, a surgical mesh reinforces the diaphragm and prevents future hernias.
- 4. **Fundoplication** is typically performed after the hernia is repaired, which recreates the lower esophageal sphincter to prevent Reflux
- 5. **Closure and Final Check:** Once the hernia is repaired, the incisions are closed with sutures or surgical glue, and the instruments are removed.

The procedure typically takes two to three hours, depending on the complexity of the hernia and any additional steps required.

Hospital Stay

Most patients undergoing robotic paraesophageal hernia repair can expect to spend one to two days in the hospital. Here's what you can expect during your hospital stay:

- **Recovery Room:** After surgery, you'll spend time in a recovery area where nurses and doctors will monitor your vital signs as you wake up from anesthesia.
- **Pain Management:** Pain medication will be provided to keep you comfortable. Because robotic surgery is minimally invasive, most patients experience less postoperative pain compared to traditional open surgery.
- **Dietary Progression:** Initially, you'll be started on a liquid diet, gradually progressing to soft foods as your digestive system begins to adjust. Your doctor will guide you on when it's safe to resume a regular diet.
- Activity Level: Light activity, such as walking, is encouraged to promote circulation and reduce the risk of blood clots. Avoid heavy lifting or strenuous exercise until cleared by your doctor.
- **Discharge:** Most patients are ready to go home within one to two days, depending on their recovery and any underlying health factors.

Recovery at Home

After discharge, you'll continue your recovery at home. Here are some general guidelines to help you heal safely and comfortably:

- 1. **Rest and Gradual Activity:** Rest is essential, but light activity, such as short walks, can help promote circulation and prevent blood clots. Avoid strenuous activities and heavy lifting for at least a few weeks.
- 2. **Dietary Adjustments:** Follow a soft or liquid diet initially, as recommended by your doctor, to avoid putting strain on the esophagus and stomach. Gradually reintroduce more solid foods over time as tolerated.
- 3. **Pain and Discomfort:** Some mild pain or soreness is normal, especially around the incision sites. Over-the-counter pain relievers are typically effective, though your doctor may prescribe additional medications if needed.
- 4. **Incision Care:** Keep the incisions clean and dry, and avoid soaking in baths or swimming until your doctor confirms that the incisions have healed.
- 5. **Follow-Up Appointments:** Attend all follow-up visits with your doctor to monitor healing and address any concerns. These appointments are essential for ensuring the hernia repair is successful and that no complications have developed.

Potential Risks and Complications

While robotic paraesophageal hernia repair is generally safe, there are some potential risks and complications to be aware of:

- **Infection:** Though small incisions reduce the risk, infections can still occur. Keep the incisions clean and follow your doctor's care instructions to minimize this risk.
- Bleeding: Some bleeding is expected, but severe bleeding is rare.
- **Difficulty Swallowing (Dysphagia):** Temporary difficulty swallowing may occur as the body adjusts after surgery. This typically improves over time.
- **Recurrent Hernia:** Although rare, the hernia may return, especially if the repair site experiences additional strain.
- **Gastric Issues:** Some patients may experience bloating or other gastrointestinal symptoms as they adjust to the repaired anatomy.

When to Contact Your Doctor

After returning home, be sure to reach out to your healthcare provider if you experience any of the following symptoms:

- Fever over 100.4°F (38°C)
- Persistent or severe abdominal or chest pain
- Difficulty swallowing that does not improve
- Nausea or vomiting that doesn't resolve
- Increased redness, swelling, or discharge from the incision sites
- Any unusual symptoms or concerns

Conclusion

Robotic paraesophageal hernia repair is a safe and effective minimally invasive option for treating paraesophageal hernias, offering reduced pain, faster recovery, and smaller incisions. Knowing what to expect before, during, and after the procedure can help you feel more at ease and prepared for a successful recovery. By following your doctor's instructions and gradually resuming activities, you'll be on the path to healing and a return to normal life. Regular follow-ups and dietary adjustments can help ensure a smooth recovery and long-term success in preventing hernia recurrence.