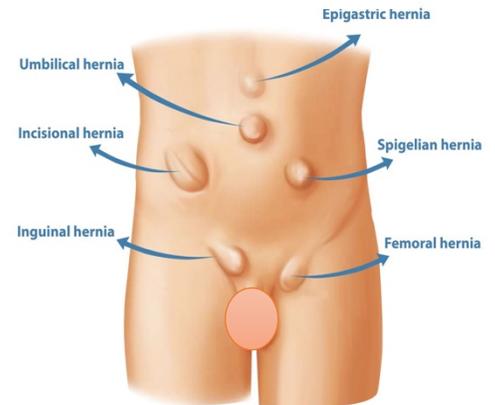


Groin Hernias – Patient Information

Different Types of Groin Hernias

- Inguinal hernia (**Figure 1, 3**)
 - o This is the most common type of hernia that happens in the groin, when fat or intestines bulge through a **defect** in the layers of the abdominal wall muscles (**Figure 2**)
 - o There are 2 subtypes of inguinal hernias: “indirect” inguinal hernia and “direct” inguinal hernia, depending on where they are relative to the epigastric blood vessels (**Figure 3**)
- Femoral hernia (Figure 1, 3)
 - o This is a much more rare type of hernia that happens in the lower groin

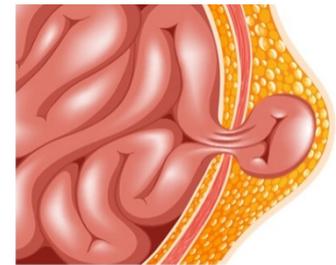
Figure 1: Types of Hernias



How Common are Groin Hernias?

- Groin hernias are very common. Roughly 1 in 3 people with male anatomy are diagnosed with an inguinal hernia whereas roughly 1 in 25 people with female anatomy are diagnosed with an inguinal hernia.

Figure 2: What is a Hernia



How are Groin Hernias Managed?

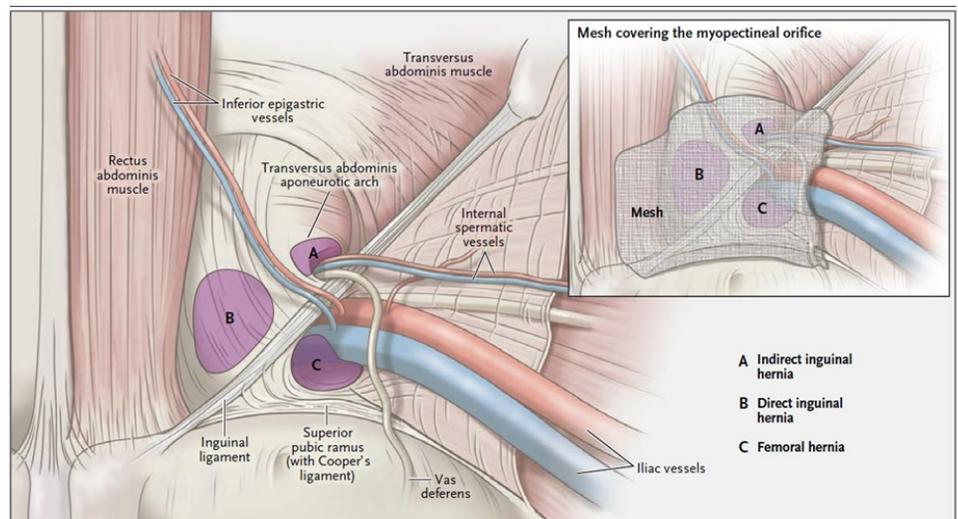
I: “Watch-and-wait” approach

- o In people assigned male at birth with hernias that don’t cause symptoms or cause minimal symptoms, e.g. small hernias seen on an ultrasound that can’t be felt on clinical exam, it is safe to observe only
- o There is no need to modify your lifestyle apart from avoiding smoking, managing diabetes well, and avoiding excess weight gain
- o Since hernias do tend to enlarge over time and worsen symptoms, most need to be fixed with surgery

II: Surgical repair (see next page)

- o Open with mesh (“Lichtenstein”)
- o Open without mesh (“Shouldice”)
- o Laparoscopic with mesh

Figure 3. Groin Hernia Types (Indirect, Direct, and Femoral) and Mesh Repair

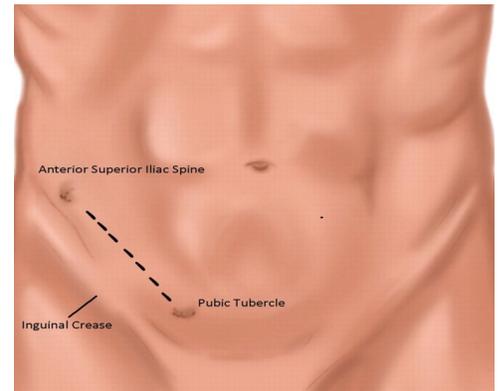


Types of Surgical Repair for Groin Hernias

Open Hernia Repair (Figure 4)

- A 7-10cm incision is made in the groin
- The hernia defect is identified and closed
- In the mesh-based repair (“Lichtenstein”), a piece of polypropylene mesh is placed within the muscle layers to buttress the repair
- In the tissue-based repair (“Shouldice”), the muscle layers are folded over top of each other without the use of mesh

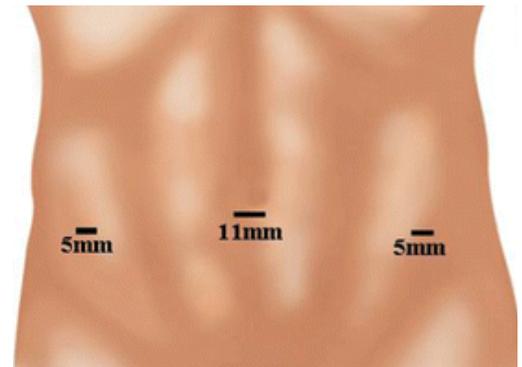
Figure 4: Open Surgery Incision



Laparoscopic Hernia Repair (Figure 3, 5)

- 3 small incisions of 0.8-1.2cm are made in the abdomen
- The innermost lining of the abdomen is peeled down to identify the hernia defect(s)
- A mesh is placed to cover the entire groin (both inguinal hernia spaces and the femoral hernia space)
- The lining of the abdomen is then closed over the mesh to cover the mesh and isolate it from the intestines

Figure 5: Laparoscopic Surgery Incisions



Which Surgery Will I Have?

- The best surgical approach is a complex decision and individualized for the individual based on many factors including whether you are male or female, if the hernia is recurrent (has been repaired in the past) and which previous approach was performed, your previous medical and surgical history, etc.

General Similarities and Differences of the Different Approaches

	Open with mesh	Open without mesh	Laparoscopic
Similarities for all 3	<ul style="list-style-type: none"> - Day surgery, takes about 1.5 hours - Dissolvable sutures - Can start walking right after surgery, let pain be your guide for other activities - Overall low risk of infection, bleeding, or other surgical complications including injury to the testicular vessels or the vas deference in men (1% each) - If you only experience pain and do not see a bulge, there is a chance your pain will persist after surgery 		
Anesthesia	Can be done under local anesthetic and sedation	Can be done under local anesthetic and sedation	Requires general anesthetic
Risk of Recurrence	1-2%	3-5%	1-2%
Post-operative pain	Moderate	Moderate	Low to moderate
Risk of chronic pain	3-10% (spectrum)	3-5% (spectrum)	1-2%
Unique aspect	Most commonly done surgery in the world	No mesh is used	<ul style="list-style-type: none"> - Can view all 3 potential defects in both groins - Recommended approach by latest guidelines