

# Inguinal Hernia

B M Osman \*

February 10, 2025

## Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
<b>2</b>	<b>Types of Inguinal Hernias</b>	<b>1</b>
<b>3</b>	<b>Causes and Risk Factors</b>	<b>2</b>
<b>4</b>	<b>Symptoms</b>	<b>2</b>
<b>5</b>	<b>Complications</b>	<b>2</b>
<b>6</b>	<b>Diagnosis</b>	<b>2</b>
<b>7</b>	<b>Treatment</b>	<b>2</b>
7.1	Watchful Waiting . . . . .	2
7.2	Surgical Repair . . . . .	3

## 1 Introduction

An **inguinal hernia** occurs when tissue, such as part of the intestine or abdominal fat, protrudes through a weak spot in the abdominal muscles near the **inguinal canal**. It is the most common type of hernia and occurs more frequently in men than women.

## 2 Types of Inguinal Hernias

- **Indirect Inguinal Hernia** – More common, often congenital, and occurs when abdominal contents protrude through the deep inguinal ring into the inguinal canal.

---

\*Al Nahada univerdity Cairo babikerosman@yahoo.com

- **Direct Inguinal Hernia** – Develops due to weakness in the abdominal wall, typically in older adults, and protrudes directly through the *Hesselbach's triangle*.

### 3 Causes and Risk Factors

- Congenital weakness in the abdominal wall
- Chronic coughing or straining
- Heavy lifting
- Obesity
- Aging
- Pregnancy
- Previous abdominal surgery

### 4 Symptoms

- A bulge in the groin or scrotum (in men)
- Pain or discomfort, especially when bending, lifting, or coughing
- A heavy or dragging sensation in the groin
- Swelling that increases with activity and decreases when lying down

### 5 Complications

- **Incarceration** – The hernia becomes trapped and cannot be pushed back.
- **Strangulation** – Blood supply to the herniated tissue is cut off, leading to severe pain, nausea, vomiting, and requiring emergency surgery.

### 6 Diagnosis

- Physical examination
- Ultrasound or CT scan (if needed for confirmation)

### 7 Treatment

#### 7.1 Watchful Waiting

Small, asymptomatic hernias may not require immediate surgery.

## 7.2 Surgical Repair

Surgical intervention is recommended for symptomatic or large hernias:

- **Open Hernia Repair (Herniorrhaphy/Hernioplasty)** – The surgeon makes an incision and reinforces the weak area with stitches or mesh.
- **Laparoscopic Hernia Repair** – A minimally invasive approach using small incisions and a camera-guided technique to place a mesh.