Difference Between Hernia and Hemorrhoid

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Key Difference – Hernia vs Hemorrhoid

A hernia is the protrusion of an organ or a part of an organ through a defect in the wall of the cavity inside which it is located, into an abnormal position. Hemorrhoids can be defined as a fold of mucous membrane and sub mucosa containing varicose tributaries of the superior rectal vein and a terminal branch of the superior rectal artery. As their definitions clearly state, in hemorrhoids, the sac contains blood vessels while in hernias, the sac is filled with either organs or part of organs. This is the key difference between hernia and hemorrhoid.

What is a Hernia?

A hernia is the protrusion of an organ or a part of an organ through a defect in the wall of the cavity inside which it is located into an abnormal position. In a majority of the cases, these malformations occurring due to the anatomical defects arise as diverticula of the peritoneal cavity and therefore are covered by a layer of parietal peritoneum.

There are different varieties of hernias such as,

- Inguinal
- Femoral
- Umbilical and para umbilical
- Incisional
- Ventral
- Epigastric
Aetiology

As previously mentioned, the anatomical weaknesses in the peritoneal cavity are the cause of hernias. These weaknesses can be due to congenital or acquired factors.

The persistence of processus vaginalis and the incomplete closure of the umbilical scar are the commonest congenital causes of hernias.

Iatrogenic causes such as a poor technique followed in closing a surgical incision can weaken the adjacent region of the wall of peritoneal cavity, increasing the vulnerability of having herniations. Sometimes during surgical procedures, there can be damages to nerves, resulting in the paralysis of muscles innervated by them. This also can be a cause of hernias.

Other Secondary Causes of Hernias

- Chronic cough
- Chronic constipation
- Pregnancy
- Abdominal distension as in ascites
- Weak abdominal muscles in conditions such as obesity and cancer cachexia

Depending on nature, hernias can be categorized into three main groups as,

- Reducible
- Irreducible
- Strangulated
Reducible Hernias

The contents of the hernial sac can be pushed back into the peritoneal cavity.

Clinical Features

- Painless lump that disappears on lying down

Irreducible Hernias

The contents cannot be pushed into the peritoneal cavity because of the formation of adhesions between the hernial sac and the structures inside it.

Clinical Features

- Usually asymptomatic

Strangulated Hernia

Strangulation of the hernial sac is the most severe complication associated with hernias. This compromises the blood supply to the organs and other structures entrapped within the sac. The resultant hypoxia and the accumulation of metabolic wastes give rise to a severe pain. If untreated the sac can rupture and the waste materials released can cause septicemia.

What are Hemorrhoids?

In an anatomical perspective, hemorrhoids can be defined as a fold of mucous membrane and sub mucosa containing varicosed tributaries of the superior rectal vein and a terminal branch of the superior rectal artery.

Anatomical Basis

Anal canal consists of three cushions made up of mucosal and sub mucosal components. The sub mucosal layer of the anal canal has a large blood supply through a network of capillaries and other tiny blood vessels. These blood vessels can get congested and enlarged, resulting in an abnormal expansion of the anal cushions into the lumen of the anal canal which we identify as hemorrhoids.

Internal Hemorrhoids
The varicosities of the tributaries of superior rectal vein covered by a mucous membrane are known as internal hemorrhoids or piles. The tributaries that lie in 3’, 7’ and 11’ positions when viewed in the lithotomy position are particularly vulnerable to get hemorrhoids. The superior rectal vein is valveless and cannot control the flow of blood through it. In addition to that, it is located in the most dependable area of the capillary network of the anal canal. These contributory factors further increase the vulnerability of this region to get hemorrhoids.

There are three stages of internal hemorrhoids.

- First degree – piles remain inside the anal canal
- Second degree – piles extrude from the anal canal during the defecation but return to their normal position later
- Third degree – piles remain outside the anal canal

Internal hemorrhoids do not cause any pain because they are innervated by autonomic afferent nerves.

**Causes**

- Family history of hemorrhoids
- Any disease that causes portal hypertension
- Chronic constipation

**External Hemorrhoids**

External hemorrhoids are varicosities of the inferior rectal vein in its course along the anal margin. These venous malformations are covered by the mucous membrane of the lower half of the anal canal or by the skin overlying the anorectal region. Unlike internal hemorrhoids, external hemorrhoids are innervated by the branches of inferior rectal nerve and therefore they are extremely painful and sensitive. Thrombosis of the external hemorrhoids and their subsequent ulceration are the common complications.

The occurrence of hemorrhoids in a patient below 20 years of age is highly unlikely.
Symptoms

- Per rectal bleeding
- Presence of a palpable lump at the anal margin
- The sensation of something coming out of the anus after defecation.
- Pruritus
- There can be features of iron deficiency anemia due to the blood loss

What is the difference between Hernias and Hemorrhoids?

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Summary – Hernias vs Hemorrhoids

Hernias are a common condition seen in the surgical wards. They are the protrusions of an organ or a part of an organ through a defect in the wall of the cavity inside which it is located into an abnormal position. On the other hand, hemorrhoids are a fold of mucous membrane and sub mucosa containing varicosed tributaries of the superior rectal vein and a terminal branch of the superior rectal artery. Therefore, in hernias, the sac contains organ or parts of organs whereas in hemorrhoids the sac contains only blood vessels. This is the basic difference between hernia and hemorrhoid.

References:


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