

DEFINITION

1. A hernia is a protrusion of a viscus or part of a viscus outside the cavity which normally contains it. The protrusion is usually through an abnormal opening in the wall of the containing cavity. An **inguinal hernia** is a protrusion of abdominal contents into the inguinal canal.

CLASSIFICATION

2. Two type of inguinal hernia are described -
 - 2.1. The **oblique** or **indirect inguinal hernia** is a protrusion along the inguinal canal into a preformed sac which is a patent processus vaginalis.
 - 2.2. The **direct inguinal hernia** is a protrusion through a defect or weakness in the posterior wall of the inguinal canal. This type, therefore, does not pass through the whole length of the inguinal canal. A direct inguinal hernia is always acquired.
3. Either type may be called a **bubonocoele** when it is small and does not extend beyond the inguinal canal. A hernia is called **irreducible** when its contents cannot be returned to the abdomen and **strangulated** when the blood supply to the contents is compromised, with a risk of gangrene.

CLINICAL MANIFESTATIONS

4. At first a patient may complain of pain in the groin when lifting or straining. A transient bulge may be seen or felt when the patient coughs. The hernia tends to increase in size, to appear more readily and to reduce less easily as time goes by. It may become irreducible. Rarely, a hernia may first present as an irreducible or a strangulated hernia.

AETIOLOGY

5. The inguinal canal forms during development and contains an extension or sac of peritoneum called the processus vaginalis. The deep and the superficial inguinal rings are the points of entry to and exit from the canal, which is bound by musculo-tendinous walls. In the male the testes migrate through the inguinal canal on their way from the abdomen to the scrotum. The sac of peritoneum is normally obliterated after birth but may persist wholly or partly into adult life. The inguinal canal is therefore a potential weakness in the anterior abdominal wall. In the male the inguinal canal contains the spermatic cord, the ilio-inguinal nerve and the genital branch of the genito-femoral nerve. In the female it contains the round ligament of the uterus.

6. About 2 per cent of British males have hernias, most commonly in the inguinal region. Females are less commonly affected. Eighty to 90 per cent of the inguinal hernias are of the indirect variety and some 30 per cent of these are bilateral. It is generally accepted that indirect hernias are essentially caused by the persistence of a partly or wholly patent processus vaginalis. The hernia may appear at any time, either in childhood or during adult life.
7. Direct inguinal hernias make up 10 to 15 per cent of cases and more than half of these are bilateral. They occur mainly in adult life and rarely affect women. They rarely grow large or descend into the scrotum. The patient commonly has poor lower abdominal musculature.
8. The onset of inguinal hernia may be precipitated by any condition which raises the intra-abdominal pressure. The following are common precipitating causes and may also worsen a pre-existing hernia -
 - 8.1. Whooping cough in the child.
 - 8.2. Chronic cough in the adult.
 - 8.3. Straining at micturition because of urethral obstruction.
 - 8.4. Straining during defecation.
 - 8.5. Stretching of the abdominal wall through pregnancy or obesity.
 - 8.6. Heavy work or heavy lifting.

CONCLUSION

9. Inguinal hernia is a protrusion of abdominal contents into the inguinal canal. The various types and their aetiologies are discussed above.

REFERENCE

Mann C V and Russell R C G (Eds). Bailey and Love's Short Practice of Surgery. 21st Ed. 1992. London. Chapman & Hall Medical. p1276-1288.

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