

Scrotal Hernia with Abdominal Eventration - Case Report

Bartko C¹ and Bartko A^{2*}

¹Surgical Department, Bratislava, Slovakia

²Gynecology-Obstetrics department, Bratislava, Slovakia

*Corresponding author:

Bartko Alexandra,
Gynecology-Obstetrics department, Bratislava,
Slovakia

Received: 16 May 2024

Accepted: 07 June 2024

Published: 12 June 2024

J Short Name: ACMCR

Copyright:

©2024 Bartko C. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and build upon your work non-commercially

Citation:

Bartko C, Scrotal Hernia with Abdominal Eventration - Case Report. Ann Clin Med Case Rep. 2024; V13(19): 1-2

Keywords:

Scrotal Hernia; Abdominal Exenteration;
Surgical treatment

1. Summary

An inguinal hernia is a bulging of the contents of the abdomen through a weak area in the lower abdominal wall. Inguinal hernias can occur at either of two passages through the lower abdominal wall, one on each side of the groin. These passages are called inguinal canals. Inguinal hernias can also occur through two deeper passages in the groin called the femoral canals. Hernias through these passages are also known as femoral hernias. In this article we are presenting case report of massive abdominal exenteration into the scrotum.

2. Introduction

Inguinal hernias are relatively common. Researchers estimate that about 27 percent of men and 3 percent of women will develop an inguinal hernia at some point in their lives.

Inguinal hernias are also more common in

- Males, who are 8 to 10 times more likely than women to develop inguinal hernias
- Males who have had prostatectomy
- People with a family history of inguinal hernias
- People who have a lower body mass index (BMI)
- People who have connective tissue disorders [1]

3. Types of Hernia

•Indirect inguinal hernias are related to a defect in the lower abdominal wall that is present at birth. In a developing fetus, the inguinal canals have openings inside the abdomen that typically close before birth. In some cases, one or both openings remain

open. Contents of the abdomen may bulge through this opening, causing a hernia. While the defect is present at birth, an indirect inguinal hernia may not occur until many years later.

•Direct inguinal hernias are related to a weak area in the inguinal canal wall that develops later in life. Contents of the abdomen may bulge out through this weak area, causing a hernia. This type of hernia primarily occurs in men. Women and children rarely develop this type of hernia.

4. Surgical Treatment of Hernia

Inguinal hernia repairs are of the following three general types:

- Herniotomy (removal of the hernial sac only)
- Herniorrhaphy (herniotomy plus repair of the posterior wall of the inguinal canal)
- Hernioplasty (herniotomy plus reinforcement of the posterior wall of the inguinal canal with a synthetic mesh) [2].

5. Complications of Surgery

The main reasons hypothesized for chronic groin pain – inguinodynia - are peri-operative nerve damage, post-operative fibrosis, or mesh-related fibrosis. They have been classified as either neuropathic or non-neuropathic pain. The three nerves potentially involved are the Ilioinguinal nerve, Iliohypogastric nerve and genital branch of the Genitofemoral nerve. These nerves can be damaged either by trauma during dissection or retraction of tissues, or nerve entrapment from post-operative fibrosis, mesh-related fibrosis or sutures used to fix the mesh [3].

Other possible complications

-Infection

- Hematoma
- Bleeding
- Relapse
- Bowel obstruction
- Urinary retention
- Adhesion
- Fistulation of mesh

6. Case Report

This article presents a case of giant scrotal hernia in 65-year-old man with lasting of the case more than 10 years. In examinations there were findings of omental tissue and eventeration of right colon dolichosigma and major part of small intestine (Figure 1). Preoperational preparation was focused on cardiopulmonary system, bronchial lavage with cultivations, because there was supposition that in abdominal eventeration and it reposition there could be reason for pulmonary respiratory complications. Before the surgery the patient underwent pulmonary exercises because the physical preparation in this case wasn't possible. He underwent antibiotic preparation according to bronchial lavage results. He was strongly advised not to smoke. Surgery was performed from abdominal approach in which the abdominal organs were put back to abdominal cavity, there was resection of scrotum performed to its normal size and inguinal canal closure was performed by bi-face intraabdominal placed mesh and also the same type of mesh was used for closing the laparotomy as prevention of dehiscence of laparotomy in post-operational period in supposed increase of intraabdominal pressure. After surgery the patient was 5 days on pulmonary support on BIPAP regime with high volume pressure. Then the patient could breathe spontaneously with observation intraabdominal pressure. This period was followed by rehabilitation and the patient was discharged on 12th day after surgery.



Figure 1: Scrotal hernia with abdominal eventration

7. Discussion

In general, from the experience of the author, there is preference of treatment of inguinal hernia by Shouldice repair, in case of adequate repair possibility by own tissue. Taking in consideration of the fact that the ileoinguinal nerve won't be included in the repair plastic because it is the most common complication of the chronic pain in Shouldice repair. Mesh plastic according to Lichtenstein is used in cases is there is not a possibility in repair by own tissue and there is use of ProGrip mesh. This technique can't exclude the possibility of including ileoinguinal nerve in the plastic and healing by fibrotisation. In cases there is chronic postoperative pain there is possibility of alcohol desensibilisation of ileoinguinal nerve by application of solution of mesocain and alcohol in ratio 2:1 (6ml of mesocain: 3ml of alcohol). This is applied straight to the nerve 1cm from spina iliaca anterior superior. Effect of nerve desensibilisation occurs within a week. In case of these kinds of herniations we have to consider the possibility of pulmonary complication in increased intraabdominal pressure and the use of bi-face mesh should be considered.

References

1. The Hernia Surge Group. International guidelines for groin hernia management. *Hernia*. 2018; 22: 1–165. International guidelines for groin hernia management, *Hernia*, 2018; 22: 1–165”
2. Awad SS, Fagan SP. Current approaches to inguinal hernia repair. *Am J Surg*. 2004; 188: 9-16. *Am J Surg*, 2004; 188: 9-16”
3. Smeds S, Löfström L, Eriksson O. Influence of nerve identification and the resection of nerves ‘at risk’ on postoperative pain in open inguinal hernia repair. *Hernia*. 2010; 14: 265–270. Löfström L, Eriksson O. Influence of nerve identification and the resection of nerves ‘at risk’ on postoperative pain in open inguinal hernia repair. *Hernia*. 2010; 14: 265-270”