SPONTANEOUS SCROTAL ENTEROCUTANEOUS FISTULA

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ABSTRACT

BACKGROUND

Management of strangulated inguinal hernias require resection of the gangrenous small bowel loops and end-to-end anastomosis. We are presenting a case of spontaneous scrotal faecal fistula due to strangulated Richter's hernia[1] where we have used a patch of tunica with scrotal inner layer to reinforce the perforated ileum. This procedure has avoided the resection of bowel and also we found useful alternative tissue instead of omental patch.

KEYWORDS

Enterocutaneous Fistula, Richter's Hernia, Scrotal.

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BACKGROUND

A 55 years old male patient presented to ER with foul-smelling discharge from the right side of the scrotum since 3 days. He gave history of abdominal pain two weeks back with vomiting for one day duration, which was treated by a local doctor. He never had any swelling in the groin in the past and he has noticed swelling in the right groin with fever since 3 days. As the discharge was faecal smelling, we suspected spontaneous enterocutaneous fistula and on exploration, there was a strangulated Richter's hernia with perforation of antimesenteric border of distal ileum for which we used a patch of inner layer of scrotal wall to close the ileal perforation. Following surgery, patient has recovered from the sepsis and discharged on 10th day.

CASE SUMMARY

A 55 years old male patient presented to casualty with fever of 3 days duration and a painful swelling in the right groin, foul smelling discharge from right scrotal area of 3 days duration. He has consulted a local doctor at his village for the pain abdomen and vomiting about 14 days ago and he did not noticed any swelling in the groin and he was told by the doctor as he had gastritis.

On examination, he was febrile with pulse rate-102/min.; BP- 96/70 mmHg. On local examination, there was a sinus like opening at the root of the right scrotal region with yellow colour purulent discharge with faecal smell (Figure 1). Abdominal examination revealed tenderness in the right inguinal region and there was no distension. Blood investigations showed leucocytosis (TC-30,700 cell/cumm), neutrophil count- 90%.

Ultrasound scan of abdomen did not reveal any hernia at right inguinal region. They reported an abscess in right scrotal region with infected hydrocele. Our initial diagnosis was scrotal abscess with funiculitis and Fournier's gangrene.[2]

Figure 1. Faecopurulent Discharge from Right Side of Scrotum

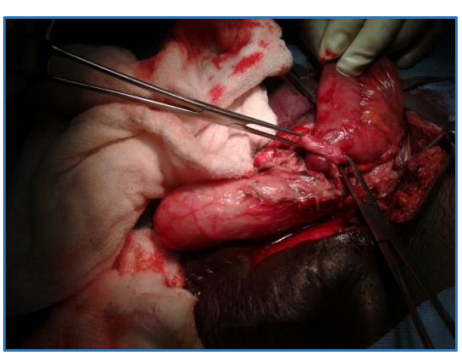

Figure 2. Richter's Hernia

As the discharge was faecal smelling, a differential diagnosis of strangulated inguinal hernia was suspected preoperatively. Patient was kept nil by mouth and IV antibiotics, IV fluids were administered. Prior consent was taken for the possible orchidectomy and also chances of resection of the small bowel.

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Under spinal anaesthesia by a right inguinoscrotal incision and elliptical incision around the sloughed out scrotal skin, the abscess cavity opened to drain yellow colour feculent pus. The sloughed out coverings of the cord could not be separated easily. On extending the deep ring laterally, we could identify a circumference of the distal ileal loop about 2 cm was strangulated in the deep ring (Richter's hernia) with small perforation (5 mm) at the summit of the strangulated antimesenteric border. There was no peritoneal contamination. As we suspected, postoperative ischaemic orchitis of the right testis, the spermatic cord is transacted at deep ring, right orchidectomy was performed. The ileal perforation closed with No. 2 zero polyglycolic acid suture. To cover the perforated part, we used a patch of inner scrotal wall with tunica intact (Figure 3). As we did not perform routine laparotomy, we did not search for omental graft. Repair of hernia done without a mesh (due to contamination in inguinal region) by Desarda repair technique. The debrided scrotal wound left open for healing by secondary intention, daily dressing was done. After 48 hours, patient was started on oral feeds, which were well tolerated. IV antibiotics were continued for 5 days. The histopathological examination of the specimen showed paratesticular abscess. Patient was discharged after 2 weeks.

Figure 3. Perforation Repair with a Scrotal Tunica Patch also showing Inguinoscrotal Abscess Wall

DISCUSSION

Richter's hernia[3] is an uncommon condition in which only part of the circumference of the antimesenteric border of a bowel wall is incarcerated within the hernia sac leading to ischaemia, gangrene and perforation of the bowel wall. It occurs at various positions like laparoscopic port site hernia, but femoral ring being the most common site. It has an early misleading presentation with tendency to early strangulation and absence of obstructive symptoms, which may lead to delay in diagnosis and proper surgical management. In neglected Richter's hernia, the bowel perforation can also be associated with Fournier's gangrene.[2],[4]

In females, inguinolabial Richter's hernia can present with spontaneous enterocutaneous faecal fistula.[5] Most of the strangulated small bowel needs resection and end-to-end anastomosis. Surgical exploration could be done via midline laparotomy. In our case, right inguinoscrotal incision was used for debridement of the scrotal abscess and also to assess the state of strangulated distal ileum.

In our patient, the perforated area was small (5 mm), hence we avoided the resection of small bowel, which prevented the patient from morbidity. To prevent postoperative faecal fistula, we decided to reinforce the sutured ileum with a tunica scrotal wall patch (with tunica layer facing outwards like serosa of bowel, see peroperative image in Figure 3), which was taken up successfully.

In any patient presenting with tender groin swelling mimicking inguinal abscess, there is a need for an early accurate diagnosis followed by prompt surgical management. The surgeon should also identify and appreciate the faecal smell of the discharge from any scrotal abscess, which gives suspicion of enterocutaneous fistula.[6] The delay in diagnosis and management may result in this rare complication of spontaneous scrotal faecal fistula.[7]

CONCLUSION

Richter's hernia[8] is more common in femoral hernia.[3] Spontaneous enterocutaneous (scrotal) fistula[6] can occur in ruptured inguinal Richter's hernia. It can occur rarely in adults without obstructive symptoms. In patients with a pyogenic abscess in the inguinal region, we should also suspect possibility of strangulated inguinal (Richter's) hernia who presents to us late due to ignorance of the patient and also delay in diagnosis.

The perforation of ileum can also be reinforced by covering with a patch of scrotal inner wall with tunica facing outwards (Figure 3) can avoid possible postoperative faecal fistula/peritonitis. We presented this article as our management is first of its kind with successful result.

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