

## Enterocutaneous Fistula of the Scrotum

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### Abstract

Inguino-scrotal hernia is a very common surgical entity. Though much common in pediatric population, yet no age is exempted. Enterocutaneous fistula in an inguino-scrotal hernia is a very rare surgical entity in both developing as well as developed countries. Comparatively commoner in pediatric age group but no age is exempt, the information gathered from few cases available in the surgical literature. About 08 cases in pediatric age group and 06 cases in adult population are available in the literature that could be revealed from Pubmed/Medline as well as medical library shelf search. We report here two rare cases of scrotal enterocutaneous fistula in an adult in inguinoscrotal hernia.

### Key Words

Scrotum, Enterocutaneous Fistula, Incarceration

### Introduction

Inguino-scrotal hernia is a very common surgical entity. Though much common in pediatric population, yet no age is exempted. The diagnosis and management is also prompt in expert surgical hands. The incarceration of inguinal hernia in children varies between 5 to 23.6% in many series and is more frequent in neonates and infants. Incarceration and strangulation is more common in developing countries probably due to not so good health care infrastructure and health education amongst the comparatively less educated population (1,2,3,4). The scrotal enterocutaneous fistula following incarceration/strangulation of inguino-scrotal hernia is beyond doubt the very rare complication even in the developing world. (5,6). Due to rarity of this surgical entity we present here two very rare case of scrotal enterocutaneous fistula one following intervention by a surgeon misdiagnosing strangulated inguinoscrotal hernia in a 65 years old male and another 40 years male from very low socio-economic

background presenting as strangulated inguinoscrotal hernia with gangrenous scrotal skin.

### Case 1

65 year old male presented in emergency unit of surgery department with fecal discharge from scrotum. The history suggested that patient went to a surgeon for pain, swelling and redness of the inguinoscrotal region for 07 days. Surgeon operated upon the patient thinking it as a case of scrotal abscess. The fecal discharge started coming out of the cut and patient was referred to Government Medical College. On examination vitals of the patient were within normal limits except tachycardia (pulse rate of 110beats/mt) and fever 100 degree F. Abdominal examination revealed signs of peritonitis. It was a case of iatrogenic enterocutaneous fecal fistula of the scrotum. On further probing it was established that patient was a known case of inguinoscrotal hernia and it was incarcerated inguinoscrotal hernia that was

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**Fig.1** Fecal matter coming out of the incision in the Scrotum (Case 1)



**Fig.2** Fecal matter coming out of the Scrotal Incision (Case 2)

misdiagnosed by a surgeon as scrotal abscess. After subjecting patient to necessary investigations for anesthesia, laparotomy was done. Intraoperatively a perforation of 1.5 cm by 1.5 cm was present in distal ileum about 45 cms from ileo-caecal valve. Fecal contamination of peritoneal cavity was present. So, ileostomy was done. Post-operatively patient had features of early septicemia that was managed with adequate antibiotics and supportive treatment

**Case 2**

40 years old male presented in emergency as a case of fecal discharge from the scrotum. On further probing patient gave history of long standing inguinoscrotal swelling that became painful and tender to touch with moderate to high grade fever. On examination, there was gangrenous scrotal skin with fecal discharge from right scrotal sac. On Laparotomy the ileal loops were brought back to the abdominal cavity and a 1 cm by 1cm perforation was note in mid ileal segment. As there was minimal contamination of the peritoneal cavity, hence after



**Fig 3.** Ileostomy and Scrotal drainage (Case 1)



**Fig.4** Shameful Exposure of the Scrotum After Debridement of Scrotal Skin Following Scrotal Enterocutaneous Fistula (Case 2)

freshening the perforation edges, perforation was closed with vicryl 3-0 in single layer. Gangrenous scrotal skin was excised. On 5th post operative day he had anastomotic leak which was managed by ileostomy.

**Discussion**

Enterocutaneous fistula in the scrotum is a very rare complication of inguinoscrotal hernia in both adults and children (5,6). In infants and children only 08 cases have been reported world over till now (7-13). Similarly in adult population only 06 cases have been reported in the literature (14-19). The causes attributed to the development of scrotal fecal fistula in inguinal hernia are illiteracy, poverty and non-availability of not very good health care delivery system especially in developing world (15); surgical interventions (14,17,20).

Udoft (20) also reported use of prosthetic material as the cause of fecal fistula; similarly Nwabunike (14) reported incision of inguinal hernia by herbalist and intervention by quack as a cause of faecal fistula in adults. Contrary to all this we in our case of scrotal fecal fistula

observed that misdiagnosis on the part of a retired surgeon lead to scrotal fecal fistula. Second case was that of ignorance and poverty leading to delay in reporting to the medical institution.

By way of these study reports and review of literature on the subject, we conclude that the spontaneous scrotal fecal fistula is beyond doubt a very rare surgical entity which is attributed to poverty, not readily available surgical health care delivery system in developing world including our state as well. In adults the event is also secondary to some attributable cause like complication of laparoscopic surgery, prosthetic mesh use, intervention by the herbalist or quacks as well as misdiagnosis even by a trained surgeon, as one of the case report is.

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