

# Spontaneous Scrotal Enterocutaneous Fistula: A Case Report and Review of Literature

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### ABSTRACT

**BACKGROUND:** Spontaneous scrotal enterocutaneous fistula (SSECF) is a rare entity both in our local and international literature. No report of such has emanated from south eastern Nigeria.

**METHOD:** The case note of the patient was retrieved and relevant data extracted and summarized. An extensive pubmed search was done and results reviewed and compared with the present case.

**RESULT:** The case report of the successful surgical management of a 7week male who developed right hemiscrotal SSECF as a result of neglected, irreducible right inguinoscrotal hernia is outlined. A review of current literature is also highlighted.

**CONCLUSION:** Spontaneous scrotal enterocutaneous fistula is a very rare complication of neglected, irreducible, strangulated inguinoscrotal hernia. Treatment is invariably inguinal exploration, excision of diseased bowel with end to end anastomosis. Early detection and early repair policy will prevent this.

**KEY WORDS:** Spontaneous, scrotal, enterocutaneous fistula

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### INTRODUCTION

Spontaneous scrotal enterocutaneous fistula is an uncommon entity in world literature<sup>2,3</sup>. No report on this has emanated from southeastern Nigeria. It mostly results from neglected strangulated inguinoscrotal hernia,<sup>6</sup> and is an apparently preventable cause of bowel and testicular losses. Pressure necrosis of scrotal skin and ischaemic necrosis of bowel wall allows spontaneous leakage of stool externally, decompressing the gastrointestinal tract. The treatment is usually inguinal exploration with resection of involved bowel and end to end anastomosis since spontaneous closure is unlikely. Outcome is usually good, but this hernia complication increases hospital stay, morbidity and overall cost of treatment. Early detection and early repair policy of all childhood inguinoscrotal hernias, especially when right-sided and in a neonate, will help prevent this.<sup>3</sup>

We report the successful management of a 7week old male with SSECF following a neglected irreducible, strangulated right inguinoscrotal hernia.

### CASE REPORT

A 7week ,4.5kg male who was delivered at term, presented with about a week history of right hemiscrotal fecal discharge following spontaneous rupture of a 2week irreducible right inguinoscrotal swelling. He also had progressive abdominal distention and absolute constipation. Initial management of the swelling was topical penicillin ointment from a patent medicine store followed by 4days of intravenous drugs and fluids and nil per oral in a peripheral hospital before referral to a tertiary centre. Delayed by financial constraints, scrotal fecal discharge spontaneously started some days after with gradual and complete resolution of the abdominal distention. There was no scrotal necrotizing fasciitis of adjacent scrotum.

On admission in our service he was evaluated, optimized and had an open right groin exploration through a right groin skin crease incision, with ileal resection and end to end anastomosis. Intraoperative findings were a 1cm antimesenteric perforation 10cm from ileocaecal junction with adjacent devitalized bowel, absent right testicle with blind ending vas deferens and testicular artery.

He had a good post operative recovery with good wound healing and bowel function. He has remained stable.



Figure 1: external fistula opening on the right hemiscrotal sac

### DISCUSSION

Spontaneous scrotal enterocutaneous fistula is a rare but significant complication of neglected obstructed, strangulated neonatal inguinoscrotal hernia. Most of the reported cases are in the developing countries<sup>3</sup>, especially India and Nigeria, reflecting poor state of

paediatric surgical health care delivery. Till date, based on extensive pubmed search, there has been only one report from northern Nigeria<sup>3</sup> but none from southeastern Nigeria. The rarity of this entity in our environment is propelling this report.

There was no necrotizing fasciitis in the index case as reported in some cases<sup>3</sup>. This may be because the fistula tract has been well formed at presentation one week after spontaneous leakage started.

The blind ending vas and testicular artery (evidence of vanishing testes syndrome) may have been an incidental finding or due to the prolonged vascular compromise. In some other report the testicles were spared.<sup>3</sup>

Poor understanding of pathology of obstructed, strangulated hernia was demonstrated by use of topical ointment and the 4day delay in a peripheral hospital. The patient would have benefited from early inguinal exploration.<sup>4,5</sup>

Poor financial status engendered further delay in seeking care in a tertiary health facility. Functional and comprehensive national health insurance program may help here as this will allow patients in need to benefit maximally and urgently from pooled resources rather than spending directly from their own depleted pockets. Obstructed hernia occur more on the right<sup>1</sup> and in younger infants<sup>1</sup> and as such early detection, referral and

repair of hernias in neonates and infants should be encouraged especially when they are right sided and in males. Awareness campaign on the dangers of poorly managed inguinal swellings will encourage prompt presentation to hospitals, thereby reducing morbidity. Furthermore, efficient referral system from secondary to tertiary care centres where adequate paediatric surgical care are readily available, should be ensured. Efforts should also be made to train more paediatric surgeons to ensure adequate coverage of our subregion and the country as a whole.

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