

3. HISTOPATHOLOGY:

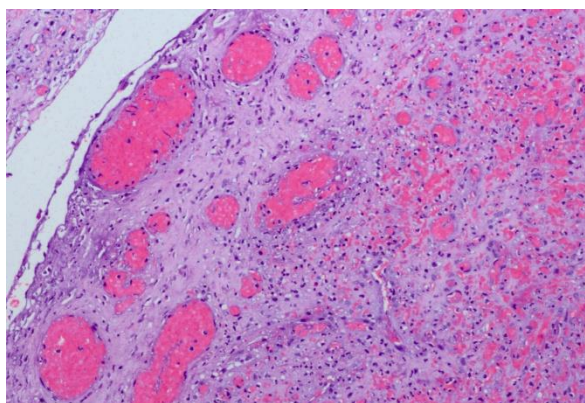


Figure 1: Testis / testicular adnexae finding is consistent with a benign inflamed cyst wall.

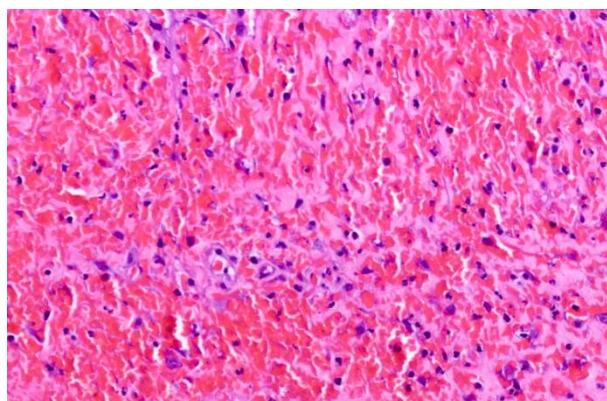


Figure 2: The tissue is devoid of epithelial lining. Granulation tissue formation is seen with reactive fibroblasts and prominent capillaries. No granuloma or malignancy seen.

4. DISCUSSION:

Inguinal-cord cysts are discovered in <1% of inguinal hernia dissections and most of them are of mesothelial origin [2, 3]. They may mimic incarcerations or contain unusual tissue elements.

Dermoid cyst as a cause of inguinal swelling is rare. A search of English medical databases, using key words dermoid cyst and inguinal mass, revealed 6 case reports of inguinal dermoid till date (Table 1) [4-6].

Table 1: Published case reports of inguinal dermoid

Year	Author	Journal	Age (yrs)	Sex	Provisional diagnosis	Duration of mass
1963	Doctor HG et al. ⁷	J Int Coll Surg.			Inclusion dermoid cyst following repair of hernia with full thickness skin graft.	
1971	Brightmore ²	BJCP	72	F	Strangulated hernia	4 years
1985	Asraf et al. ³	JIMA	20	F	Lipoma	2 years
1992	Leeming et al. ⁴	J Paed Surg	18	M	Incarcerated hernia	1 year
2006	Genetzakis M et al. ¹	Clin Exp Obstet Gynecol	27	F	Cyst of round ligament	4 years
2012 (Present case)	Das et al.	IJCRI	48	M	Irreducible hernia	12 years

Dermoid cysts may be teratomatous or non teratomatous benign malformations. Non teratomatous dermoids are common in the inguinal canal. Grossly the excised tumour may be mistaken for a sebaceous cyst or epidermoids. The microscopic presence of skin along with its appendages and sebaceous gland differentiates them from epidermoids and sebaceous cyst which have stratified squamous epithelium surrounded by fibrous tissue forming their wall [4-6]. Diagnosis is often mistaken clinically as irreducible inguinal hernia. Complications of the cyst which resembles obstructed or incarcerated inguinal hernia include inflammation and hemorrhage. The cyst may sometimes lead to compression of adjacent organs causing retention of urine and bowel obstruction. Possibility of malignant degeneration exists especially in women with dermoid cysts arising from round ligament. Tumour markers like alpha fetoprotein and beta chorionic gonadotropin estimation are helpful to monitor treatment and recurrence. Complete surgical excision is the treatment of choice. It is to be contemplated in order to avoid complications like inflammation, hemorrhage and rarely malignant degeneration [7].

According to a study by Georges *et al.* the polypropylene meshes can be safely used in inguinal hernia surgery, even when intestine resection is needed. The authors observed a lower recurrence rate in patients operated on with the Lichtenstein technique (tension-free) [8]. He concluded Mesh repairs can be safely performed when operating due to an incarcerated inguinal hernia. This also relates to other short- and long-term complications such as wound healing disorders, testicle hydrocoele, spermatic cord cyst, sexual dysfunction, seroma, haematoma and chronic pain [9]. The use of polypropylene mesh, in emergency inguinal hernia repairs, does not increase the rate of local complications. It seems that synchronous, partial resection of the small intestine, due to intestinal necrosis, is not a contraindication to use mesh.

D'Ambrosio et al. [10], in their study assessing the efficacy of polypropylene mesh in treating inguinal hernias, detected a beneficial influence of the polypropylene mesh structure on the rate of infectious complications. This is associated with the large diameter of pores (> 70 microns), which allows the macrophages and granulocytes to contact the bacteria.

CONCLUSION

We have presented a very rare case of a dermoid cyst of the spermatic cord in an adult patient mimicking incarcerated inguinal hernia. Although rare, this lesion must always be kept as a differential diagnosis while dealing with inguinal masses. The treatment of choice will be complete surgical excision of the dermoid cyst of the spermatic cord with mesh repairs. The use of polypropylene mesh, in emergency inguinal hernia repairs, associated with dermoid cyst is safe as it does not increase the rate of mesh infection.

