

*Case study*

# DERMOID CYST OF INGUINAL REGION IN PEADIATRIC PATIENT

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## ABSTRACT

**Introduction:** Dermoid cyst in inguinal region is rare case it mimics encysted hydrocele in inguinal region. A dermoid cyst of the spermatic cord is an unusual cause of groin swelling, with 9 cases reported to date. In paediatric patients only one case reported till date.

**Case presentation:** We presenting a case of 6-year-old boy with complain of right sided inguinal swelling for 6 months. Post operative histo-pathology examination confirm the specimen of dermoid cyst.

*Keywords: Dermoid cyst, inguinal swelling, paediatric swelling, Dermoid cyst in inguinal region*

## 1. INTRODUCTION

Most of inguinal swelling in children correspond to inguinal indirect hernias, but there is other pathology also may be found. Other pathologic conditions may mimic hernias, such as preperitoneal lipoma, supernumerary pectineus bursa, internal oblique muscle hematoma, angioma of the round ligament, pedunculated uterine fibroid, inguinal endometriosis, thrombophlebitis of the long saphenous vein, hydrocele, spermatocele, undescended testes, spermatic cord cyst, lymphangioma, lymphadenopathy, abscess and dermoid/epidermoid cysts. Dermoid cysts are common developmental anomalies occurring along embryonic fusion lines.

## 2. CASE REPORT

We presenting a case of 6-year-old boy with complain of right sided inguinal swelling for 6 months. A 6-year-old boy was admitted to our ward with a 6 months history of a slowly progressive swelling in the right inguinal region. The physical examination of the inguinal canal revealed an irreducible non-tender swelling with no cough impulse. On examination his abdomen was soft and nontender. There were no cough impulses in the inguinal region. Both testes were normal.



**Fig.1 Pre operative right sided inguinal region swelling**

An ultrasound showed the presence of a right inguinal mass consisting of large cystic lesions with internal echoes within the inguinal region. These measured 3 x 2 cm. There were no reported sonographic features to suggest an underlying malignancy.

The patient underwent an exploration of the right inguinal region with the differential diagnosis of a lipoma or an encysted hydrocoele of the cord.



**Fig.2. Intra operative image showing Dermoid cyst stump attached**



**Fig. 3 Intra operative image after excision of dermoid cyst**

During surgery we noted soft masses, small size within the inguinal canal. They appeared separate from the cord, and we felt they contained fat. We excised masses.

On macroscopic examination partially skin covered creamish brown single globular structure measuring total about 3 x 2 x 1 cm. External surface capsulated, smooth. Cut surface sebum present. Histopathological section shows histology of well-defined wall lined by stratified squamous epithelium with mature skin appendages (hair follicles and sebaceous gland) and a lumen filled with keratin. There was no evidence for dysplasia or malignancy in the lining of the cyst. The histological appearances suggested a dermoid cyst.



**Fig.4 Dermoid cyst**



**Fig. 5. Dermoid cyst after opening**

### **3. DISCUSSION:**

Patients with groin swellings can present to the urologist in the outpatient clinic. Though the most common diagnosis is an inguinal hernia, other causes of groin swellings include femoral hernias, hydrocoeles, undescended testis, enlarged lymph nodes, lipoma, femoral artery aneurysm, saphena varix and varicocele. Rarer causes include inguinal endometriosis in women and thrombophlebitis of the long saphenous vein. A dermoid cyst of the spermatic cord is an unusual cause of groin swelling, with 9 cases reported to date.

One Dermoid is a loose term given to cysts lined by squamous epithelium occurring in various parts of the body. Dermoid cysts in and beneath the skin occur mostly on the face, neck or scalp. Dermoid cysts can also be intracranial, intraspinal or peri spinal. Intra-abdominal dermoid cysts can also occur on the ovary or omentum. Dermoid cysts occur when skin and skin structures become trapped during foetal development. Histogenetically, Dermoid cysts are a result of the sequestration of skin along the lines of embryonic closure. Histologically the wall of a dermoid cyst consists of all components of the skin, including hair follicles, hair, sweat and sebaceous glands.

### **4. CONCLUSION**

A dermoid cyst is a rare, benign cause of masses in the groin. The diagnosis may be suspected on ultrasound, but requires surgical excision and histopathological confirmation.

### **CONSENT**

Consent has been taken from the patient.

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