

EPIDERMAL INCLUSION CYST OF THE PERIANAL REGION: REPORT OF A RARE CASE

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Received: 30 June 2021, Revised and Accepted: 07 August 2021

ABSTRACT

Epidermal cysts are congenital lesions that originate from embryonal tissue remnants. It requires histopathology for its diagnosis. In this case, we report a young male with no comorbidities presenting with perianal swelling. He was evaluated and taken up for surgery. Post-operative period was uneventful and he was discharged on the 2nd post-operative day. He is doing well at 4 months of follow-up.

Keywords: Epidermal cyst, Epidermoid cyst, Perianal swelling, Perianal cyst

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INTRODUCTION

Epidermal inclusion cysts, commonly known as sebaceous cysts, of the perianal region are a rare entity which is lined with true, stratified squamous epithelium which occurs due to blockage of the duct of sebaceous glands or traumatic inclusion. They are most commonly found in region of head and neck; perineum being the rarest location. They are clinically asymptomatic with very slow growth but are susceptible to infection and inflammation causing discomfort to the individual. The gold standard treatment involves complete excision of the sac with its contents without any spillage.

CASE REPORT

A 31-year-old male presented with complaints of swelling in the perianal region for 2 years which gradually increased in size. It was associated with pain for 2 months mainly while sitting. There was no history of any trivial injury over the region. There were no other specific symptoms. On examination, a solitary swelling of size 6 cm×5 cm was noted in the right side of intergluteal cleft – 2 cm away from the anal margin. The swelling was oval with dilated veins over it. On palpation, it was soft, cystic with smooth surface and with no local rise of temperature or tenderness. The skin over the swelling was pinchable; transillumination test was negative. On digital rectal examination, sphincter tone was normal with no evidence of extension or connection to mucosa (Fig. 1).

Magnetic resonance imaging (MRI) pelvis showed well-defined round to oval-shaped exophytic lesion within subcutaneous tissues of the right side of intergluteal cleft causing focal contour bulge. The lesion

appears hypointense on T1 and heterogeneously hyperintense on T2 and short-tau inversion recovery (STIR) sequences. T2 and STIR sequences show thin hypointense rim surrounded by thin perilesional hyperintensity. There were no intralesional cystic changes or anal canal/intramuscular infiltration; features suggesting the possibility of benign neurogenic tumor – likely schwannoma (Fig. 2).

After examination under anesthesia, swelling was excised in toto. Intraoperatively, swelling was well encapsulated with no surrounding extensions. The defect was closed primarily with absorbable sutures and closed suction drain *in situ* (Fig. 3). The drain was removed after 24 hours and the patient was discharged. On follow-up, histopathology was reported as epidermal cyst (Fig. 4).

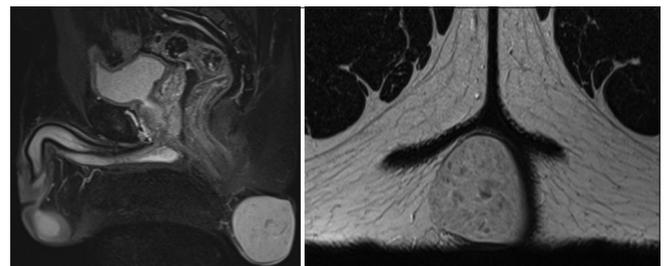


Fig. 2: Magnetic resonance imaging pelvis of the perianal swelling



Fig. 1: Clinical picture of the perianal swelling

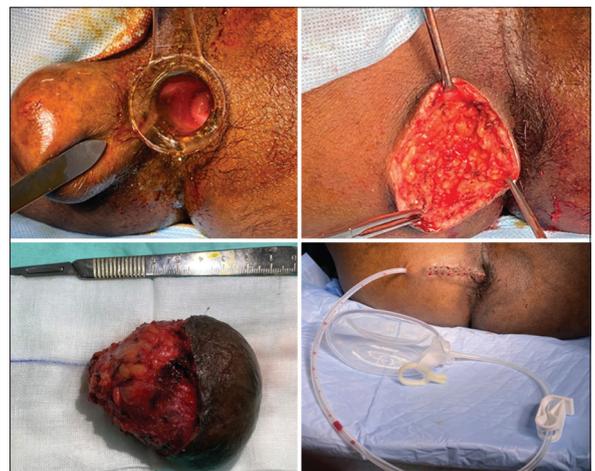


Fig. 3: Intraoperative pictures showing the swelling being excised and wound primarily closed with drain *in situ*

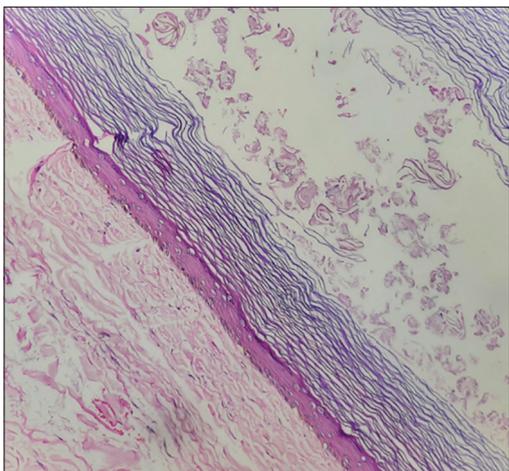


Fig. 4: Histopathology showing cyst wall with flattened squamous epithelium and prominent granules

DISCUSSION

The incidence of epidermal cyst in perineal region is very rare [1]. Various factors responsible for the formation of cyst include exposure to ultraviolet rays, human papilloma virus infection, smoking, and trauma such as needle biopsies or episiotomies involving the perineal region [2,3]. Multiple epidermoid cysts are found in Gardner syndrome and Gorlin syndrome [4]. The differential diagnosis of epidermal cyst involving perineal region includes pilonidal cyst, abscess, dermoid cyst, lipoma, or benign teratoma [5]. Although these are clinically asymptomatic, few cases have been reported where they underwent malignant transformation [6]. Squamous cell carcinomas arising from

the epidermal cysts are considered to be even rarer [7]. On computed tomography, cysts appear as well-defined surrounded by a capsule; with any contrast enhancement of mural nodule or focal thickening of wall indicates malignant changes [8]. On MRI, the cyst shows low signal intensity on T1-weighted images and intermediate or high signal intensity images on T2-weighted images [5]. The successful treatment of cyst depends on complete surgical excision with utmost care to avoid intraoperative spillage and recurrence [9]. Care must also be taken during surgery to avoid excessive excision, thereby causing anal canal stenosis [9].

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