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Case Report

A Large Sebaceous Cyst at An Atypical Site

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Abstract

Epidermoid inclusion cysts of the perineal region are a very rare entity, which require careful diagnosis by appropriate imaging and according management. We are here to describe an unusual case of a huge perineal epidermoid inclusion cyst extending upwards into pelvic cavity, which was removed successfully by meticulous dissection in abdominoperineal approach. Essential investigations to ensure accurate diagnosis in addition to surgical techniques followed to ensure complete removal & to prevent recurrence are described in this case report.

Introduction

Sebaceous cysts (epidermoid inclusion cysts) are common benign cysts, thought to occur with developmental disorder of the sebaceous glands, the progression of epidermis into the dermis layer or duct blockage. Misplacement of ectodermal structure during embryonic fusion stage is also implicated in the etiology.[1,2] It progresses over time due to incorporation of epidermal tissue into the dermis layer of the skin.[3]

Although epidermal cysts usually appear on the the head and neck including scalp and cause no symptoms at rest; has also been reported to be seen in neck, eyes, ears, lips, oral cavity, fingers, hands, hips, thighs, vulva, mons pubis and upper and lower limbs.[1,2]

However, perianal involvement is considerably rare. These are susceptible to infection and inflammation causing discomfort.[3] In this study, a rare case of an epidermoid inclusion cyst arising in perianal region extending upto the pelvis, but extra-peritoneal, has been described along with necessary investigations and surgical technique to ensure accurate diagnosis and to reduce recurrence and patient morbidity.

Case report

A 55-years-old post-menopausal lady presented to a tertiary care hospital with history of left lower abdominal aching discomfort for last 5-6years, insidious in onset, gradually increasing in intensity over time. Since last 6 months, she noticed a lump in left lower abdomen which was painless, no change in size or appearance with time. These symptoms were not associated with any alteration of bowel habits, per rectal bleeding, per vaginal bleeding/discharge, passage of in urine or difficulty in micturition. There was no past medical history of trauma to the perineal region or previous perineal procedures. On assessment of the patient, per-abdominally a soft non tender lump was found

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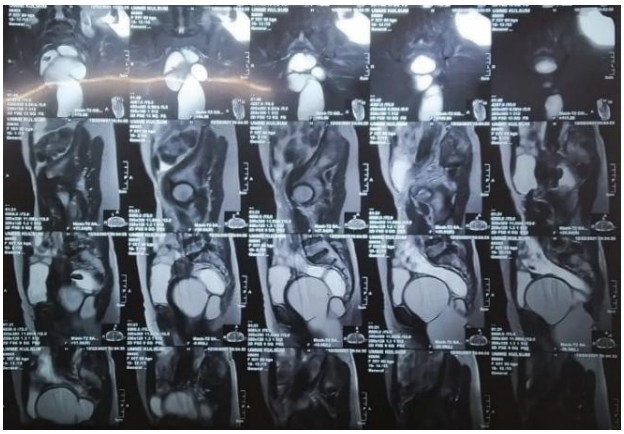
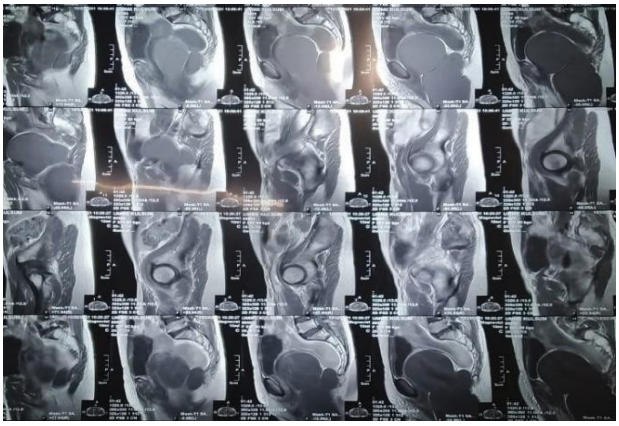
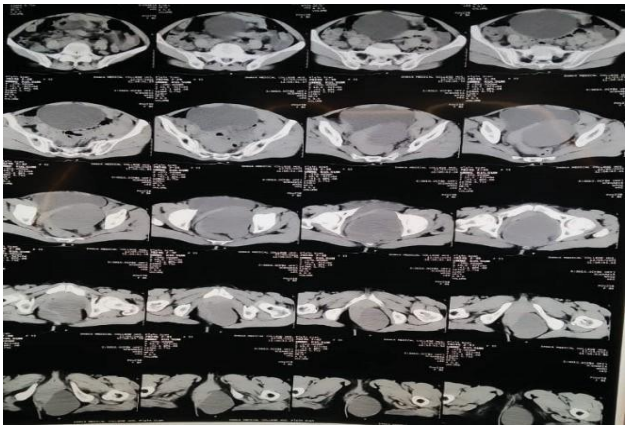
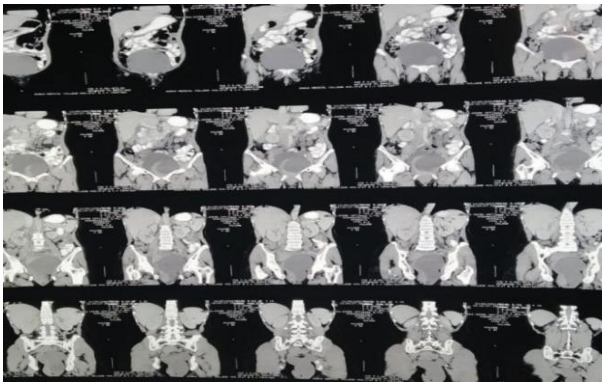
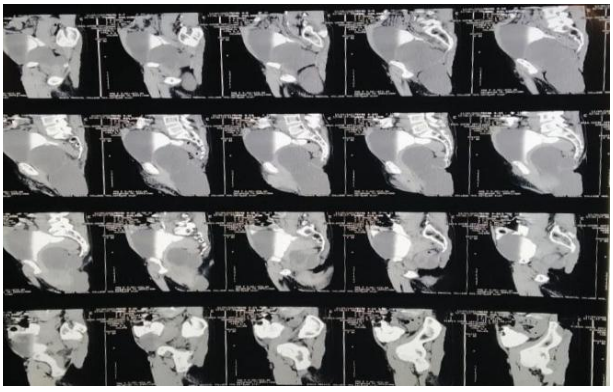
occupying the left iliac fossa measuring approximately 6 x 5cm in diameter, with well-defined margin, smooth surface, is free from overlying parietal wall but neither lower limit could be palpated beyond bony margin of pelvis nor the fixity to underlying structures could be assessed. Per vaginal examination revealed a cystic mass which could be felt behind the posterior vaginal wall,Os was found high up to the right; cervix & uterus couldn't be assessed further due to mass. On peri-anal examination, left buttock was a high up than the right one. A lump could be felt beneath the bulge, which was non tender, soft to firm in consistency, smooth surfaced, margin ill-defined, lower limit of the lump couldn't be assessed, seemed deep into the pelvis, but free from overlying perianal skin. Magnetic resonance imaging (MRI) was undertaken and demonstrated a large multiloculated cystic lesion noted at left side, between the bladder & rectum displacing rectum & uterus laterally extending downwards along anal canal, may be of adnexal origin. CECT of abdomen shows, moderately enlarged cystic structure is noted in left adnexal region measuring 7.2x 6.7cm in diameter with solid cystic component. So, the surgeon team decided to proceed for exploration in abdomino-perineal approach. On lithotomy position at first abdomen was opened with Pfannenstiel incision, upper limit of the cyst could be seen only, but no peritoneal breach was detected. On perineal approach, cyst was reached by a longitudinal incision on perianal skin over the bulge. (Fig. 2). The cyst which had pushed rectum laterally; cervix & uterus upwards, was entirely enucleated, meticulously separating it from pelvic floor muscles. Macroscopically it appeared to be a thin-walled 13x 8x 4.5cm sac containing greyish brown sebum like material. After washing resultant pelvic space with normal saline, it was closed in layers after keeping a drain tube there. containing laminated keratin materials.(Fig. 3).











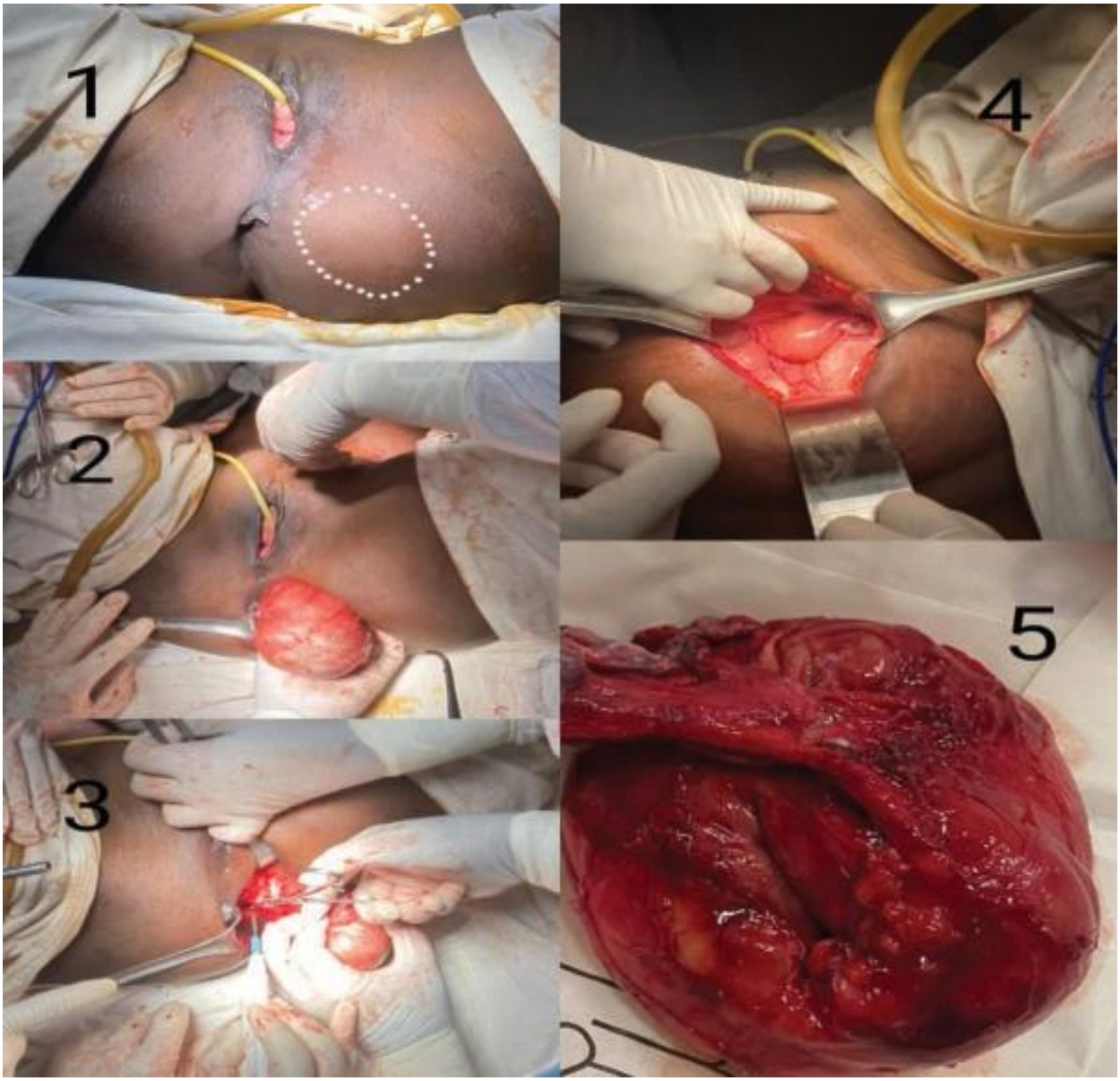


Figure 2: *Surgical management of the large intersphincteric epidermoid inclusion cyst. 1.Examination under anaesthesia. 2. Delineation of the origin of the cyst in theintersphincteric plane. 3. Surgical excision of the cyst and haemostasis. 4. Pelvic floor following excision of the cyst. 5. Excised cyst*

Perineal skin was closed with interrupted stitches using 2-0 non-absorbable suture. Histological analysis of the mass confirmed epidermal inclusion cyst which was lined by stratified squamous epithelium .

Discussion

Epidermoid inclusion cysts are benign developmental cysts that believed to occur due to developmental disorders of sebaceous glands, obstruction of the ducts or extension of the epidermis into the dermis and proliferation.[4] The last two etiologies are mostly secondary to trauma. However, some cases may also occur without any cause. It progress over time due to incorporation of epidermal tissue into the dermis layer of the skin.[3] These epidermal cells form the surrounding walls of the cyst and secrete the yellow sebum and keratin liquid found in this case[3] They are seen most commonly in the face, neck or body.[5] Epidermal cysts are mostly asymptomatic; however, when infected or gave evidence, they lead to compression of the surrounding strutures.[6] A small cyst can grow over time; therefore can be turned into

a giant cyst.[7] Various factors have been linked to the development of epidermoid cysts including male gender, genetic conditions such as Gardner syndrome (a variant of familial adenomatous polyposis), injury and sun damage to the skin, smoking and the human papillomavirus.[3] Epidermal cysts arising in the pelvis or perineum are very rare. Most of these cases are retro-rectal or presacral. However, the involvement of the perianal region is quite rare, with less than 10 case reports in the literature. Benign perianal masses are rarely seen especially in female patients.[8,9,10,11,12,13] Periianal abscess, tailgut cysts, anal canal cysts, retrorectal/ presacral cysts, teratomas and dermoid cysts, anal skin cancer should be considered in the differential diagnosis of perianal cysts.[6,14] Furthermore pelvic computed tomography (CT), transrectalen-dosonography, USG or magnetic resonance imaging (MRI) are useful for showing the relationship between the environment and the contents of the cyst tissue.[15] There are no laboratory tests for helping diagnose. Definite diagnosis and the distinction with other pathologies considered in the differential diagnosis is made by only pathological examination. Total excision is the preferred treatment method.

Asymptomatic epidermal inclusion cysts do not need treatment. When becoming symptomatic, treatment consists of wide excision, since there is some risk of recurrence. Cysts must be fully excised without disrupting the integrity of the cyst and damaging the sphincter. Very rare cases malignant carcinomas may develop from epidermoid cysts as described in five published case reports, necessitating imaging and histopathological analysis.[16]

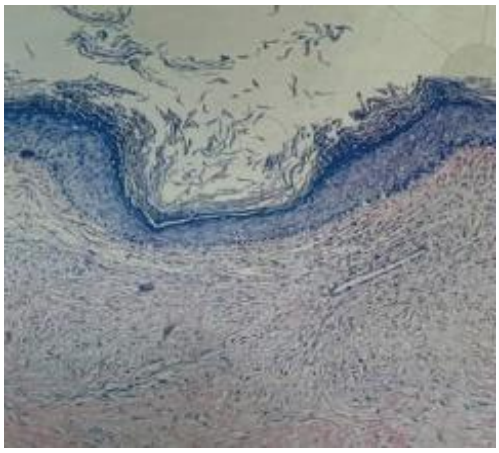


Figure 3: *Microscopic overview of the surgical specimen showing a large epidermal inclusion cyst lined by squamous epithelium (haematoxylin and eosin stains).*

Furthermore, if misdiagnosed and managed as a perianal abscess or fistula-in-ano, there is an estimated post-operative infection rate of <“30% causing significant patient morbidity [3]. Successful epidermoid inclusion cyst removal relies on complete surgical resection and the avoidance of intraoperative surgical spillage due to the potential for recurrence [3]. pCare must be taken to avoid anal canal stenosis resulting from excessive excision [3]. The patient in this case had an uneventful postoperative recovery with excellent functional results.

Conflict of interest statement

None.

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