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Diagnostic and Therapeutic Approach to Epidermoid Cysts in the Gluteal Region: A Rare Case and Review of the Literature

By Ouhammou Yousra, Laamri Imad, Maouni Ilyass, Boussaidane Mohammed, Elmoukhtari Kamal & Abou Elalaa Khalil

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We discuss the clinical features and possible etiology of this rare condition, as well as the importance of medical imaging for an accurate diagnosis. Epidermoidcysts are often asymptomatic, but may cause discomfort or pain in the area where they are found. When they are located in the gluteal area and can be confused with other types of cysts, such as lipomas or sebaceous cysts.

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Treatment of epidermoid cysts is usually surgical, as in our patient's case. Complete excision of the cystis necessary to avoid recurrence. In addition, histologyis essential to confirm the diagnosis and exclude any potential malignancy.

Epidermoidcysts of the gluteal region are a rare but important condition to consider when a mass is present in this region. Medical imaging and histology are important tools for the accurate diagnosis and appropriate treatment of this benign condition.

Keywords: epidermoid cyst, gluteal region, excision surgery, histology, medical imaging, diagnosis.

I. Introduction

Epidermoid cysts in the gluteal region are rare benign tumors that can develop from epithelial cells of the skin. They generally have a good prognosis and are often discovered incidentally. However, their symptomatology can vary depending on their size and location. Although they can appear any where on the body, they are rare in the gluteal region. Diagnosis is based primarily on clinical examination, but ultrasound, computed tomography (CT), and magnetic resonance imaging (MRI) are the most commonly used imaging modalities to characterize these cysts and assess their locoregional extension. Definitive diagnosisis based on histology and immunohistochemistry.

Epidermoidcysts are rare and represent less than 1% of all skin tumors. They occur most commonly on the head, neck, and trunk and are rare in the gluteal region. They occur more frequently in young and middle-aged adults, with a slight predominance in women. In a review of review of 432 cases of epidermoid cysts, only seven cases were reported in the gluteal region (1)

II. Case Report

We report the case of a 63-year-old woman, without any notable pathological history, who presented for one year with a bulging right gluteal mass that was progressively increasing in size. This mass was palpable to the firm touch, sensitive to the contact and was bleeding. It was located in the right lower gluteal quadrant and fixed relative to the gluteal muscle (Figure 1). Helical imaging was performed after intravenous contrast injection, revealing a large hypodense tissue mass occupying the right gluteal region, measuring 12 x 8.1 cm with no other secondary locations (Figure 2).

Author σ ρ: Department of VisceralSurgery, Military Hospital Mohammed V, Faculty of Medicine and Pharmacy of Rabat, Morocco.
Author ω ¥: Department of Traumato OrthopedicSurgery, Military Hospital Mohammed V, Faculty of Medicine and Pharmacy of Rabat, Morocco.
Author §: Department of Anesthesiology and Intensive Care, Head of the Operating Room TheatreMilitary Hospital Mohammed V, Faculty of Medicine and Pharmacy of Rabat, Morocco.
Corresponding Author α: Department of visceralSurgery, Military Hospital Mohammed V, Faculty of Medicine and Pharmacy of Rabat, Morocco. e-mail: ouhammouyousra2017@gmail.com

Figure 1: Preoperative image of a giant right gluteal mass

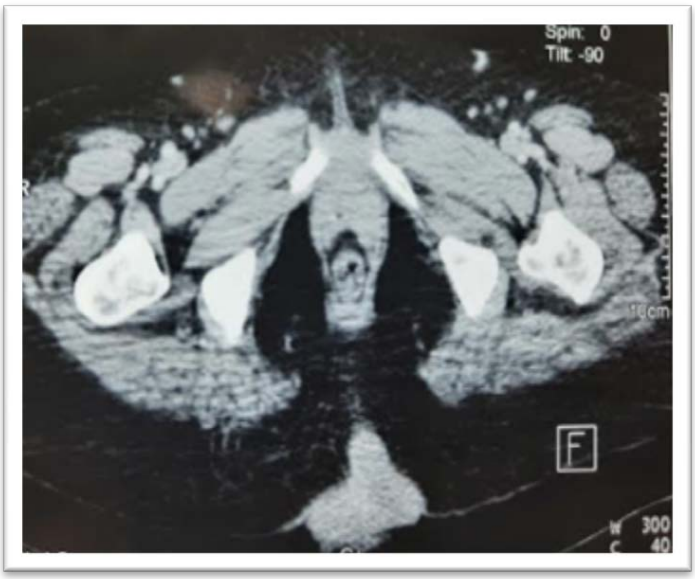

Figure 2: Computed tomography scan showing gross mass of the region Gluteal

Surgical excision was proposed to the patient, who accepted the procedure. A carcinological resection was performed (Figure 3). Histopathological examination on section revealed a mammariescystic formation, the wall of which is made of stratified, keratinized epithelium delimiting a cavity where degradation products of desquamated epithelial cells accumulate in the form of an amorphous material, rich in keratin and cholesterol (Figure 4).

Figure 3: Image showing the surgical specimen of the right gluteal region

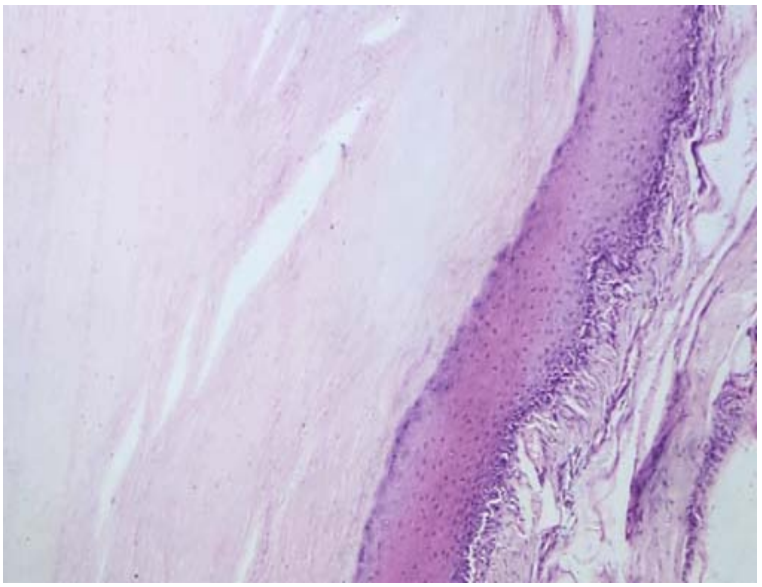

Figure 4: Pathological specimen demonstred a mammaries cystic formation with a stratified, keratinized epithelium in the wal. (coloration HE Gx100)

III. Discussion

The circumstances of discovery may vary for an epidermoid cyst of the buttock. Their growth is very slow and symptoms occurlate (2). Symptoms vary depending on the tumor location (3). In this particular case, the patient presented with a painful mass in the right but tock, which led to imaging to evaluate the cause of the pain. Possible clinical presentations include a painful mass, pain on palpation, and discomfort with walking or physical activities (4).

The diagnosis of epidermoidcyst of the right buttock can be established by imaging, such as ultrasound or computed tomography (CT). In this case, CT was used to confirm the diagnosis and locoregional extension. On CT, the epidermoid cyst typically presents as an iso or hypodense, heterogeneous, irregularly contoured mass without any contrast and without peri-lesionaledema (5). The diagnosisis confirmed by MRI and in particular by their hyper signal on diffusion sequences. Diffusion sequences are essential to confirm the diagnosis on MRI (6). The evolution of gluteal

epidermoid cysts is very slow. They are usually monitored by regular MRI. Surgical treatment is proposed if symptoms are present. If symptoms are moderate and the risk of surgery is considered significant, surveillance may be preferred initially (7). The recommended surgical procedure for an epidermoid cyst of the buttock depends on several factors, such as the size and location of the lesion, as well as the experience and preference of the surgeon. The treatment of choice for squamous cystis total resection of the tumor including the cyst capsule that produces the cyst contents (8). But sometimes, total resection is not possible because of the location of the cyst and its close relationship with critical nerve or vascular structures. In this case, part of the capsule is left in place with a high risk of recurrence (9).

The diagnosis is essentially established by histopathological examination, which objectifies the tumor as a "pearly" tumor because of its pearly white color and nippled appearance (10). The differential diagnosis is essentially with its rarer dermoid cyst counterpart, which usually does not have the milky white appearance so characteristic of its epidermoid counterpart. It is more variable, more heterogeneous, due to the diversity of the Several studies have examined the outcomes of surgical excision for epidermoid cysts of the buttock, with high success rates and low recurrence rates (11). One study reported a 98% success rate for surgical excision of epidermoid cysts of the buttock, with a recurrence rate of only 1% (12). Another study reported a success rate of 95.8% with a mean follow-up of 31 months (13).

IV. Conclusion

Epidermoid cyst of the buttockis a rare benign tumor, whose diagnosisis established by imaging and confirmed by histopathological examination. Epidermoid cysts are treated surgically, with complete resection of the tumor and its capsule, if possible. Follow-up isnecessary to monitor for recurrence, although this is rare. Surgeries have a high success rate and are considered the treatment of choice for squamous cysts of the buttock.

Consent

Written informed consent was obtained from the patient for publication of this case and for the accompanying images.

Ethical Approval

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

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