

**Vulvar Epidermoid Cyst: A Rare Benign Vulvar Lesion — Case Report****Tarini Sonwani****Assistant Professor, Department of Obstetrics & Gynaecology, Venkateshwara Institute of Medical Sciences, Uttar Pradesh, India****Received: 01-09-2025 / Revised: 15-10-2025 / Accepted: 21-11-2025****Corresponding author: Dr. Tarini Sonwani****Conflict of interest: Nil****Abstract**

Epidermoid cysts are common benign cutaneous lesions; however, their occurrence in the vulvar region is uncommon and often poses diagnostic confusion due to similarity with other vulvar masses. We report a case of a vulvar epidermoid cyst in a reproductive-aged woman presenting with a slowly enlarging, painless vulvar swelling. Clinical examination and imaging suggested a benign cystic lesion. Complete surgical excision was performed, and histopathological examination confirmed the diagnosis of an epidermoid cyst. This case highlights the importance of considering epidermoid cysts in the differential diagnosis of vulvar swellings and emphasizes surgical excision as definitive management.

**Keywords:** Vulvar epidermoid cyst, vulvar mass, benign vulvar lesion, epidermal inclusion cyst.

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**Introduction**

Epidermoid cysts, also known as epidermal inclusion cysts, are benign lesions arising from the proliferation of epidermal cells within the dermis [1]. They are commonly encountered on the scalp, face, neck, and trunk but are rarely seen in the vulvar region [2, 3].

Vulvar epidermoid cysts may arise due to trauma, surgical procedures, obstruction of pilosebaceous units, or implantation of epidermal tissue during embryogenesis [1,3]. Because vulvar masses have a wide differential diagnosis ranging from benign to malignant conditions, accurate diagnosis and appropriate management are essential [2].

**Case Presentation:** A 45-year-old woman, para 7, live issues 6, all vaginal deliveries, presented with a swelling over the left labia majora for eight months.

The swelling was painless and gradually increasing in size, with no associated discharge, fever, or dyspareunia. There was no prior history of trauma or vulvar surgery.

Local examination revealed a solitary, well-circumscribed, cystic, non-tender mass measuring approximately 7 × 3 cm, with normal overlying skin and no inguinal lymphadenopathy [Figure 1].



**Figure 1: Shows swelling over left labia majora**

Ultrasonography demonstrated a well-defined hypoechoic cystic lesion with internal echoes, suggestive of a benign vulvar cyst [2]. The patient underwent complete surgical excision. The postoperative period was uneventful. Histopathological examination revealed a cyst lined by stratified squamous epithelium with a granular layer and lamellated keratin, confirming the diagnosis of an epidermoid cyst [3].

### Discussion

Epidermoid cysts of the vulva are uncommon and represent a diagnostic challenge due to their rarity and the wide spectrum of vulvar pathologies [3]. These cysts are benign lesions formed by the implantation and proliferation of epidermal elements within the dermis. In the vulvar region, they may be congenital or acquired, with acquired lesions often associated with trauma, episiotomy, surgical procedures, or chronic irritation [1]. However, many patients, including the present case, may not have an identifiable predisposing factor.

Clinically, vulvar epidermoid cysts present as slow-growing, painless swellings and are often discovered incidentally or when they cause discomfort due to size or secondary infection [3]. The differential diagnosis includes Bartholin duct cyst or abscess, lipoma, hidradenitis suppurativa, sebaceous cyst, endometriosis of the vulva, and vulvar malignancy [1,2]. Distinguishing between these entities based solely on clinical examination may be difficult.

Imaging modalities such as ultrasonography and magnetic resonance imaging can aid in characterizing vulvar masses. Epidermoid cysts

typically appear as well-circumscribed cystic lesions with internal echoes on ultrasonography, while MRI may show restricted diffusion due to keratin content [2,4]. Despite these features, imaging findings are not pathognomonic, and histopathological examination remains the gold standard for diagnosis.

Complete surgical excision is the treatment of choice and provides both definitive diagnosis and cure [1,3]. Care must be taken to excise the cyst wall completely to prevent recurrence. Malignant transformation of epidermoid cysts is extremely rare, and prognosis after excision is excellent [3].

### Conclusion

Although rare, epidermoid cysts should be included in the differential diagnosis of vulvar swellings. A thorough clinical evaluation supported by imaging and confirmed by histopathology ensures accurate diagnosis. Surgical excision is curative and associated with excellent outcomes [1,3].

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