Case Report

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# Epidermoid Cyst of Forearm In A Young Male Showing Classical Pseudotesticular Pattern.

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## Abstract

Epidermoid cysts are benign, slow-growing lesions commonly seen in young adults. This case report describes a 21-year-old male with a painless, progressively enlarging nodule on his right forearm. USG showed Presence of an epidermoid cyst characterized by a pseudotesticular pattern. The lesion was well-defined with a homogeneous echotexture, resembling testicular tissue. There was no significant internal vascularity on color Doppler imaging, further supporting the benign nature of the cyst. The surrounding tissues appeared normal with no signs of inflammation or other abnormalities. Clinical examination revealed a firm, mobile nodule with a central punctum. The cyst was excised under local anesthesia, and histopathology confirmed the diagnosis of an epidermoid cyst. The patient had an uneventful recovery with no recurrence at follow-up. This case underscores the effective management of epidermoid cysts through complete surgical excision.

**Keywords:- Epidermoid cyst, Pseudo testicular pattern, Surgical excision, Ultrasound.**



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## INTRODUCTION

Epidermoid cysts, also known as epidermal inclusion cysts or sebaceous cysts, are benign, slow-growing lesions that can occur anywhere on the body but are most commonly found on the face, neck, and trunk.[1] They arise from the proliferation of epidermal cells within a cystic structure in the dermis and are typically filled with keratinous material. These cysts are generally asymptomatic but can become inflamed or infected, leading to discomfort and potential complications.[2]

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Epidermoid cysts are common in young adults, with a slight male predominance. They can be associated with trauma or surgical procedures that cause the epidermal cells to be implanted deeper into the dermis, but many cases occur without any apparent cause. The cysts are lined by stratified squamous epithelium and contain a mix of keratin and lipid-rich debris.[3]

Clinically, epidermoid cysts present as firm, round, mobile nodules with a smooth surface. They are typically non-tender unless secondarily infected or ruptured. The overlying skin may appear normal or show a central punctum, which represents the clogged pore or hair follicle. Diagnosis is usually clinical, but imaging or histopathological examination can be performed if the presentation is atypical or if malignancy is suspected. Ultrasound characteristically shows pseudotesticular pattern.[4]

An important diagnostic feature is the presence of a central punctum and the characteristic cheesy, malodorous material that can be expressed from the cyst. When inflamed, the cyst can mimic other conditions such as abscesses or lipomas, necessitating differential diagnosis.[5]

# CASE REPORT

A 21-year-old male presented to the dermatology clinic with a 6-month history of a painless lump on his right forearm. The lump had gradually increased in size but was not associated with any significant discomfort. He denied any history of trauma to the area, systemic symptoms, or previous similar lesions. His medical history was unremarkable, and there was no family history of similar conditions.

On physical examination, a 2.5 cm firm, round, mobile nodule was noted on the right forearm. The overlying skin was intact with a visible central punctum. The lesion was non-tender, and there were no signs of inflammation or infection. Differential diagnoses included lipoma, dermoid cyst, and abscess, but the presence of the central punctum and the lesion's characteristics suggested an epidermoid cyst.

An ultrasound examination was done which showed well-defined hypoechoic lesion with homogeneous echotexture, resembling testicular tissue. There was no significant internal vascularity on color Doppler imaging, further supporting the benign nature of the cyst. The surrounding tissues appeared normal with no signs of inflammation or other abnormalities.

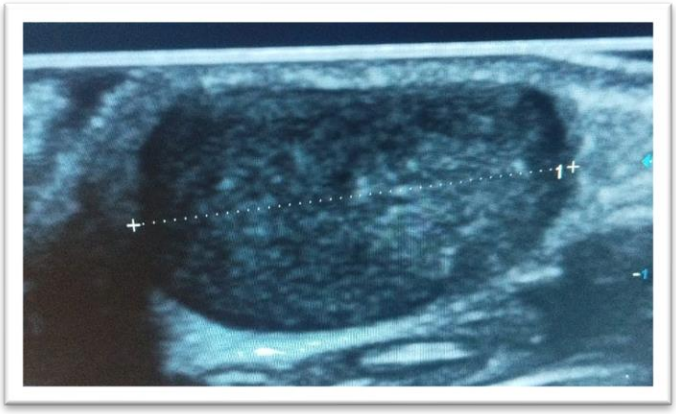

**Figure 1: Characteristic Pseudotesticular pattern on ultrasound.**

The patient was advised about the benign nature of the lesion and the options for management, including observation, incision and drainage, or complete excision. He opted for surgical excision due to cosmetic concerns and the potential for growth or infection.

The cyst was excised under local anesthesia in an outpatient setting. The procedure involved making an elliptical incision over the lesion, carefully dissecting around the cyst to avoid rupture, and completely removing it along with the cyst wall to prevent recurrence. The excised cyst was sent for histopathological examination, which confirmed the diagnosis of an epidermoid cyst.

The patient’s postoperative course was uneventful, with the wound healing well and no signs of infection. At the follow-up visit two weeks later, the sutures were removed, and the patient was satisfied with the cosmetic outcome. He was advised on wound care and the low likelihood of recurrence with complete excision.

# DISCUSSION

Epidermoid cysts are a common benign condition, often managed conservatively unless complications arise. This case demonstrates the typical presentation and straightforward management of an epidermoid cyst in a young adult. Complete surgical excision is the preferred treatment for symptomatic, recurrent, or cosmetically concerning cysts, ensuring the removal of the entire cyst wall to prevent recurrence.[6]

Several similar cases in the literature emphasize the benign nature of epidermoid cysts and the effectiveness of surgical excision. For instance, a study by Li J et al. reported a case of repeated recurrent epidermoid cysts highlighting the importance of removing the entire cyst wall.[8] Another case report by de Mendonça JCG described a similar presentation in a 54-year-old with successful outcomes following excision .[9]

The differential diagnosis of epidermoid cysts includes lipomas, dermoid cysts, abscesses, and other benign or malignant tumors. Clinical evaluation and imaging, if necessary, can help distinguish these conditions. Ultrasound can be particularly useful in differentiating cystic from solid lesions and assessing the relationship to surrounding structures.[10]

In rare cases, epidermoid cysts can undergo malignant transformation into squamous cell carcinoma. However, this is exceedingly uncommon, and regular clinical follow-up post-excision is generally sufficient for monitoring.

## .CONCLUSION

Epidermoid cysts are common, benign lesions that can be effectively managed with surgical excision when symptomatic or for cosmetic reasons. This case highlights the typical presentation, diagnosis, and successful treatment of an epidermoid cyst in a young male patient. Complete excision ensures minimal risk of recurrence and satisfactory cosmetic results.

## Conflict of interest

None

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None

## REFERENCE

1. Kasahara R, Tajiri R, Kobayashi K, Yao M, Kitami K. Squamous Cell Carcinoma Developing from a Testicular Epidermal Cyst: A Case Report and Literature Review. Case Rep Urol. 2019;2019:9014301.
2. Bashaireh KM, Audat ZA, Jahmani RA, Aleshawi AJ, Al Sbihi AF. Epidermal inclusion cyst of the knee. Eur J Orthop Surg Traumatol. 2019 Aug;29(6):1355-1358.
3. Prior A, Anania P, Pacetti M, Secci F, Ravegnani M, Pavanello M, Piatelli G, Cama A, Consales A. Dermoid and Epidermoid Cysts of Scalp: Case Series of 234 Consecutive Patients. World Neurosurg. 2018 Dec;120:119-124.
4. Santhosh K, Thomas B, Radhakrishnan VV, et al.Diffusion tensor and tensor metrics imaging in intracranial epidermoid cysts. J Magn Reson Imaging 2009; 29: 967–970.
5. Jolapara M, Kesavadas C, Radhakrishnan VV, et al.Diffusion tensor mode in imaging of intracranial epidermoid cysts: one step ahead of fractional anisotropy. Neuroradiology 2009; 51: 123–129.
6. Fanous AA, Gupta P, Li V. Analysis of the growth pattern of a dermoid cyst: case report. J Neurosurg Pediatr 2014; 14: 621–625.
7. Chowdhury F, Haque M, Sarker M. Intracranial epidermoid tumor; microneurosurgical management: an experience of 23 cases. Asian J Neurosurg 2013; 8: 21.
8. Li J, Qian M, Huang X, Zhao L, Yang X, Xiao J. Repeated recurrent epidermoid cyst with atypical hyperplasia: A case report and literature review. Medicine (Baltimore). 2017;96(49):e8950.
9. de Mendonça JCG, Jardim ECG, Dos Santos CM, et al. Epidermoid Cyst: Clinical and Surgical Case Report. *Ann Maxillofac Surg*. 2017;7(1):151-154.
10. Liu M, Liu X, Wang Y, et al. Epidermal Cyst on the Scalp Induced by Forceps Injury During Delivery: A Case Report and Epidemiological Analysis of 3949 Patients. Clin Cosmet Investig Dermatol. 2023;16:593-601. Published 2023 Mar 8.

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