

Giant Epidermoid Cyst of Scalp – A Rare Presentation

S Dalal, T Chauhan, R Kumar, S Choudhury

Citation

S Dalal, T Chauhan, R Kumar, S Choudhury. *Giant Epidermoid Cyst of Scalp – A Rare Presentation*. The Internet Journal of Surgery. 2013 Volume 29 Number 1.

Abstract

Sebaceous cysts – more correctly referred to epidermal inclusion cysts, are benign lesions of the skin. They rarely require intervention out of medical necessity, but are removed for cosmetic reasons. Sometimes the cysts become infected, inflamed or grow so large that they interfere with the normal patient's functioning, then they need to be removed. We encountered a huge epidermoid cyst of the scalp in an elderly male. An intracranial extension of the cyst was ruled out by CECT of the skull. Complete excision of the cyst was carried out by an elliptical incision and the wound was closed in layers by rotation of scalp flaps. The patient was well at one month follow-up and an excellent scalp scar was noticed.

INTRODUCTION

Epidermoid cysts are generally asymptomatic, slowly enlarging, firm to fluctuant, dome-shaped lesions of the skin. They are frequently present on the trunk, neck, face, scalp and scrotum. These cysts often arise from ruptured pilosebaceous follicles associated with obstruction of the sebaceous gland opening resulting into a surface comedo, i.e. punctum.¹ These epithelial, walled cysts vary from a few millimeters to five centimeters in diameter. We encountered a giant epidermoid cyst over the scalp in an elderly male, which was successfully excised.

CASE REPORT

An elderly male of 65 years was admitted to the surgical ward with the complaint of a huge swelling over the scalp for the past 40 years. The swelling was non-tender, cystic, measuring 18×12cm, and was situated in the left temporal and occipital region of the scalp (Fig. 1).

Figure 1

Fig.1: Clinical photograph showing a huge epidermoid cyst of the scalp.



The patient first noticed this swelling when he was 25 years of age and it kept on enlarging slowly. In the last three years, the swelling increased at a more rapid pace to the present size and it also got ulcerated at one place. At the time of presentation, the left sided scalp mass was so large that the patient was not even able to sleep or lie down on that side.

With these findings, the clinical diagnosis of a large epidermoid cyst was made. Dermoid cyst and lipoma were entertained as differential diagnoses. Contrast-enhanced CT scan of the skull was done to look for any bony or intracranial involvement, which revealed normal underlying bone with no intra-cranial extension of the lesion. Complete excision of the lesion was carried out by an elliptical incision

and after raising the scalp flaps, the wound was closed in layers, after rotation and adjustment of the flaps. The postoperative period was uneventful and an excellent scar was noticed on follow-up (Fig. 2). Pathological examination of the specimen revealed that it was an epidermoid cyst.

Figure 2

Fig. 2: Clinical photograph showing an excellent scar at three weeks follow-up.



DISCUSSION

The term sebaceous cyst has fallen into disuse; current terms include epidermoid cyst, epithelial cyst or keratin cyst.¹ These cysts arise from a ruptured pilosebaceous follicle often associated with acne and more common on face and scalp. Epidermoid cysts have a thin capsule of stratified squamous epithelium filled by keratin, cellular debris and lipids, but they do not contain hairs or other dermal elements which differentiate them from the dermoid cysts.² These cysts have a slow growing rate, approximating that of a normal skin. In most cases the cysts are simple skin lesions, but can be complicated in few situations. Multiple cysts associated with multiple fibromas and osteomas can be part of Gardner's syndrome.¹ Another variant, although rare, is the intracranial epidermoid cyst, which is thought to be arising from sequestration of ectodermal remnants within the cranial bones.³ These cysts will present as well-

circumscribed intracranial lesions as well as a swelling over the scalp.

There are many surgical approaches to epidermoid cysts. While complete surgical excision can ensure complete removal and prevent recurrence, this technique is somewhat more time-consuming and requires suture closure of the wound. The minimal excision technique has been proposed as a less invasive and successful intervention.⁴ It involves a two-millimeter incision, expression of cyst contents and expression of cyst wall through the small incision. Vigorous finger compression is required to express the cyst contents and loosen the cyst wall from the surrounding tissues to facilitate its removal. The tiny wound can be closed with a single suture or may be left as such. A variation of this technique uses a punch biopsy instrument to create the opening into the cyst.⁵ The minimal excision techniques are practiced more frequently by dermatologists and family physicians while surgeons generally prefer excision by traditional incisions.

The patient in consideration was an elderly male, who was having a huge cystic swelling over scalp for the last 40 years. Complete excision of the cyst was carried out under general anesthesia after ruling out any intracranial extension by CECT of the skull. The histopathology report of the specimen revealed an epidermoid cyst. The case is being presented to highlight the following facts:

References

1. Lookingbill DP, Marks JG: Principles of Dermatology. 3rd ed. Philadelphia, PA: WB Saunders Company; 2000: 120-25.
2. Diven DG, Dozier SE, Meyer DJ, Smith EB: Bacteriology of inflamed and uninfamed epidermal inclusion cysts. Arch Dermatol; 1998; 134: 49-51.
3. Kalgutkar A, Kini S, Jambhekar N, Das S: Intradiploic primary epithelial inclusion cyst of the skull. Ann Diagn Pathol; 2006; 10: 20-23.
4. Zuber TJ: Minimal excision technique for epidermoid (sebaceous) cysts. Am Fam Physician; 2002; 65: 1409-12.
5. Mehrabi D, Leonhardt JM, Brodell RT: Removal of keratinous and pilar cysts with the punch incision technique: analysis of surgical outcomes. Dermatol Surg; 2002; 28: 673-77.

Author Information

Satish Dalal, M.S., F.A.I.S., F.I.C.S

Professor, Department of General Surgery, Pt.B.D.Sharma Postgraduate Institute of Medical Sciences (P.G.I.M.S.)

Tapan Chauhan, M.S

Senior Resident, Department of General Surgery, Pt.B.D.Sharma Postgraduate Institute of Medical Sciences (P.G.I.M.S.)

Ramesh Kumar

Junior Resident, Department of General Surgery, Pt.B.D.Sharma Postgraduate Institute of Medical Sciences (P.G.I.M.S.)

Satyaprakash Ray Choudhury

Junior Resident, Department of General Surgery, Pt.B.D.Sharma Postgraduate Institute of Medical Sciences (P.G.I.M.S.)