

SHORT REPORT

Sebaceous Cyst: Clinicopathological Analysis

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Epidermoid cyst is one of the common benign intradermal or subcutaneous tumours commonly presenting on the scalp, face, neck, trunk, and extremities.¹ The cyst cavity is filled with keratinaceous or fatty material arranged in layers.² It is commonly asymptomatic but may become secondarily infected or reach dimensions that can cause damage to the surrounding anatomical structures.³

This was a retrospective study done on samples submitted to the Department of Pathology at a peripheral hospital in Nasik, Maharashtra. Patients reporting to General Surgery outpatient department who were keen to get their cystic swelling surgically removed were included in the study. The present study includes the 112 cases reported by the gist during a period of 1 year from January 2018 to December 2018. The clinical details were taken from the department of surgery for the given period and evaluated.

In the present study, 112 cases of epidermoid cysts were included. The age of the patients ranged from 10 years to 70 years with the mean age of 45 years and the median age of 40 years. The highest incidence was observed in the age group of 31-40 years (33.92%, 38 out of 112) followed by age group of 51-60 (19.64%, 22 out of 112). The incidence in the age groups 21-30 years and 41-50 years was found to be same (17.85%, 20 out of 112). The trunk (39.28%, 44 out of 112) was the most common affected region followed by scalp (23.21%, 26 out of 112), scrotum (12.5%, 14 out of 112), and neck (8.92%, 10 out of 112), respectively. The incidence was low in the lower limb (5.35%, 6 out of 112), hips (3.57%, 4 out of 112), axilla (3.57%, 4 out of 112) and foot (3.57%, 4 out of 112). Males (64.28%, 72 out of

112) were more commonly affected than females (35.71%, 40 out of 112) with an overall male: female ratio of 1.8:1. The proportion of male patients was significantly higher than females ($Z=5.93$, $p<0.001$). The size of cysts ranged from 0.2 to 7 cm in diameter with a mean of 3.7 cm and standard deviation for this range is 1.7. Histopathological findings revealed that cyst lined by stratified squamous epithelium with preservation of granular cell layer, lumen containing fragments of laminated keratin.

Epidermoid cysts result from the trauma to the pilo-sebaceous unit in the hair-bearing area¹ and are slow-growing benign subcutaneous lesions imposing as nodules or tumours. Although the preferred localisation of epidermoid cysts is hair-bearing skin, they have also been seen on the glabrous skin (thick, non-hairy skin as in palms and soles) and mucous membranes. The uncommon sites in the upper and lower limbs were palm, finger, and sole as these sites are devoid of hair.¹

These cysts are considered to be epidermal inclusion secondary to trauma or HPV infection.⁴ Epidermoid cysts are usually solitary. Multiple epidermoid cysts suggest a genetic background. They can occur in Gardner syndrome caused by mutations in the adenomatous polyposis coli gene.⁵ Epidermoid cysts are benign, slow-growing, high, round, firm, subcutaneous, or intradermal which usually grow 1-5 cm in diameter. Young males are the most affected. These cysts had equal sex predilection and most commonly affect the young and middle-aged adults.¹

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In epidermoid cysts, a definite diagnosis preoperatively and/or intraoperatively can be made based on pathognomonic features in the form of presence of a punctum, ability to indent larger lesions and cheesy, toothpaste-like material on excision of the tumour. Moreover, their malignant potential is negligible.

To conclude, epidermoid cysts are common benign intradermal or subcutaneous tumours presenting anywhere over the body including hair free sites. Male predominance may be due to the reluctance of women to seek medical help for this simple lesion and male sex being more mobile and prone to trauma, as trauma has been cited as a causative of epidermoid cysts in non-hairy areas like palms and soles. The head, neck, scalp and trunk were the leading affected sites followed by scrotum. Scrotal cysts most frequently were multiple. Epidermoid cysts can be diagnosed clinically preoperatively and the clinical diagnosis may be confirmed post-operatively as soon as cheesy, toothpaste-like material is demonstrated on excision of the tumour. Keeping in mind their miniscule malignant potential and the ability to diagnose clinically in almost all cases, sending all specimens of epidermoid cysts excised surgically is a topic of dispute and needs further deliberation.

Competing interests

The authors declare that they have no competing interests.

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