

Asymptomatic, Dome-shaped Mass on the Chest

Alexander K.C. Leung, MBBS, FRCPC, FRCP(UK&Irel), FRCPC; and Benjamin Barankin, MD, FRCPC

A 54-year-old man presents with an asymptomatic, dome-shaped mass on his chest that has been present for two years. The mass is slowly growing. There is no known history of local trauma or infection. The mass is firm, nontender, and not attached to the underlying structure.

What is your diagnosis?

An epidermoid cyst, also known as an epidermal inclusion cyst or epidermal cyst (or the misnomer sebaceous cyst), is one of the most common benign cysts of the skin. The cyst is filled with keratin flakes or debris, and its wall is composed of keratinized stratified squamous epithelium.

Congenital cases are uncommon and may be due to entrapment of ectodermal elements intradermally or subcutaneously during embryogenesis. Acquired cysts may result from traumatic or iatrogenic implantation of epithelial cells into the dermal or subcutaneous layer or from obstruction of a pilosebaceous unit in the hair follicle.

Typically, an epidermoid cyst presents as a fluctuant to firm, dome-shaped lesion that is not attached to the underlying structure. It has a tendency to grow slowly. An epidermoid cyst is usually asymptomatic unless it becomes infected, ruptures (resulting in inflammation), or is large enough to affect adjacent structures.

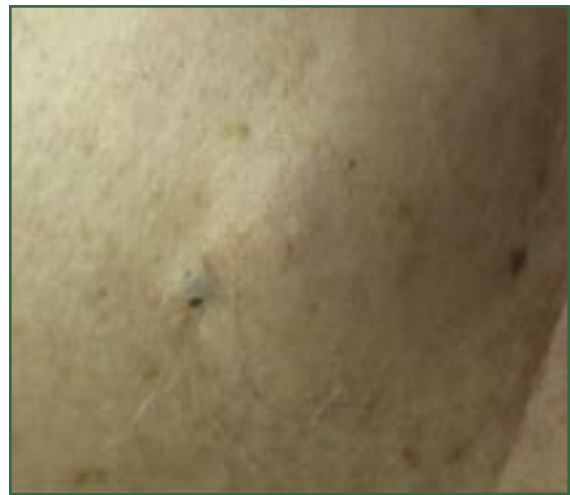


Figure 1: Asymptomatic dome-shaped mass on the chest

Epidermoid cysts occur mainly on hair-bearing areas.

The lesion is usually solitary, but there can be multiple cysts. Most epidermoid cysts are 1 to 5 cm in diameter and are unilocular. Their occurrence is usually sporadic, but certain hereditary syndromes, such as Gorlin syndrome, Gardner syndrome, and Lowe syndrome, include epidermoid cysts in their constellation of features.

The diagnosis is typically a clinical one. Uncommonly, an ultrasound may be useful. An epidermoid cyst should be differentiated from a neurofibroma, nevus lipomatosus, eruptive vellus hair cyst, pilomatricoma, dermatofibroma, sarcoma, lipoma, and trichilemmal cyst.

An epidermoid cyst may be cosmetically unsightly and socially embarrassing if it occurs in an exposed area. The cyst may rupture spontaneously or as a result of trauma with release of keratinous material. An odour can emanate from these cysts. Epidermoid cysts may become secondarily infected, which can result in abscess formation. Rarely, squamous cell carcinoma, basal cell carcinoma, Bowen's disease, melanoma, and mycosis fungoides may develop in an epidermoid cyst.

If removal of an epidermoid cyst is desired for cosmetic purposes or to manage complications, complete excision of the cyst's contents

and wall is the treatment of choice. Incomplete excision may lead to chronic inflammation and recurrence. Inflamed or tender cysts can be injected with intralesional triamcinolone, and infected cysts should be treated with oral antibiotics prior to excision.

Dr. Alexander K.C. Leung is a Clinical Professor of Pediatrics at the University of Calgary in Calgary, Alberta.

Dr. Benjamin Barankin is a Dermatologist practicing at the Toronto Dermatology Centre in Toronto, Ontario.

 CME