Facial Lump

Benjamin Barankin, MD, FRCPC

66-year-old male presents with a slowly growing nodule in the medial nasal canthus area. It is asymptomatic and has never bled. He has never had such a lesion before.

1. What is the most likely diagnosis?

- a. Epidermoid cyst
- b. Pilomatricoma
- c. Milia cyst
- d. Lipoma
- e. Dermoid cyst

2. Which conditions may be associated with this lesion?

- a. Gardner syndrome
- b. Basal cell nevus syndrome
- c. Pachyonychia congenita
- d. Idiopathic scrotal calcinosis
- e. All of the above

Epidermoid cysts form as a result of the growth of epidermal cells within a focal area of the dermis. The material inside the cysts is chemotactic for neutrophils and can result in inflammation. Most epidermoid cysts grow slowly and do not cause any problems. However, because of trauma or other factors, cysts can become



Figure 1. A slowly growing nodule.

inflamed and less commonly infected which results in redness, tenderness and pain. Epidermoid cysts can occur at any age, but are more common in young adulthood and appear to be more common in men.

the material inside the

Patients present to clinic for a variety of reasons, including the cosmetic appearance of a lump on their body, the odiferous cheese/ curd-like material which can be extruded, or because of discomfort associated with inflammation or infection. Clinically, the lesions appear as firm, round, flesh-coloured nodules of various size, often with a central punctum.

The most commonly affected areas are the head and neck and trunk.

The etiopathogenesis is not quite clear, but some factors which may play a role include occlusion of the pilosebaceous unit, HPV infection, or traumatic implantation of epidermal elements. A number of hereditary syndromes, including nevoid basal cell carcinoma syndrome and Gardner syndrome, have the feature of multiple epidermoid cysts. As well, idiopathic scrotal calcinosis may represent the end stage (calcification) of scrotal epidermoid cysts.

The diagnosis of epidermoid cysts is usually made clinically. If infection of a cyst is of concern, a swab for bacterial culture can be sent. Imaging is unnecessary unless the lesion is in the midline; ultrasound or MRI can be considered in this case.

Epidermoid cysts require treatment only if symptomatic or if the patient wants it removed for cosmetic purposes. A tender, inflamed, uninfected cyst often benefits from an intralesional triamcinolone acetonide injection. For cysts presumed or proven to be infected, incision and drainage is recommended followed by oral anti-staphylococcal antibiotics.

Epidermoid cysts are excised using a classic large incision, mini-incision, or trephination with a punch biopsy device. Incising and draining is a quick procedure, but has high recurrence risk since the entire cyst wall contents are unlikely to be evacuated. Excision of the entire cyst is the most definitive treatment.

Answers: 1-a; 2-e; 3-d

Dr. Barankin is a Dermatologist practicing in Toronto, Ontario.

