

A multifaceted cyst

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A woman has an elevated papule with a yellow–white multifaceted surface. What is this lesion?

A 35-year-old woman presented with a longstanding elevated papule (4 mm diameter) under her right medial lower eyelid (Figure 1). The pink papule was smooth and had a yellow–white multifaceted surface. Skin biopsy showed a nodule outlined by a rim of basaloid cells. The cells progressively became keratinised towards the centre of the nodule (Figure 2), forming hyaline sheets of keratin with small pale holes representing previous sites of nuclei (shadow cells).

Differential diagnosis

The clinical appearance of this smooth, pale papule with yellow–white flecks raises a number of diagnoses.

- **Calcinosis cutis** may present as aggregated white spheres of calcium undergoing transepidermal elimination and forming a papule. Skin biopsy will show dark-blue fractured calcium deposits in the superficial skin.
- **Molluscum contagiosum** may present as a solitary firm, smooth, yellow–white papule, but it is usually umbilicated. Skin biopsy will reveal many molluscum contagiosum viral bodies in keratinocytes.
- **Hidrocystoma** usually presents as a smooth fluid-filled cyst at the eyelid margin. Skin biopsy reveals a cyst

lined by cuboidal cells and filled with clear fluid.

- **Pilomatrixoma** is the correct diagnosis. It is a benign appendageal tumour. The basophilic cells can be compared to the matrix (hair bulb) cells that produce hair keratin.

Pilomatrixomas are usually solitary, and most cases are seen in childhood. Older lesions may become progressively calcified and may induce a foreign body reaction. Multiple lesions may be seen in familial cases or in association with myotonic dystrophy or Gardner's syndrome.

The production of keratin with shadow cells is a hallmark of pilomatrixomal follicular cysts. The follicular exit canal produces epidermal cysts filled with loose keratin. Trichilemmal cysts, derived from the middle third of the follicle, are filled with compact hyaline keratin. Steatocystomas, derived from the sebaceous gland and duct, are filled with sebum. Progressively enlarging lesions, representing pilomatrixomal carcinoma, also exist.

Surgical removal is the treatment of choice.

Keypoint

Pilomatrixoma may be recognised clinically as a solid cyst with a multifaceted yellow–white surface. MT

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Figure 1. Nodule with multifaceted yellow–white surface.

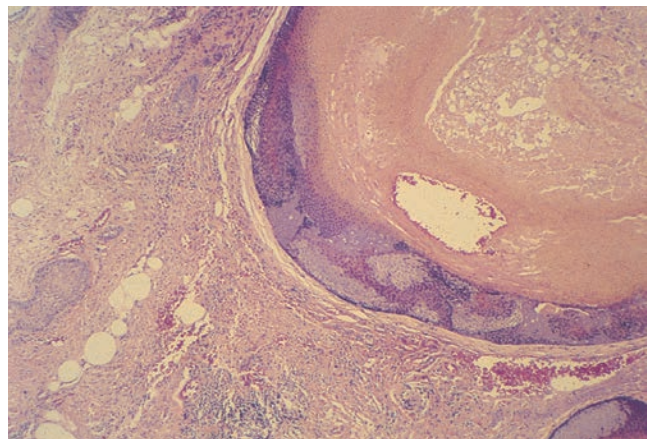


Figure 2. Biopsy of the dermal nodule, demonstrating basophilic matrix cells with central keratin.