

Hair follicle tumors: Be Hygienic and Immunogenic

Viral M. Bhanvadia, MD *

Department of Pathology, Gujarat, India

Editorial

Hair anatomy based classification of follicular tumors facilitates the diagnosis because the nomenclature of follicular tumors is descriptive and sometimes inconsistent. It is a classification that categorizes the entities based on the anatomic part of the follicle whose morphology they recapitulate. There are essentially four parts of the follicle from deep to superficial: the hair bulb, the supra bulbar zone (the stem), the isthmus and the infundibulum. The supra bulbar zone extends between the bulb and the insertion of erector pili muscle. It is followed by the isthmus whose upper limit is the opening of the sebaceous duct. The infundibulum is the uppermost part of the follicle, spanning the distance between the sebaceous duct opening and the epidermal surface

Causes of folliculoma:

The exact cause of a hair follicle tumor is not known though it is mostly an abnormal development of the follicles. The nodules are often mistaken for cancerous mass on the skin, such as basal cell carcinoma.

It develops spontaneously, though rarely it is associated with a history of trauma at the lesion site. Research on follicle tumors is limited, but studies say that it is more common in Caucasians. No possible genetic links have been identified.

Tumors with infundibula differentiation:

The infundibulum is characterized by epidermal-resembling keratinocytes (containing a palisaded basal layer, a spinous and a granular layer) and laminated keratin. We will focus on trichoadenoma, as other entities in this group are cysts or hematomas and not truly neoplastic (dilated pore, nevus comedonicus).

Trichoadenoma, also called "trichoadenoma of Nikolowski",⁵ is a collection of keratinous dermal cysts, typically well-circumscribed, with little variation in cyst size (Figure 1). It bears an adenoma-like architecture on scanning power, but has no glandular components and is clearly not an adenoma. Cysts are filled with laminated infundibula keratin, and the epithelium contains all epidermal layers. Occasionally, the epithelium may be composed of pale pink isthmus-like cells and the keratin is more compact, or the surface of cysts is somewhat crenulated resembling the sebaceous duct. A foreign-body granulomatous reaction surrounding the cysts is frequent. The tumor is entirely benign in behaviour.

General diagnostic considerations:

The most important diagnostic task is to determine whether a follicular tumor is benign or malignant and, if malignant, whether it is prone to recur or metastasize (fortunately, the latter being quite rare). Architectural (infiltrative vs. circumscribed) and cytological features (high mitotic count, pleomorphic) are quite useful for this categorization, yet not sufficient alone without a thorough knowledge of specific entities.

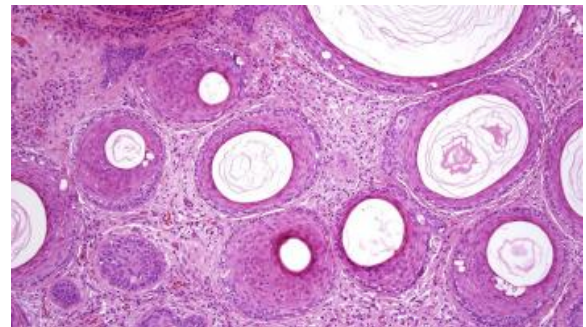


Figure 1 Trichoadenoma. Multiple dermal cysts filled with infundibular-type keratin.

Prognosis for trichofolliculoma:

The prognosis for folliculoma patients is excellent as folliculomas are noncancerous masses with no possible chances of malignancy.