

# Multiple Perifollicular Fibromas

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**We report a case of multiple perifollicular fibromas. The patient was a 23-year-old female who had numerous skin colored perifollicular papules of 10 years' duration on her left cheek without any symptoms. Some of the perifollicular papules had a central comedo. A skin biopsy specimen of a perifollicular papule showed dense concentric fibrous sheaths surrounding the hair follicles. (Ann Dermatol 2:(1) 68-69, 1990)**

**Key Words:** Multiple perifollicular fibromas

Multiple perifollicular fibromas, a rare condition, is usually limited to the face and neck. Histologically, it is characterized by proliferation of connective tissue surrounding small pilosebaceous structures.<sup>1,2</sup> Zackheim and Pinkus,<sup>1</sup> in 1960, first described five adult patients with tumors of the face and neck having a common histologic appearance. From the time of their original description, a few additional case reports have been published.<sup>3-6</sup>

We describe another patient with multiple perifollicular fibromas.

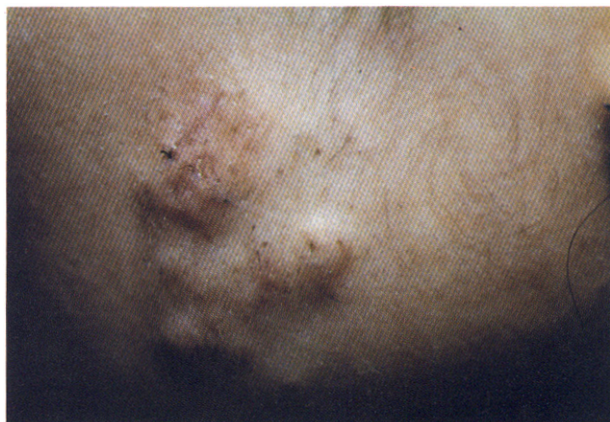
## REPORT OF A CASE

A 23-year-old woman was first seen at our clinic with asymptomatic skin lesions on her left cheek of 10 years' duration. No family history of similar lesions was noted.

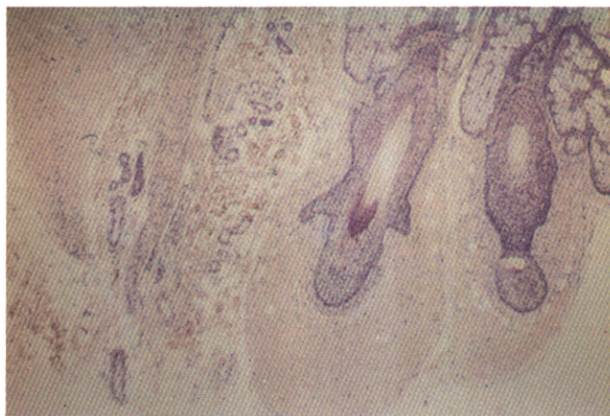
On examination, there were multiple ill-defined, skin-colored, perifollicular papules, some of which had a hair or central comedo (Fig. 1). The biopsy specimen of a papule demonstrated concentric proliferation of fibrous connective tissue surrounding hair follicles and mild inflammatory infiltrate in the perifollicular area (Fig. 2).

The collagen fibers within concentric fibrous

sheaths surrounding hair follicles stained green with Masson's trichrome stain (Fig. 3).



**Fig. 1.** Multiple ill-defined, skin-colored, perifollicular papules on the left cheek, some of which have a hair or central comedo.



**Fig. 2.** Concentric proliferation of fibrous connective tissue surrounding hair follicles and mild inflammatory infiltrate in the perifollicular area (H & E stain, ×100).

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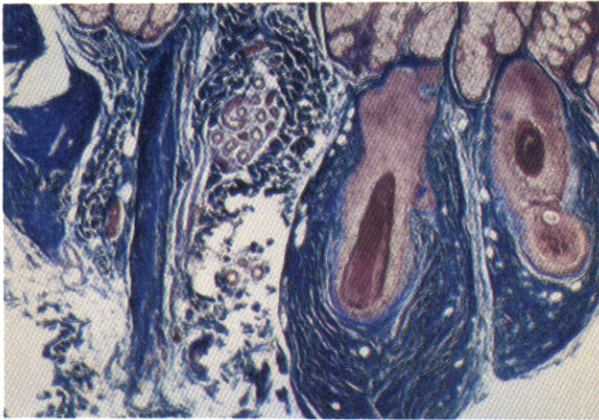


Fig. 3. The collagen fibers within concentric fibrous sheaths surrounding hair follicles stained green with Masson's trichrome stain ( $\times 100$ ).

## DISCUSSION

Multiple perifollicular fibromas are usually limited to the face and neck,<sup>1</sup> but may extend to the upper trunk<sup>7</sup> or may even be generalized.<sup>8</sup> Clinically, the lesions, for the most part, are small, firm, either skin-colored or pink papules<sup>1</sup>. Some of them have a central comedo. The lesions in our case were multiple small, firm, skin-colored papules with comedones and hairs located on the face.

Zackheim and Pinkus<sup>1</sup> postulated that histologic changes would place this tumor in the group of benign fibromas. They believe that these fibromas are adnexal tumors of the skin representing the proliferation of the connective tissue sheath, which is certainly an integral part of the pilary complex. They also suggested a de novo theory as the histogenesis of this tumor. However, they could not exclude the possibility that these fibromas may simply represent a fibroblastic response to previous inflammation.

Freeman and Chernosky<sup>4</sup> observed this tumor present at birth in a male infant and supported the nevoid concept of origin of this entity. They also supported the interpretation of Zackheim and Pinkus<sup>1</sup> that this was indeed an adnexal tumor of the follicular connective tissue sheath by the observation on electron micrographs that the fibroblastic tissue was in a uniform concentric arrangement closely applied to the outer root sheath and without an intervening follicular connective tissue sheath. Kegel<sup>6</sup> also reported a case of nevoid perifollicular fibromas.

Histopathologically, multiple perifollicular fibromas show concentric proliferations of the fibrous connective tissue sheaths surrounding hair follicles.<sup>1, 3, 4</sup> The differential diagnoses of this tumor include angiofibromas of tuberous sclerosis, fibrous papule of the face, fibrofolliculoma, and trichodiscomas.<sup>2, 9</sup> The angiofibromas of tuberous sclerosis usually show vascular changes in addition to perifollicular fibrosis. A fibrous papule of the face usually shows no perifollicular arrangement of the fibroblasts. Fibrofolliculomas show epithelial strands extending from the infundibulum of the hair follicle into the mantle of connective tissue. In our case, the infundibular epithelium did not show any significant outward projections on serial section. Trichodiscomas do not show a concentric, perifollicular arrangement of the collagen. The histopathologic findings of our case were quite typical for multiple perifollicular fibromas.

Hornstein and Knickenberg<sup>8</sup> and Simon et al.<sup>5</sup> reported the case of a female who had multiple perifollicular fibromas of the skin and a hitherto asymptomatic malignant villous adenoma of the sigmoid colon. They considered their case as either a cutaneo-intestinal tumor syntropism or a paraneoplastic syndrome. Therefore, further evaluation of this possibility will be conducted in our case.

## REFERENCES

1. Zackheim HS, Pinkus H: *Perifollicular fibroma*. *Arch Dermatol* 82:913-917, 1960.
2. Lever WF, Schaumburg-Lever G: *Multiple perifollicular fibromas*. In *Histopathology of the Skin*, Lippincott, Philadelphia, 1983, pp 602.
3. Cramer HJ: *Klinische und therapeutische Kurzberichte Multiple perifollikulare Fibrome*. *Hautarzt* 19:228-229, 1968.
4. Freeman RG, Chernosky MF: *Perifollicular fibroma*. *Arch Dermatol* 100:66-69, 1969.
5. Simon M, Hornstein OP, Haneke E: *Perifollikulare Fibromatose. Eine kutane Paraneoplasie?* *Hautarzt* 33:481-483, 1982.
6. Kegel M: *Navoide perifollikulare Fibrome (Zackheim und Pinkus)*. *Hautarzt* 36:412-414, 1985.
7. Vakilzadeh F, Manegold HG: *Perifollikulare Fibrome*. *Z Hautkr* 51:1039-1041, 1976. Cited from reference 2.
8. Hornstein OP, Knickenberg M: *Perifollicular fibromatosis cutis with polyps of the colon—a cutaneous-intestinal syndrome sui generis*. *Arch Dermatol Res* 253:161-175, 1975.
9. Pinkus H, Mehregan AH: *Hair nevi and hair follicle tumors*. In *A Guide to Dermatohistopathology*, Appleton-Century-Crofts, New York, 1981, pp 423-434.