

Linear Sebaceous Hyperplasia

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We report an unusual case of sebaceous hyperplasia in an 18-year-old male manifested clinically as yellowish, grouped papules with a linear distribution, present on the right side of forehead since birth. Histopathologically, a large sebaceous gland composed of numerous lobules grouped around a centrally dilated duct was seen. The sebaceous lobules distributed in the upper dermis showed direct connection to the skin surface, which suggested a transepidermal elimination of sebaceous lobules. (*Ann Dermatol* 4 : (1) 45-48, 1992)

Key Words : Sebaceous hyperplasia, Linear distribution

Sebaceous hyperplasia is a common benign condition that originates in sebaceous units. Usually such hyperplasia is found on the forehead, nose, and cheeks of the aged.¹ The typical lesions consist of either one or several, elevated, soft, yellowish papules usually 2~3mm in diameter with central umbilication. Histologically, these papules consist of sebaceous glands with lobules of mature sebaceous cells grouped around a centrally located duct.

Herein we report a case of sebaceous gland hyperplasia with the unusual clinical appearance of a linear distribution of the papules, as well as a unique histopathological feature of sebaceous lobules directly connecting to the skin surface.

REPORT OF A CASE

An 18-year-old male was first seen in April

1990 because of multiple yellowish lesions on his right forehead (Fig. 1). From birth, yellowish spots have been present and the lesions have grown and become more prominent. On examination, many soft, yellowish papules with

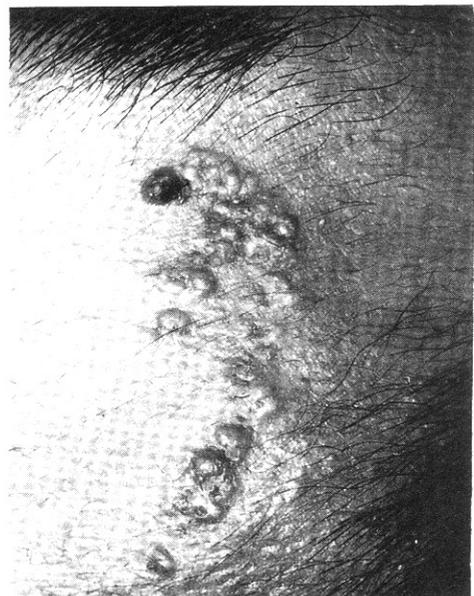


Fig. 1. Many soft, yellowish, 3~5mm sized papules with central umbilication in a linear arrangement on the right forehead.

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central umbilication, both discrete and confluent, 3~5mm in size, were distributed in a linear arrangement on the right side of his forehead. His past medical history was otherwise unremarkable, and there was no family history of similar skin disorders.



Fig. 2. Mature sebaceous lobules located around a central wide duct. The lobules in the upper dermis are directly connected to the surface of the skin, suggesting transepidermal elimination of the lobule (H & E stain, $\times 40$).

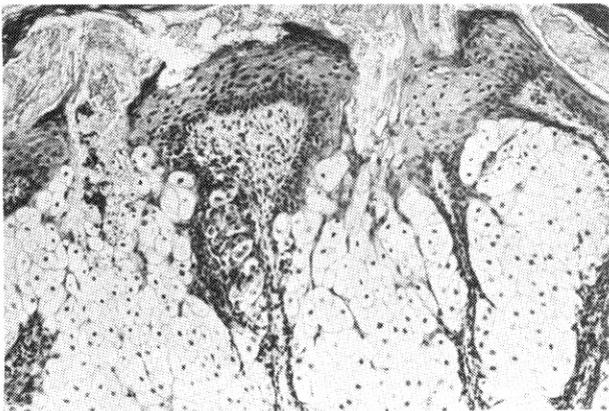


Fig. 3. Magnified view of Fig. 2. showing that the sebaceous lobule is composed of mature sebaceous cells (H & E stain, $\times 200$).

A biopsy specimen was taken from the elevated papule and showed a large sebaceous gland composed of multiple, mature, sebaceous lobules grouped around a central, wide, sebaceous duct in a grapelike pattern (Fig. 2). The lobules located in the upper dermis showed direct connection to the surface of the epidermis (Fig. 3).

The patient was treated with electrodesiccation with good cosmetic result.

DISCUSSION

Sebaceous hyperplasia is a common dermatologic condition of the forehead, cheeks, and nose, typically found in middle age but showing increased frequency with age.¹ De ville and Roberts,² Bhawan and Calhoun,³ Burton⁴ reported cases of sebaceous hyperplasia with an age of onset at 12 years, 18 years, and 37 years, respectively. All of them had numerous, 1~2mm, yellow, well-circumscribed papules with central umbilication with oily skin are sebaceous gland hyperplasia, located on the forehead, nose and cheek. They called the condition premature sebaceous gland hyperplasia in order to compare it with senile sebaceous hyperplasia.

We found several cases of sebaceous hyperplasia with unique clinical appearances in the literature. Lee and Yeom⁵ reported a case in a 26-year-old female which developed on her left forearm. Catalano and Iosannides⁶ reported a case of sebaceous hyperplasia characterized by confluent yellowish thickening on both central areolar mammae. The case reported by Czarnecke and Dorevitch⁷ was a rapidly growing, solitary, flesh-colored nodule, 5cm in diameter, on the forehead. It consisted of numerous sebaceous glands opening to the skin surface through sebaceous ducts. Kudoh *et al*⁸ reported a case of sebaceous hyperplasia manifesting clinically as a large solitary intracutaneous nodule. Moreover Graham-Brown and McGibbon,⁹

Fernandez and Torres,¹⁰ and Hong et al,¹¹ Cho et al¹² reported cases of linear or zosteriform hyperplasia of sebaceous glands with an age of onset from birth to 32 years. The common findings or lesions were numerous, yellowish, discrete and confluent papules, 2~5mm in size, grouped in a zosteriform or linear arrangement with histopathology of sebaceous gland hyperplasia. In our case, many linearly arranged 3~5mm in size, yellowish, soft papules with central umbilication were located on the right forehead, and had been present from birth.

The clinical differential diagnosis of this condition includes other hamartomatous lesions with tendencies to form a linear pattern, like nevus sebaceus of Jadassohn, nevus comedonicus, epidermal nevus and inflammatory diseases like lichen striatus.^{10,11} In considering the differential histopathology, nevus sebaceus of Jadassohn, sebaceous adenoma, sebaceous trichoepithelioma, and adenoma had to be included. Nevus sebaceus of Jadassohn could be excluded on clinical grounds because of the presence of multiple central umbilicated papules and on histologic grounds because there was no papillomatous epidermal hyperplasia, immature hair follicles, or dilated apocrine glands.^{10,12} Just as Grawhan-Brown and McGibbon⁵ and Fernandez and Torres⁶ considered that hyperplasia of sebaceous glands in a linear or zosteriform arrangement was a new peculiar type of sebaceous hyperplasia not previously reported, it is thought that it is a new separate entity.

Cho et al¹³ and Park et al¹⁴ found a sebaceous lobule lying in a dilated infundibular portion of a gland and suggested that it seemed to represent transfollicular extrusion of sebaceous lobules as a natural phenomenon. In contrast, Mehregan et al¹⁵ said that compression of the tissue either by forceps or during curettage of the skin lesion may put enough pressure on sebaceous glands to force them out into the canal

and to the surface of the skin. On histopathologic examination in our case, we found the sebaceous lobules directly connected to the skin surface, which suggests a transepidermal elimination of sebaceous lobules.

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Announcement

The third Congress of the European Academy of Dermatovenereology will take place in Tivoli Gardens, Copenhagen, Denmark, on September 26–30, 1993.

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