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Nevus comedonicus with unusual bilateral band distribution around the neck.

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Summary A case of comedo nevus was presented, differing in certain respects from previous descriptions of this nevoid condition. The unusual feature of our case was bilateral band distribution around the neck.

Key words Nevus comedonicus, neck.

Nevus comedonicus (NC) is an uncommon disorder characterized by groups or bands of dilated keratin-filled follicular pits, appearing early in life. The lesions are usually unilateral but occasionally bilateral, are commonly located on face, neck, upper arms, chest and abdomen, and frequently show a linear distribution along Blaschko's lines. The unusual features of our case include its bilateral distribution, and its distinct bands of distribution around his neck.

Case report

A 10-month-old Chinese male baby was referred to the dermatology clinic for bands of open comedones, localized around the neck, and present at the age of two months. They had remained entirely asymptomatic except for repeated infections and pustule formation over the months with residual scarring. The patient had been treated with 5% sulfur cream and benzoyl peroxide, but the lesions did not clear.

On physical examination both linearly arranged lesions around his neck and patchy ones on the nape of the neck were present. The lesions were characterized by varying-sized bands of dilated hair follicles filled with keratinous plugs. The tip of each horny plug was blackish-grey (Fig. 1). The plug could be expressed with some difficulty from the follicular orifice. The follicular lesions were 1 to 3 mm in diameter. There were also some inflamed lesions and some of the latter had healed with atrophic scars, ranging in size from 1 to 1.5 mm.

Laboratory studies including a complete blood cell count, blood chemistry and urinalysis were normal. A complete neurological, ocular and dental examination were performed and revealed no alterations. The patient was the first product of a full-term gestation, with no known intrapartum viral infections and no parental consanguinity. He had no inherited disorders or nevus malformations, nor did any members of his family. There was no history of contacting any irritating materials including cosmetics and occlusive wraps or sheets.

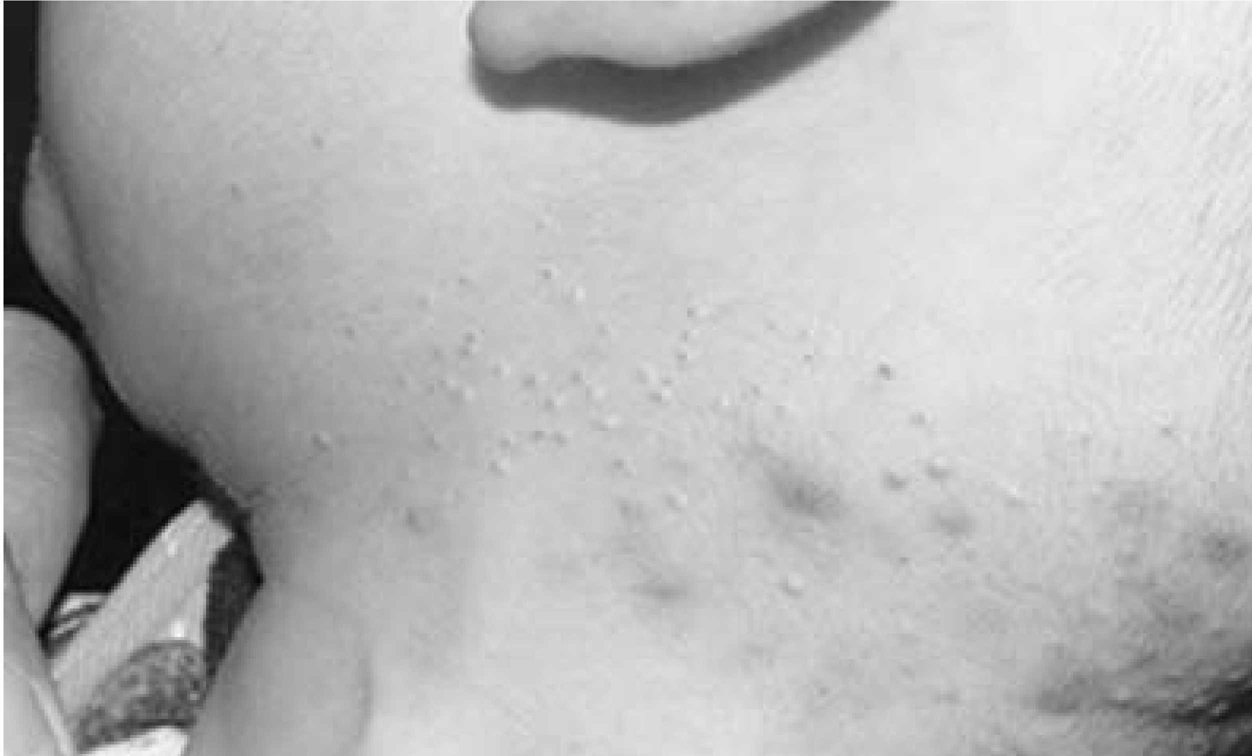

Fig. 1: Nevus comedonicus: comedones with band distribution on the neck associated to inflammatory papules.

Discussion

Nevus comedonicus was first described in 1895 by Kofmann (4). It is thought to be a developmental abnormality of the pilosebaceous unit. The resulting structure is unable to produce properly formed hairs, matrix cells, or sebaceous glands and capable only of forming keratin. This keratin then accumulates to form follicular plugs and comedones. The condition is characterized clinically by enlarged follicular openings with horny plugs resembling comedones, which may be easily removable or adherent and protrude from the skin surface, giving it a rough texture. After repeated inflammation, NC can have an acneiform appearance including papules, pustules, nodules and scars (7).

Nevus comedonicus is usually present at birth, but its appearance may be delayed until adulthood. Its lesions are usually found on the face, neck, trunk and extremities. Some rare cases have been described in the genital area (5). The distribution is usually in groups, bands, or linear lesions confined to one side of the body. However, bilateral lesions have also been reported (1, 2, 6, 8). In our patient, the lesions containing follicular papules with keratin plugs localized around his neck, and their distribution had taken on the configuration of bands. To our knowledge, this unusual pattern of bands of distribution around the neck have not been reported up to now.

Clinically, NC can be divided into two types, one in which the formation of comedones with no suppuration preponderates and the other in which cyst formation with recurrent infection, fistulae, abscesses, and scarring is a feature. Our patient showed pustules and scarring after suffering from repeated infections, so the case fell into the second type.

The condition of the patient needs to be differentiated from acne neonatorum, acne infantum,

acne tropica, epidermal nevi, and acneiform eruptions due to the use of topicals, oils and ointments, or to maternal medications.

Acne neonatorum occurs at birth or in the first week of life and regresses spontaneously within several months. Acne infantum does not make its appearance until the third to the sixth month of life. The lesions are mostly confined to the face (3). The here reported patient was already suffering from the disease in the second month. The lesions were mainly opened comedones in a distribution encircling his neck. There was no regression after treatment with anti-acne drugs. Thus acne neonatorum and acne infantum can be eliminated. Acneiform eruptions can be ruled out, because no drugs, topical skin care products and chemical materials had been applied by his parents. No history of using an occlusive wrap or sheet denied acne tropica. The familial variant can be ruled out because no members of his family had similar lesions. There were not any maternal effects, because there was no medical treatment given to his mother during gestation.

In conclusion, comedo nevus was diagnosed according to the clinical appearance.

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