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Clinical illustration

Keratosis Pilaris

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Clinical Illustration

A 15-year-old East Indian boy presented with diffuse, rough bumps on his arms and thighs of two-year duration. The bumps were not painful or pruritic. He had atopic dermatitis in early childhood. His past health was otherwise unremarkable. His 35-year-old mother had similar lesions on her arms during her teenage years.

Physical examination revealed numerous, cone-shaped follicular papules with keratotic plugs on his arms and, to a lesser extent, on his thighs. The affected skin felt like sandpaper. Apart from xerotic skin, the rest of the physical examination was unremarkable.

Question

Based on the patient's history and physical examination, which one of the following is the most likely diagnosis?

A. Molluscum contagiosum

B. Atopic dermatitis

C. Keratosis pilaris

D. Miliaria rubra

E. Milia

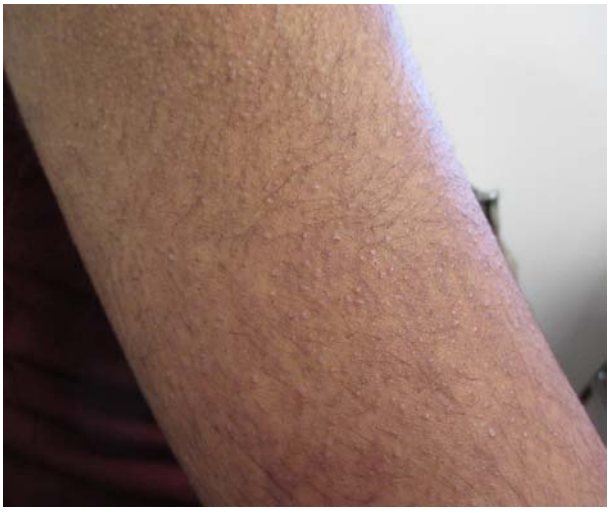

Figure 1:

Discussion

The answer is C: keratosis pilaris. Keratosis pilaris is a disorder of keratinization of the infundibulum of pilosebaceous follicles that results in horny plugs that fill the follicular orifice. The condition is characterized by the presence of minute, discrete, keratotic, follicular papules with varying degrees of perifollicular erythema [1]. When the perifollicular erythema is marked, the term "keratosis pilaris rubra" is used [2]. On the other hand, the papules of keratosis pilaris can be grayish white without perifollicular erythema; a condition often referred to as "keratosis pilaris alba", as is illustrated in the present case [2]. The affected skin looks like gooseflesh and feels like sandpaper. Keratin plugs cannot be expressed with pressure. Patients with keratosis pilaris are usually asymptomatic. Sites of predilection include the lateral aspects of the arms and thighs [1]. Keratosis pilaris develops during childhood and reaches its peak during adolescence. The prevalence in adolescents of both genders is estimated to be at least 40%, while up to 80% of adolescent girls may be affected. The disorder can involute spontaneously and is less common during adult life. Keratosis pilaris is more common in patients with ichthyosis vulgaris and atopic dermatitis [1].

Molluscum contagiosum presents as discrete, smooth, flesh-colored, dome-shaped papules with central umbilication from which a plug of cheesy material can be expressed. Lesions are usually 1 to 5 mm in diameter and the number is usually less than 20. They often appear in clusters or in a linear pattern and are most common in areas of skin rubbing or moist regions. The lesions are often asymptomatic [Table].

Atopic dermatitis is a chronically relapsing dermatosis characterized by pruritus, erythema, vesiculation, exudation, excoriation, crusting, scaling, and sometimes lichenification. All lesions are plaques, not discrete papules. In infants, the eruption often affects the face and scalp. In older children and beyond, the neck and antecubital and popliteal fossae usually display the eruption.

Miliaria rubra, known universally as prickly heat, presents as erythematous, minute papules or papulovesicles that may impart a prickling sensation. The itching is paroxysmal. Typically, lesions are localized to flexural areas. Most cases occur in hot and humid conditions.

Table 1 :

Condition	*Characteristics*
Molluscum contagiosum	Discrete, smooth, flesh-colored, dome-shaped papules with central umbilication; most common in areas of skin rubbing or moist regions
Atopic dermatitis	Relapsing dermatosis with intensive pruritus, erythema, vesiculation, exudation, excoriation, crusting, scaling, and sometimes lichenification; most common in flexural areas
Keratosis pilaris	Minute, discrete, keratotic, follicular papules with variable perifollicular erythema; skin looks like gooseflesh and feels like sandpaper; sites of predilection: arms and thighs
Miliaria rubra	Erythematous, minute papules or papulovesicles; prickly sensation; most common in flexural areas
Milia	Small, white, dome-shaped, superficial keratinous cysts; most commonly seen on the nose and around the eyelids

Citation: Leung AKC. Keratosis Pilaris. Austin J Pediatr. 2014;1(1): 1005.

Milia are small (generally less than 3 mm), white, benign, dome-shaped, superficial keratinous cysts. Congenital milia favor the nose while milia of later onset favor the area around the eyelids.

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