WHAT'S YOUR DIAGNOSIS?

Skin-Colored Papules on the Chest

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An otherwise healthy male presents with multiple smooth uniform painless cystic papules scattered across his central chest.

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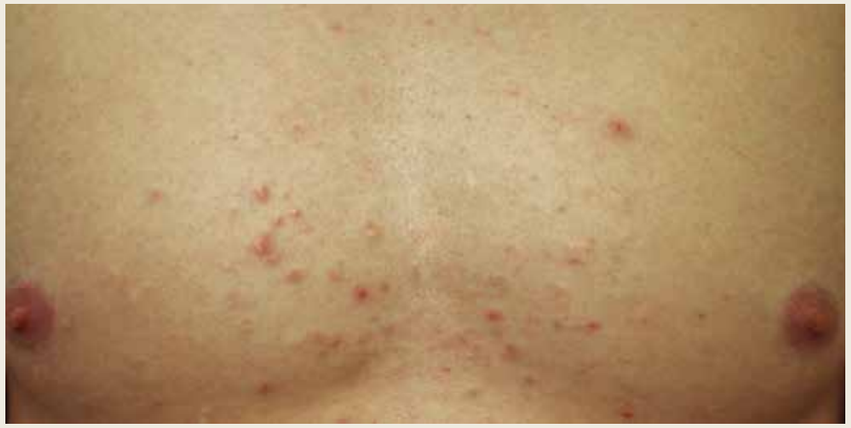
A 25-year-old man presented with multiple sternal cysts that he first noticed when he was aged 18 years and had persisted despite treatment with topical anti-acne agents, including tretinoin. No other medications were used. The patient was unable to express purulent material from the lesions and reported no infection or additional trauma to the affected area. He had no other significant past medical history and no family history of similar skin lesions.

A physical examination revealed an otherwise healthy-appearing male with multiple uniform painless cystic papules scattered across his central chest that were smooth and flesh-colored to slightly yellow-colored, measuring 2 mm to 6 mm in diameter (Figure). A ring of erythema surrounded the lesions that had been recently manipulated by the patient. There were no overlying central puncta, and the remainder of his body was spared.

- What is your diagnosis?
- How would you treat this patient?

FIGURE Painless Skin-Colored Papules Localized to the Central Chest



DIAGNOSIS

The patient was diagnosed with steatocystoma multiplex based on his poor response to topical anti-acne agents, the location of his lesions, and histopathology of a biopsy specimen. Steatocystoma multiplex, sometimes termed *sebocystomatosis*, typically presents between puberty and the third decade of life. Lesions are usually < 2 cm in diameter and occur as multiple smooth skin-colored or yellow-colored painless papules on areas with high concentrations of hormonally sensitive sebaceous glands, especially the chest. Lesions also can be found in the axillae and on the neck.[1-3] Solitary lesions can occur and are termed *steatocystoma simplex*.

The timing and location of presentation can easily be mistaken for acne vulgaris, but steatocystoma lesions are true sebaceous cysts, which are rare, and spontaneous resolution with increasing age does not typically occur. The diagnosis of steatocystoma often goes unreported because the disease is usually asymptomatic and mimics more common benign skin conditions, so an accurate prevalence and incidence are both unknown.

First on the differential diagnosis is acne vulgaris, which also presents at puberty and affects nearly 85% of adolescents. However, acne is less common in people of Asian or African descent and may progress along a continuum of increasingly severe and larger lesions, including the primary comedones and papules followed by pustules, nodules, and pseudocysts. Painful lesions develop from inflammation of pilosebaceous units concentrated on the face, neck, trunk, upper arms, or buttocks and are typically worse in males. Resolution often occurs spontaneously by the third decade of life, but scarring can persist.[4]

Eruptive vellus hair cysts present as dozens of skin-colored small (1-4 mm) painless dome-shaped papules, sometimes with erythema and crusting. Typically these appear on the head, trunk, or flexor surfaces of infants (familial cases) or adolescents (sporadic cases) without bias for gender or ethnicity. Although benign and potential mimickers of steatocystoma and acne, these lesions can also be associated with more serious syndromes, like ectodermal dysplasias and pachyonychia congenita.[2,3]

Epidermoid cysts are common benign solitary skin-colored subcutaneous dome-shaped nodules that contain a central punctum through which cheeselike keratinaceous material can be expressed.[4] These benign lesions arising from the dermis can enlarge to several centimeters, and adults of both genders and most ethnicities tend to develop the lesions on the trunk or face, with small cysts on the face termed *milia*. Ruptured cysts can incite intense inflammation, and multiple epidermoid cysts should raise concern for Gardner syndrome.[2,3]

ABOUT THIS CONDITION

Steatocystoma lesions are benign and thought to arise from a mutation in keratin 17. The mutation can be inherited in an autosomal dominant pattern, but sporadic nonheritable cases are more common.[5] There are no distinct associations with gender or ethnicity. The dermal cysts arise from the sebaceous ducts of the pilosebaceous unit, and histopathology typically shows numerous mature sebaceous cells encased by a thin wall of stratified squamous epithelium.[2] Immunohistochemical staining for the defective keratin can help diagnose biopsy specimens, and histopathology confirmed the diagnosis in this case.

TREATMENT

Steatocystoma is usually asymptomatic, so patients mainly present to physicians for cosmetic reasons. Puncturing the cyst wall within the dermis produces translucent sebum-containing fluid, and ruptured cysts can incite inflammation, pain, and scarring.[2] However, prognosis is good, and treatment consists of excision, aspiration and curettage of the cyst wall, oral isotretinoin, or laser therapy. Our patient elected to forego treatment and will consider definitive removal in the future, since the lesions will persist and potentially enlarge. Accurate diagnosis of this rare cause of chest papules improves the timeliness and efficacy of appropriate treatment, favoring good cosmesis.

Author disclosures

The authors report no actual or potential conflicts of interest with regard to this article.

Disclaimer

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