"What's this on my neck?"

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An eight-year-old boy and his mother are concerned about papules developing on the boy's chest, upper arms, and neck (Figure 1). These papules are mildly pruritic, have been present for two months, and new papules are still appearing. The child was not in contact with anyone sick and, otherwise, he is well.

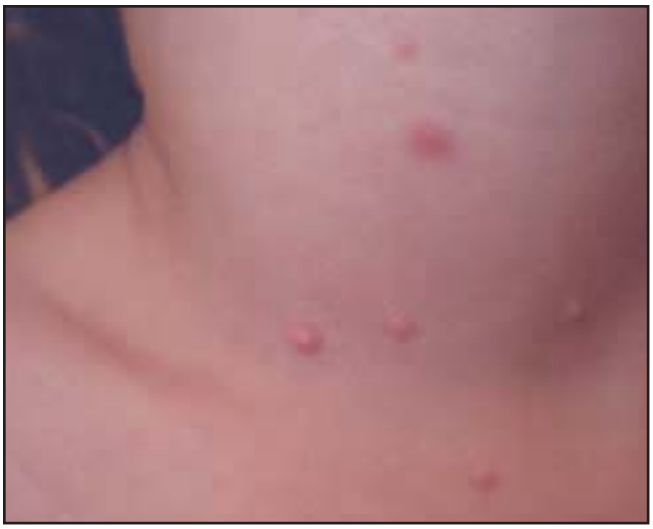

Figure 1. Papules on the neck.

What's your diagnosis?

This patient has molluscum contagiosum (MC).

This common condition is caused by the MC virus, an unclassified member of the Poxviridae family, which is a benign and generally self-limited viral infection. Skin lesions usually consist of multiple dome-shaped, pink to skin-coloured papules, 2 mm to 6 mm in diameter, of which some lesions show the classic feature of umbilication. MC is usually asymptomatic, although individual lesions may be tender or pruritic.

MC is most common in children by autoinoculation, or who become infected through direct skin-to-skin contact, or indirect skin contact with fomites. Lesions typically occur on the chest, arms, trunk, legs, and face. Mucous membrane involvement is quite rare, and palmoplantar skin is spared. Patients with atopic dermatitis are more prone to MC, and may develop many lesions. About 10% of all patients will develop eczema around the lesions. In adults, MC is most commonly a sexually transmitted disease (STD), and presents as a few scattered lesions often limited to the perineum, genitalia, inner thighs, lower abdomen, or buttocks. MC in healthy children and adults is usually a self-limited disease, but may persist for several months, and even up to a few years. Widespread, persistent, and atypical MC may occur in patients who are significantly immunocompromised, or who have acquired immunodeficiency syndrome (AIDS) with low CD4 T-lymphocyte counts.

For the most part, the main concerns are temporary adverse cosmetic results and embarrass-

ment. Most lesions resolve with no permanent residual skin defect; however, occasional lesions may produce a slightly depressed scar, especially if excoriated.

Diagnosis is usually clinical and based on the distinctive central umbilication of the dome-shaped papule. If diagnosis is uncertain, papules can be biopsied, which gives a classic histopathologic picture. Adult patients should be questioned about sexual history and, where appropriate, evaluated for other concomitant STDs. Always consider testing for human immunodeficiency virus (HIV) infection in patients with large or facial lesions.

Is there a treatment?

Patients and their families should be educated as to the benign and self-limited nature of this condition, and should be aware that treatment is not a necessity. Although treatment is not required, it can help reduce autoinoculation or transmission to close contacts, and can improve clinical appearance. More than one treatment session is frequently required.

In healthy children, a major goal is to limit discomfort; benign neglect or minor direct trauma is appropriate. Older children can better tolerate cryotherapy or curettage, or can pre-apply a eutectic mixture of local anesthetics, which is very effective. For younger children, cantharidin applied carefully by a physician to the lesions, taped over, and removed (and washed off) after 30 minutes to one hour, can be effective. Similarly, tretinoin cream applied daily only to the lesions (*e.g.*, with a toothpick) can be used. A more expensive option, but also a very effective one, is imiquimod, a new topical immune response modifier, which is a potent inducer of interferons.

In adults who are more motivated to have their lesions treated, cryotherapy or curettage of individual lesions is effective and well-tolerated. In immunocompromised individuals, MC can be extensive and difficult to treat. The goal may be to only treat the most troublesome lesions, such as the ones on the face. In severe cases, these patients may warrant more aggressive therapy with lasers, imiquimod, optimized HIV antiviral therapy, or a combination of approaches.

Prognosis is generally excellent because the disease is usually benign and self-limited. In healthy patients, one to three treatments are usually effective. CME

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