



# DermaCase

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## CAN YOU IDENTIFY THIS SKIN CONDITION?

A 9-year-old boy presented with multiple pruritic, skin-coloured papules on his face and neck. His parents had first noticed these papules 3 weeks earlier and had grown more concerned because they appeared to be spreading. The boy was otherwise healthy and was taking no medications.

### The most likely diagnosis is:

1. Varicella zoster (chicken pox)
2. Herpes zoster (shingles)
3. Lichen planus
4. Warts
5. Molluscum contagiosum

*Answer on page 1407*

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Answer to Dermacase continued from page 1395

## 5. Molluscum contagiosum

Molluscum contagiosum (MC) is a common, benign viral cutaneous infection that affects only humans, primarily children. Sexually active adults and immunodeficient patients are sometimes affected.<sup>1</sup>

Molluscum contagiosum is a member of the Poxviridae family and is thought to be transmitted by person-to-person contact, autoinoculation, and possibly fomites.<sup>2</sup> Humoural immunity might play a role in defence against MC virus as most adults have immunoglobulin G antibodies against the viral antigen and are resistant to infection. Patients with impaired cellular immunity (eg, those with AIDS or atopic dermatitis) are at increased risk of widespread infection that can be difficult to treat.<sup>1</sup>

Molluscum contagiosum presents with small, discrete, smooth, pearly or flesh-coloured papules. The dome-shaped, grouped, and often umbilicated papules have white curdlike cores that can be easily expressed.<sup>1</sup> Molluscum contagiosum is most often located on the trunk, axillae, antecubital, and popliteal fossae.<sup>2</sup> Genital lesions are especially common in sexually active adults. Pruritus and an eczema-like reaction can develop around lesions. In HIV patients, lesions are usually widespread, can be large, and can even mimic cutaneous tumours.<sup>1</sup>

Diagnosis is made on the distinctive clinical appearance, but can be confirmed by skin biopsy and uncommonly by stained smears of expressed cores. Warts, varicella, intradermal nevi, lichen planus, and basal cell carcinomas are included in the differential diagnosis.<sup>1,2</sup>

Molluscum contagiosum is usually self-limited in children and often resolves between several months and a few years without any treatment. Most children affected with MC, however, receive treatment to achieve relief of symptoms, to prevent autoinoculation or transmission to close contacts, or to alleviate the cosmetic concerns of parents or caregivers.<sup>3</sup>

Several treatment options are available for MC infection; most rely on destruction of the lesions. Cantharidin, an extract from the blister beetle, penetrates deeply through the epidermis causing acantholysis and thus inducing blister formation. It is highly effective and safe<sup>3</sup> and is the preferred treatment for children. Cantharidin is applied sparingly with the blunt end of a cotton-tipped applicator to each lesion; each lesion is then covered with tape. After 20 to 30 minutes (sooner if the child starts complaining of burning or discomfort), the lesion is rinsed thoroughly with soap and water. Patients can be followed for 2 to 4 weeks after treatment with repeat administration of cantharidin as new lesions might appear owing to their long incubation time. Treatment should be localized to 1 body area and no more than 20 lesions treated at a single visit. Side effects of this treatment include blistering, pruritus, pain, and temporary



hypopigmentation or hyperpigmentation, all of which are well tolerated.<sup>3</sup>

Cryotherapy and curettage are also effective treatments.<sup>3</sup> They are more invasive than cantharidin therapy and are usually reserved for adults or for localized disease. Pretreatment use of a topical anesthetic is often helpful if these therapies are used for children.

Topical imiquimod 5% cream applied 3 times a week can be used to treat generalized MC infection or MC localized to the anogenital area.<sup>4</sup> Some patients with facial or visible body lesions might benefit from topical tretinoin therapy.

Molluscum contagiosum is particularly difficult to treat in patients with poorly managed HIV and AIDS. Optimizing antiretroviral therapy and using lesion-destroying therapies are usually helpful for these patients. ❁

## References

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