

## PHOTO ROUNDS

# Multiple facial bumps with weight loss

The large and extensive lesions on this young patient's face led us to an even more troubling finding.

A 12-YEAR-OLD GIRL came into our hospital for treatment of multiple bumps that had developed around her eyes and other areas of her face 2 months earlier. She had difficulty opening her eyes and complained of gradual weight loss.

On examination, we noted numerous skin-colored, shiny, dome-shaped, coalescing papules and nodules with central umbilications that were distributed mostly on her periocular and perinasal areas (FIGURE).

When we expressed the papules with forceps, they exuded a cheesy material. We also noticed crusting and signs of inflammation on her eyelids.

The systemic examination was unremarkable.

- O WHAT IS YOUR DIAGNOSIS?
- O HOW WOULD YOU TREAT THIS PATIENT?

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## Opening her eyes was difficult



This 12-year-old patient had multiple dome-shaped, coalescing papules and nodules with central umbilications in the periocular and perinasal areas.





### Diagnosis: Giant molluscum contagiosum

Molluscum contagiosum (MC) is a relatively common, benign, viral cutaneous infection that primarily affects children, sexually active adults, and immunodeficient individuals. MC accounts for approximately 1% of all diagnosed skin disorders in the United States; internationally, however, the incidence is higher. The causative organism of MC is a member of the *Poxviridae* family and is thought to be transmitted by close personal contact, autoinoculation, and fomites.

MC is clinically characterized by the presence of pearly white, dome-shaped papules or nodules with central dells. The lesions are typically located on the trunk, body folds, extremities, and genitalia (particularly when the infection is sexually acquired).<sup>2,3</sup> Pruritus and an eczematous reaction can develop around the lesions.

MC is a recognized ocular complication of acquired immune deficiency syndrome (AIDS). Periocular MC can also occur after eyebrow shaping in beauty salons.<sup>4</sup> In human immunodeficiency virus (HIV)-positive patients, lesions are usually widespread, tend to be large, and usually occur during the advanced stage of HIV infection.<sup>2,5</sup>

#### The differential includes carcinoma

When considering a diagnosis of MC, you'll need to rule out the following causes of similar-looking papules and nodules:

- Nodular basal cell carcinoma presents as a slow-growing, firm, shiny, pearly nodule with fine telangiectasia. It may also present as a cystic lesion that can be mistaken for inclusion cysts of the eyelid. If left untreated, the tumor may ulcerate.
- **I Juvenile xanthogranulomas** are rubbery, tan-orange papules or nodules. Patients may have one or several papules or nodules in the head and neck region; these lesions may appear elsewhere, as well.
- Cryptococcosis may present as painless papules or pustules, which then become nodules that may ulcerate. The lesions may show central umbilications.
  - Keratoacanthoma begins as a firm,

roundish, skin-colored or reddish papule that rapidly progresses to a dome-shaped nodule, with a smooth, shiny surface and a central crateriform ulceration or keratin plug. Patients typically have a solitary lesion that may appear on the face, neck, or dorsum of the upper extremities.

■ Penicillosis often presents with MC-like skin lesions, in addition to fever, anemia, hepatomegaly, lymphadenopathy, and productive cough.

#### History and lab work clinch the Dx

Diagnosis is made by the distinctive clinical appearance, but can be confirmed by skin biopsy demonstrating eosinophilic molluscum bodies packed into the cells of the spinous layer of the epidermis.<sup>3</sup> Giemsa stain of the material obtained from a crushed papule will reveal the presence of pathognomonic "molluscum bodies" in the cells of the epidermis.<sup>2,3</sup>

**I Our patient's Giemsa stain** revealed molluscum bodies. And since it is always wise to rule out concomitant HIV infection in patients who have giant MC, we tested our patient. Her results were positive; she had a CD4+count of 93 cells/mm<sup>3</sup>.

## Many treatment options from which to choose

MC is usually self-limiting, although it can take several months—or even a few years—to resolve on its own<sup>6</sup> (strength of recommendation [SOR]: **B**). However, most patients with MC should receive treatment to obtain relief from symptoms, prevent autoinoculation or transmission to close contacts, decrease occurrence of scarring, reduce secondary bacterial infections, and improve cosmesis.

Several treatment options are available, and most rely on destruction of the lesions. Manual extrusion is a simple but effective therapy<sup>6</sup> (SOR: **B**). Cryotherapy and curettage are also effective treatment options<sup>5</sup> (SOR: **C**). Pretreatment topical anesthesia is often helpful if these therapies are used in children.

Topical imiquimod<sup>2</sup> (1%-5%) cream applied 3 to 7 times a week can be used to treat generalized MC infection or MC localized to the anogenital area<sup>6</sup> (SOR: **A**). Some patients



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may improve with topical tretinoin therapy<sup>6</sup> (SOR: **C**).

Chemical cauterization with 10% povidone iodine with 50% salicylic acid<sup>7</sup> (SOR: **B**), 10% potassium hydroxide8 (SOR: **B**), cantharidin<sup>2</sup> (SOR: **C**), or 25% to 50% trichloroacetic acid<sup>6</sup> (SOR: C) is also effective. Treatment with flashlamp pulsed dye laser is a safe and efficient treatment modality9 (SOR: C). Cidofovir<sup>10</sup> (1%-3%) cream or ointment, electron beam therapy, and photodynamic therapy have also been used with variable success rates<sup>6</sup> (SOR: **C**).

MC is particularly difficult to treat in patients with poorly managed HIV and AIDS. Pairing proper antiretroviral therapy with lesion-destroying therapies is usually helpful for these patients.3

If you are caring for a patient with giant MC, you'll need to stress the benign—but potentially contagious-nature of the disease. Tell the patient to wash his or her hands frequently, to avoid scratching the lesions, and to keep infected areas covered with clothing (when possible). In suspected sexually transmitted cases, the patient should adopt safe sexual practices or abstinence, if necessary. It is unclear whether condoms or other barrier methods provide adequate protection.1

#### Our patient transfers to the HIV clinic

We sequentially expressed the large lesions on our patient's face and put her on a course of cefadroxil to control the secondary infection of MC. Her facial lesions gradually improved over 2 months.

We also referred the patient to our institution's HIV clinic, where she was put on highly active antiretroviral therapy (HAART). We advised her mother to get tested for HIV, and she turned out to be HIV positive, as well.

#### CORRESPONDENCE

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#### Strength of recommendation (SOR)

- (A) Good-quality patient-oriented evidence
- (B) Inconsistent or limited-quality patient-oriented evidence
- Consensus, usual practice, opinion, disease-oriented evidence, case series

Our patient's mother turned out to be HIV positive, as well.

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