



## A Scaly Periorbital Rash in a Preschool-aged Boy

### ABSTRACT

A healthy 4-year-old boy presented with an 8-month history of a pruritic scaly eruption around his right eye associated with several small pearly papules on the face. A clinical diagnosis of an eczematous id reaction to molluscum contagiosum was made. While up to 40% of cases of molluscum contagiosum may have an associated eczematous dermatitis, these are often under-recognized or misdiagnosed.

**KEYWORDS:** Pediatrics, Dermatology, Dermatitis, Molluscum, Eczema, Id reaction, Viral exanthem, Hypersensitivity



### Case 1: A scaly periorbital rash in a preschool-aged boy

A previously healthy 4-year-old boy presented with a pruritic scaly eruption around the right eye that had been present for approximately 8 months. His parents had not noticed any other rashes or skin lesions. His past medical history was unremarkable and he was not on any medications. There was no history of atopy in the patient or other family members. Family history was only significant for molluscum contagiosum in his 3-year-old brother. Review of systems was unremarkable.

On examination, the patient had a unilateral scaly eruption with mild underlying erythema on the right upper and lower eyelids (Figure 1).

**Figure 1:** Photograph of patient's right eye (informed consent was obtained for publishing these photos)



### ABOUT THE AUTHORS

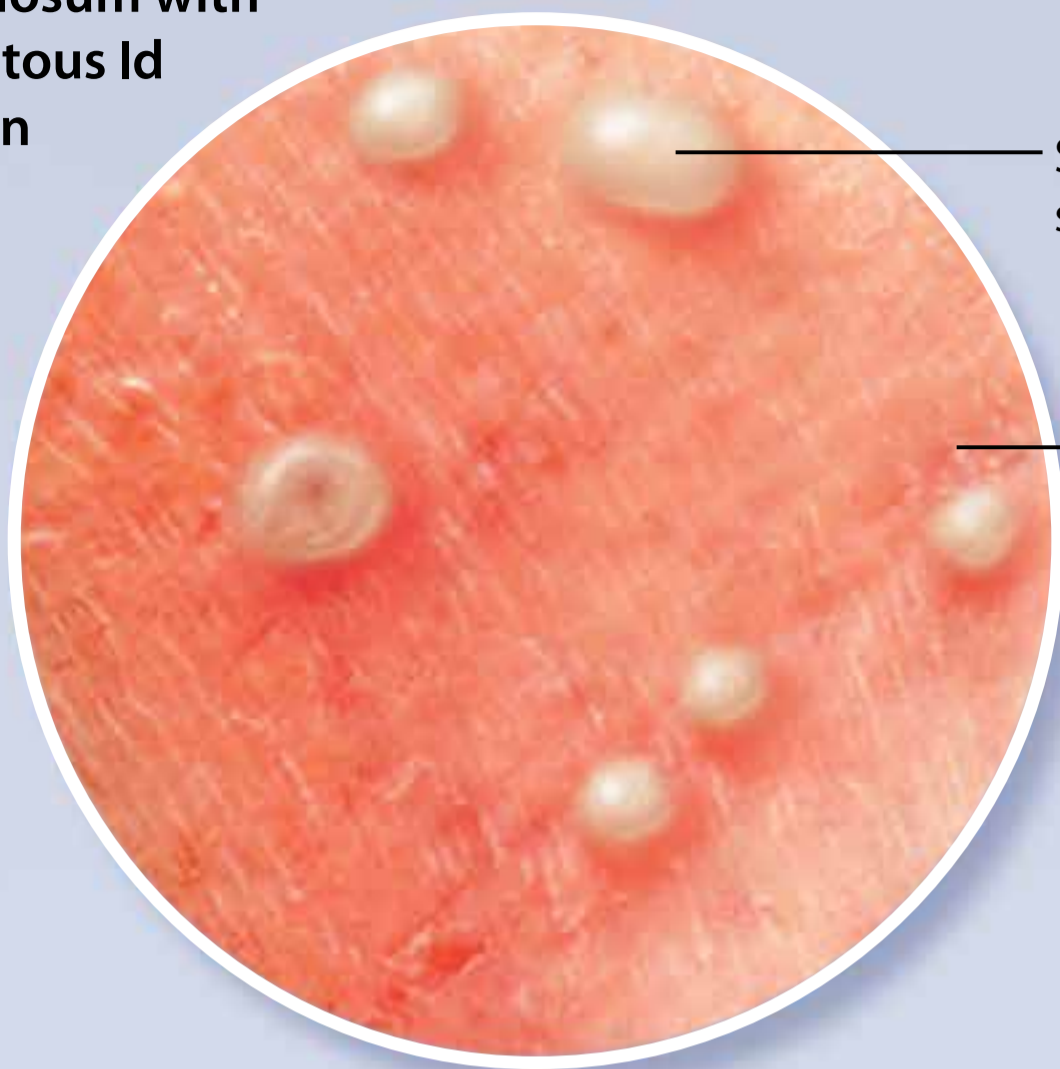
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# Eczematous Id Reaction to Molluscum Contagiosum

## Gross Appearance of Molluscum Contagiosum with Eczematous Id Reaction



Small smooth pink or skin-coloured papules

Pruritic scaly rash

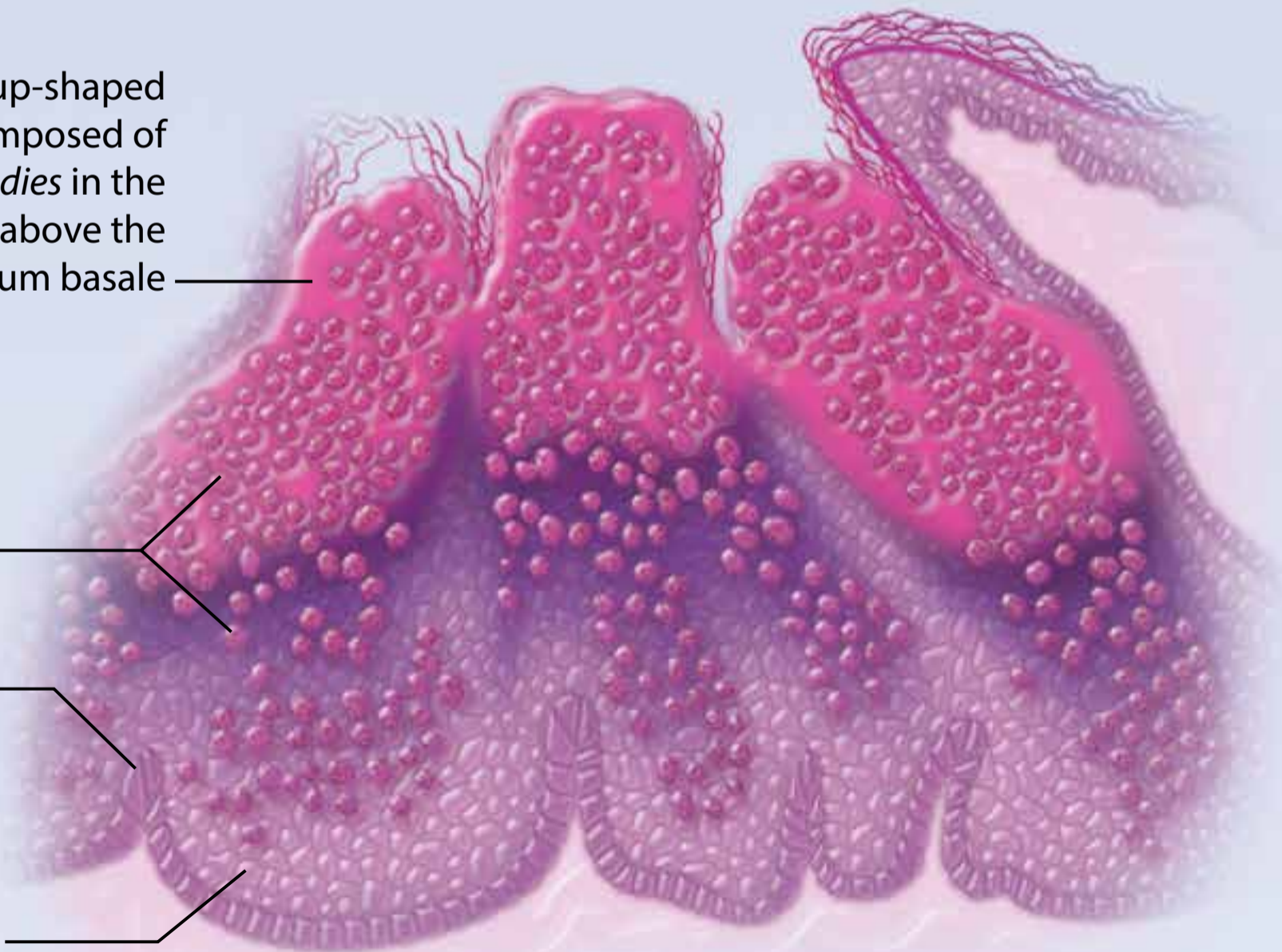
## Histology of Molluscum Contagiosum

Distinctive cup-shaped lesion composed of *molluscum bodies* in the epidermis above the stratum basale

Molluscum bodies

Stratum basale

Verrucous epidermal hyperplasia with acanthosis





The left eye and both conjunctivae appeared normal. On closer inspection, additional lesions were noted that revealed the diagnosis.

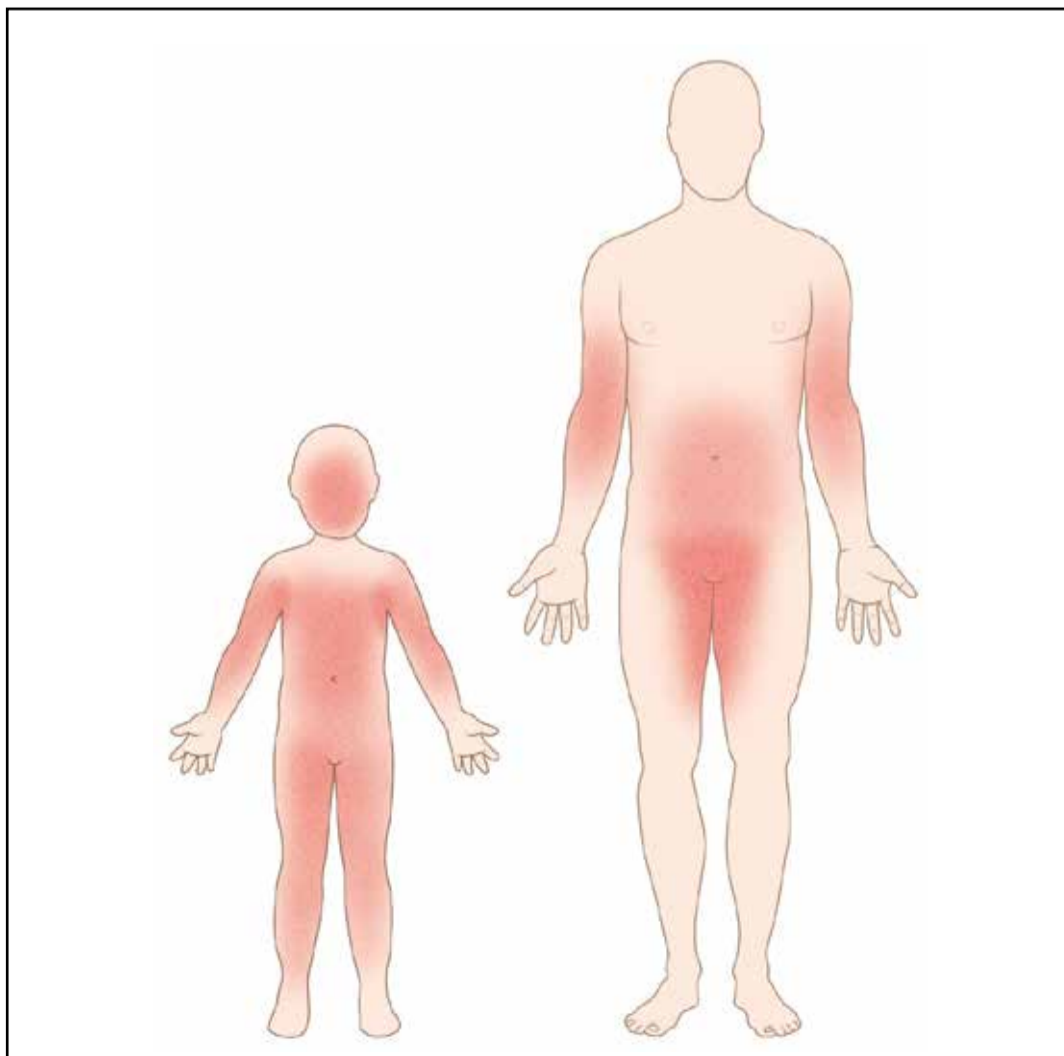
**Case diagnosis: Eczematous id reaction to molluscum contagiosum**

On closer inspection, this patient was noted to have multiple small flesh-coloured pearly papules on the face, including one on the right upper eyelid near the lateral canthus. These lesions confirmed the diagnosis of an eczematous id reaction to molluscum contagiosum (MC) (Figure 2).

Molluscum contagiosum is a poxvirus that commonly affects children 2-6 years of age, with a second peak in young adults.

Lesions are usually diagnosed based on the classic appearance of small smooth pink or skin-coloured papules with or without central umbilication. The infection can trigger a secondary inflammatory reaction, known as an eczematous id reaction.<sup>1</sup> While the diagnosis of MC is straightforward for most pediatricians, the recognition of the eczematous id reaction may be easily missed. In a recent review of 696 pediatric patients with MC, 38.8% had an associated eczematous dermatitis.<sup>2</sup> This is higher than previously reported, possibly due to under-recognition. These id reactions tend to be more difficult to diagnose than the primary papular lesions because the morphology can vary and they may occur either at the site of the molluscum papules or at a distant site (Figure 3). Appropriate recognition is important, as treatment of the pruritic id reactions can reduce spread of MC via autoinoculation from scratching. In addition, under-recognition or misdiagnosis may result in inappropriate or unnecessary treatment. Asymptomatic id reactions do not require pharmacologic treatment and a watchful waiting approach is reasonable. In cases of unilateral periorbital dermatitis, an allergic contact dermatitis is important to consider on the differential diagnosis, either as an allergen directly placed on the periorbital skin or one that has been handled

**Figure 3:** Various sites of id reactions on the body





## SUMMARY OF KEY POINTS

Eczematous id reactions to molluscum contagiosum (MC) in children are common, occurring in up to 40% of cases of MC.

Id reactions to MC can be challenging to diagnose, as they may occur at sites distant from the MC lesions.

Id reactions can be caused by a variety of infectious and noninfectious dermatoses.

Asymptomatic id reactions do not require pharmacologic treatment and a watchful waiting approach is reasonable.

with fingers and later rubbed over the eyes.

Id reactions can be caused by a variety of infectious and noninfectious dermatoses. Common infectious triggers include dermatophyte infections such as tinea capitis and tinea pedis as well as infestations such as scabies. Noninfectious causes include allergic contact dermatitis, such as to nickel. Recognition and treatment of the underlying cause is paramount.

In this case, we made the clinical diagnosis of MC with an associated eczematous id reaction. We treated the molluscum lesions with topical cantharidin and

prescribed a topical corticosteroid for the symptomatic eczematous reaction. In follow-up 2 weeks later, the pruritic scaly rash that had been present for several months had completely resolved and the majority of the molluscum lesions had cleared.

*Financial disclosure: None*  
*Conflicts of interest: None*

### References

1. Elena Netchiporouk and Bernard A. Cohen, "Recognizing and managing eczematous id reactions to molluscum contagiosum virus in children," *Pediatrics* 129,(no. 4, (2012):e1072-75.
2. EM Berger et al., "Experience with molluscum contagiosum and associated inflammatory reactions in a pediatric dermatology practice: the bump that rashes," *Archives of dermatology* 148,( no. 11)(2012):1257-64.



## CLINICAL PEARLS

Id reactions can be caused by a variety of infectious and noninfectious dermatoses, including allergic contact dermatitis to nickel, scabies infestation, tinea infection and molluscum infection.

In a unilateral eczematous dermatitis, consider molluscum dermatitis, especially in a child with no personal or family history of atopy

Treatment of symptomatic id reactions may help to reduce spread of MC via autoinoculation from scratching.

