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# **Ocular Molluscum Contagiosum Atypical Clinical Presentation**

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#### To the Editors

Molluscum contagiosum (MC), a common childhood condition, is a cutaneous viral infection caused by poxvirus that replicates in the cytoplasm of epidermal cells. It typically produces benign, self-limiting eruptions on skin and mucous membranes. MC lesions are commonly seen on the face, trunks, limbs and genital areas (in sexually active young adults; for more information on molluscum contagiosum, visit the Centers for Disease Control and Prevention website at http://www.cdc.gov/ncidod/dvrd/molluscum/). MC is 1 of the easily overlooked causes of chronic unilateral conjunctivitis refractory to routine treatment,<sup>2</sup> and eyelid lesions may assume atypical appearances or may be initially inconspicuous, thereby delaying diagnosis and subsequent treatment. We hereby present 1 such case in a child with several months of chronic conjunctivitis.

On October 25, 2012, a 13-year-old female with a 4-month history of chronic conjunctivitis was referred to an ophthalmologist. Her symptoms began in July with a red, itchy left eye.

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At that time, she was evaluated by her pediatrician and received a presumptive diagnosis of viral conjunctivitis. When her symptoms failed to resolve, she was referred to an ophthalmologist who felt the condition was consistent with bacterial conjunctivitis and prescribed an antibiotic ointment. When symptoms again did not improve, a second opinion was sought resulting in a presumptive diagnosis of allergic conjunctivitis. At this visit, patanol eye drops were prescribed. Again, symptoms persisted and in September, the patient additionally developed a left upper lid lesion, precipitating a visit to a third ophthalmologist, who diagnosed her with a chalazion and suggested warm compresses. The symptoms failed to resolve and on October 25, 2012, the patient presented to a 4th ophthalmologist. Here, a slit lamp examination revealed follicular conjunctivitis with punctate epithelial erosions on her cornea. Her left upper lid also showed a small umbilcated lesion on the central lid margin. She was diagnosed with a chronic follicular conjunctivitis of the left eye caused by molluscum contagiosum. Excision of the lesion was recommended, and the procedure was performed on November 14, 2012. The patient followed up 10 days after the procedure with complete resolution of symptoms. Two months after the procedure, the patient continued to be symptom free. The excised lesion was sent to Centers for Disease Control and Prevention's Poxvirus branch. Extracted DNA was found to be positive for MC DNA using a real-time quantitative PCR (qPCR) targeting the MC virus DNA polymerase gene locus (see Supplemental Digital Content 1, http://links.lww.com/INF/B798, which describes assay).

As seen in this case report, chronic unilateral conjunctivitis can be an early indication of a nascent eyelid lesion; however, children can also present with other ocular manifestations, ranging from lid abscess to granuloma<sup>3–8</sup> (see Table, Supplemental Digital Content 2, http://links.lww.com/INF/B799, which summarizes available case reports and series on ocular MC). A retrospective analysis of 35 MC patients visiting a Manchester eye clinic found that delayed diagnosis of ocular MC was significantly higher among patients presenting with conjunctivitis than in those presenting with non-conjunctivitis symptoms. Thus, in patients with persistent unilateral chronic follicular conjunctivitis, MC should be ruled out by careful examination of the eyelid margin. Removal of eyelid lesions, commonly by excision, is the preferred treatment option as it prevents recurrence and scaring. Although MC is a benign infection, delay in diagnosis might facilitate spread of infection and cause discomfort.

# References

- 1. Gottlieb SL, Myskowski PL. Molluscum contagiosum. Int J Dermatol. 1994; 33:453–461. [PubMed: 7928025]
- 2. Curtin BJ, Theodore FH. Ocular molluscum contagiosum. Am J Ophthalmol. 1955; 39:302–307. [PubMed: 14350041]
- 3. Khaskhely NM, Maruno M, Hoshiyama Y, et al. *Molluscum contagiosum* appearing as a solitary lesion on the eyelid. J Dermatol. 2000; 27:68–70. [PubMed: 10692832]
- Ingraham HJ, Schoenleber DB. Epibulbar molluscum contagiosum. Am J Ophthalmol. 1998; 125:394–396. [PubMed: 9512162]
- 5. van der Meer Maastricht BC, Gomperts CE. *Molluscum contagiosum* giganteum. Am J Ophthalmol. 1950; 33:965–967. [PubMed: 15419259]
- 6. Shubhangi N. Ocular molluscum contagiosum-A case Report. Pravara Med Rev. 2009; 4:3.
- Rao VA, Baskaran RK, Krishnan MM. Unusual cases of *Molluscum contagiosum* of eye. Indian J Ophthalmol. 1985; 33:263–265. [PubMed: 3842837]

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8. Balakrishnan E. *Molluscum contagiosum* conjunctivitis. J All India Ophthalmol Soc. 1964; 12:173–175. [PubMed: 14264217]