

## CASE REPORT OF OCULAR MOLLUSCUM CONTAGIOSUM

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## ABSTRACT

Molluscum contagiosum is a cutaneous viral infection with pale, raised, painless nodules with typical central umbilication. Good clinical examination can prevent misdiagnosing the condition as eyelid lesions are usually overlooked. Two male patients presented to our OPD with small umbilicated nodule on the lower eyelids causing conjunctivitis and discomfort to the patient. Excision of the lesions was done and postoperatively topical antibiotics were prescribed. In the follow-up period, conjunctivitis improved completely, no scarring was seen and no recurrence of the lesions was reported. Excision of the lesions not only helped in alleviating the patient's symptoms but also prevented any further spread of infection or secondary infection.

## INTRODUCTION

*Molluscum contagiosum* is a cutaneous viral infection caused by poxvirus that typically produces benign, self-limiting eruptions on skin and mucous membranes. The infection is acquired by direct contacts, fomites or autoinoculation. It is particularly common in hot, developing countries and in communities with poor personal hygiene. It can also be seen in immunosuppressed<sup>[1]</sup> patients (e.g. with AIDS, using corticosteroids, patients with atopic dermatitis, sarcoidosis, etc. Diagnosis is usually based on clinical findings, and histopathological examination and laboratory tests are not usually required.

Ocular *molluscum* lesions are commonly found on the eyelids.<sup>[1]</sup> Clinically it appears as single pale, waxy and umbilicated nodule on eyelid margins. Hypersensitivity reaction in the form of follicular reaction, punctate keratopathy of conjunctiva, subepithelial deposits can occur due to viral proteins shed from the lesion into the tear film. Congestion of conjunctiva can likely pass out as acute conjunctivitis. Such lesions may also spontaneously resolve within a few months or modalities such as topical chemicals, cauterisation, excision, incision and curettage can be done.

## CASE REPORT

## Case 1

41 years old male presented to OPD in our department with complaints of redness and watering in his left eye from last 3-4 months. Patient gave history of visiting 2 ophthalmologists earlier and had been treated with topical antibiotic (G. Ciprofloxacin 0.5% 4-6 times),

topical antihistaminic (G. Naphazoline+ Phenylephrine+ HPMC 3 times) with lubricants (G. CMC 0.5% 6-8 times).

Snellen's chart Visual acuity was 6/6 in both eyes. Pupillary reactions and intraocular pressure was normal. On anterior segment examination, 1 single round pitted and umbilicated lesion was noticed on the lid margin of left lower eyelid at the junction of medial 1/3<sup>rd</sup> and lateral 2/3<sup>rd</sup>s (Fig. 1A). The conjunctiva was hyperaemic and there was papillary hyperplasia in both upper and lower fornix along with mild follicular reaction in lower fornix. Cornea was clear and fundus was normal.

The lesion was excised under topical anaesthesia with all antisepsis measures taken. Slit lamp photograph after excision of the lesion has been shown in Figure 1B. Haemostasis was assured. The patient was treated post operatively with topical antibiotics (G. Moxifloxacin 0.5% 6 times per day). Follow up after 3 days showed complete healing of wound without any scarring (Fig. 1D). Also the conjunctival congestion was cleared completely within 1 week (Fig. 1C) following which the patient was put on lubricant eye drops (G. Carboxymethylcellulose 0.5% 4-6 times) for 4-8 weeks.

## Case 2

A 28 years old male patient presented to OPD with complain of small nodule in right lower eyelid for 2 months. Patient also complained of mild irritation in eye due to the nodule. There was history of redness of eyes but no history of watering from eyes. On examination visual acuity of the patient was 6/6 in right eye, 6/12 in left eye. On anterior segment examination, there was a

pitted papular lesion 2\*1mm on the lateral aspect of the lash line of right lower eyelid (Fig. 2A). There was conjunctival hyperaemia in the right eye with mild to moderate follicular reaction in lower fornix. Rest ocular examination was within normal limits.

The lesion was excised in the same manner as done in 1st case. Figure 2B depicts slit lamp photograph of the patient after excision of the lesion. Hemostasis was assured. Treatment was initiated with topical Moxifloxacin (0.5% 6 times/day). Follow up examination after 3 days showed the regression of the symptoms and the wound had also healed. Refraction of the patient was done to correct far vision and spectacles were prescribed. Patient later was lost to follow up.

## DISCUSSION

*Molluscum contagiosum* is a double stranded DNA Poxvirus. The virus replicates in cytoplasm of epithelial host cells, especially in epidermal cells.<sup>[2]</sup> Clinically it presents as discrete, pearly, smooth, dome shaped papules with typical central umbilication.<sup>[2,3,4]</sup> These small umbilicated lesions associated with the virus can be autoinoculated or spread from person to person. Such lesions can be commonly seen on face, eyelids, neck, axillae and thighs. Single site involvement, especially head and neck, is more common in children.<sup>[2]</sup>

The incidence of molluscum contagiosum occurring in the eyelid has been reported by Elbert<sup>[5]</sup> and de-Vincenti's.<sup>[6]</sup> Lesions of *Molluscum contagiosum* on eyelids usually presents with chronic irritation, mild discharge, which may lead to follicular conjunctivitis or epithelial keratitis when virus enters the tear film.<sup>[7]</sup>

Such lesions need to be differentiated from other less common conditions like papilloma, basal cell carcinoma, sebaceous cyst, keratocanthoma, warts, etc. Typical umbilication is a clue for diagnosing Molluscum Contagiosum. In case of uncertain diagnosis, histopathological examination helps.

Allergic, bacterial, viral and chlamydial conjunctivitis may be considered in the differential diagnosis of the follicular reaction in patients with conjunctival involvement.

Although the diagnosis is made clinically, but many times the lid lesions are overlooked as seen with our first case where patient was being treated for infectious conjunctivitis alone.

There is no known antiviral treatment for Molluscum. A review of Cochrane database including 495 cases indicated that no therapy was universally and convincingly effective in treatment of MC.<sup>[8]</sup> It may resolve spontaneously within months in healthy, immunocompetent individuals, but it requires treatment in some refractory cases.

Molluscum lesions are filled with viral inclusion bodies and need to be physically removed from the skin to prevent further autoinoculation. Chemical cauterisation using tri-chloroacetic acid, silver nitrate has been successfully tried. There might be subsequent scarring or loss of eyelashes with these chemical agents. Surgical techniques include extirpation with cauterisation of the base, needle aspiration, cryotherapy with liquid nitrogen and various laser therapies.<sup>[9]</sup> Removal of lesion can be done by shaving with surgical blade as we did in our cases with or without application of tincture iodine cautery or carbolic acid cautery.

Hanna et al.<sup>[10]</sup> compared four treatment options for MC in 124 children and found that curettage was the most effective treatment with lowest rate of side effects. They also reported that 80.6% of patients needed only one visit with this therapy.

There is significant improvement in associated keratitis and conjunctivitis once lid lesions are eradicated. Sometimes, in patients with chronic conjunctivitis with corneal involvement it may complicate into corneal vascularisation and scarring.

In our cases, surgical excision of the lesions with post-excision topical antibiotics resulted in complete disappearance of the lesions with no residual scarring. Chronic conjunctivitis in both of our cases was resolved completely. There was no recurrence within 6 months follow-up period of our 1st case.





Fig. 1 CASE 1. (A) Left lower eyelid showing molluscum lesion with congestion of conjunctiva; (B) Slit lamp photograph after excising lesion; (C) Follow up after 1 week with complete resolution of signs; (D) Slit lamp photograph showing no scarring

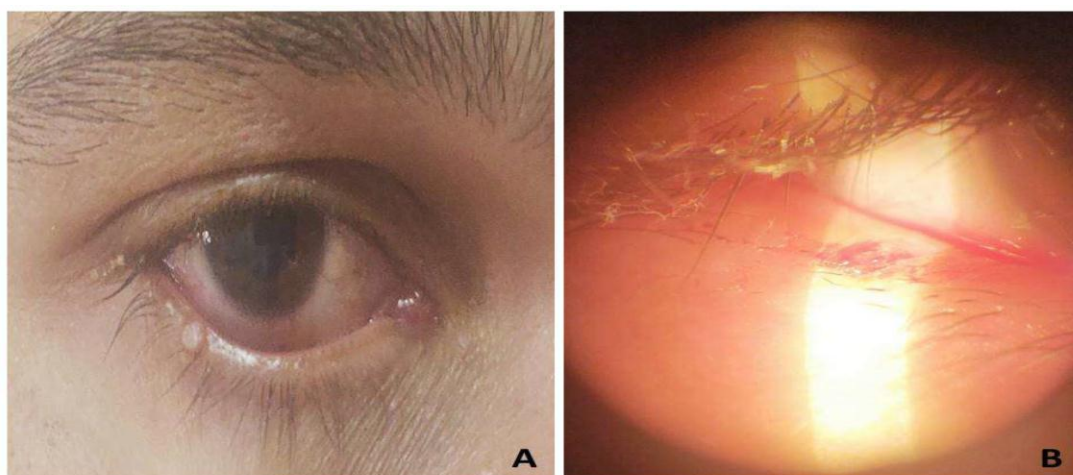


Fig. 2. CASE 2. (A) Right lower eyelid showing Molluscum papule with congestion of conjunctiva; (B) Post-excision slit lamp photograph of lesion

## CONCLUSION

Although the diagnosis of Molluscum is made clinically due to the typical umbilication present on the lesions, many patients are mis-diagnosed at their first presentation. The lid lesions are overlooked and the patient usually receives symptomatic treatment.

Most cases being self limited may resolve spontaneously, but in our cases we preferred to excise the lesion to overcome cosmetic problem, to alleviate discomfort due to conjunctivitis as well as to prevent any further spread of infection or secondary infection.

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