

## Ocular Molluscum contagiosum- A Case Report

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### ABSTRACT

*Molluscum contagiosum is an infection of skin caused by Poxvirus and usually affects eyelid margins as pearly pink umbilicated tumor. Single molluscum contagiosum lesion is more common in school going children who are otherwise healthy while multiple lesions are seen in immunosuppressed patients. Eighteen months healthy female child, a case of molluscum contagiosum, presented with multiple swellings on right upper and lower eyelid margins with mild conjunctival congestion of 6 months duration. The case was investigated and treated with surgical excision followed by postoperative local antibiotic treatment which helped the patient. Histopathological report of excised tissue confirmed the diagnosis of molluscum contagiosum. The patient had an uneventful recovery.*

**Key words:** *Molluscum contagiosum, eyelid tumors*

### INTRODUCTION

Molluscum contagiosum is a skin infection caused by Poxvirus and affects otherwise healthy children with peak incidence between 2-4 years<sup>[1]</sup>. It is transmitted through direct contact with infected people, fomites and autoinoculation. Clinically it usually presents with single, pale, waxy and umbilicated nodule on eyelid margins. It may be associated with follicular conjunctivitis with mild mucoid discharge. However in immunosuppressed patients multiple eyelid margin lesions and bulbar nodules are seen. If untreated molluscum lesions may lead to follicular conjunctivitis, epithelial keratitis, pannus and child may suffer from reduced vision.

### CASE REPORT

Eighteen months old female child presented to outpatient department of Pravara Rural Hospital, Loni on 6<sup>th</sup> July 2009 with chief complaints of multiple, painless, progressive swellings on right upper and lower eyelids with mild conjunctival congestion in right eye



**Figure1: Showing lesions over lids**

off and on for the past 6 months(Fig.1). There were no similar complaints in the past and there was no relevant medical, surgical, family or birth history. Child was immunized fully as per age. Ophthalmic examination revealed three circular, pearly skin colored, umbilicated and firm nodules on the lower eyelid margin of right eye. The lesion near medial canthus was of one cm diameter and the other two were of 2-3mm diameter (Fig.1). Similarly there were two nodules of 2-3 mm diameter on the upper eye lid margin of the right eye. There was mild conjunctival congestion in the right eyes. The patient was investigated for general anaesthesia purpose including HIV status. The lesions were surgically excised after clamping (Fig 2) and haemostasis ensured. Post operative local antibiotics were used.

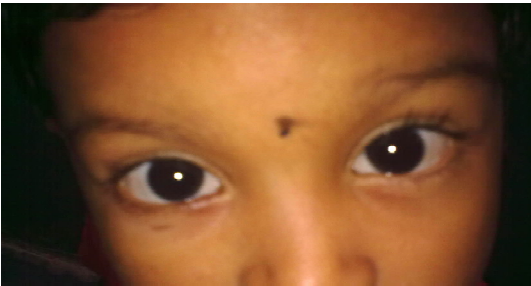
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Follow up after five days showed complete healing of wound without any scarring (Fig.3).

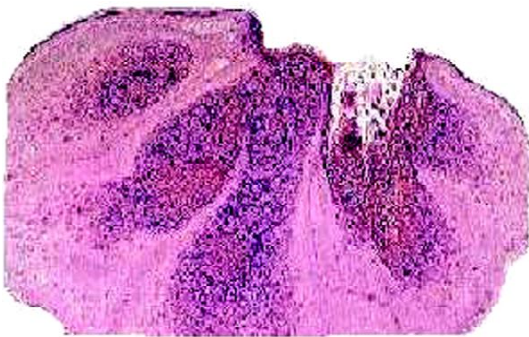


**Figure 2: Showing surgical removal of lesion**



**Figure 3: Post-operative photograph of patient**

Histopathological Microscopic Examination- showed stratified keratinized squamous epithelium with underlined dermis within epidermis and large central crater filled with molluscum bodies (Fig.4). Also dermis showed mild inflammatory cells infiltration and diagnosis of molluscum contagiosum was confirmed.



**Figure 4: Photomicrograph showing molluscum bodies**

## DISCUSSION

Molluscum contagiosum is a skin infection caused by human specific double stranded DNA Poxvirus. It affects otherwise healthy children with peak incidence between 2-4 years. Virus replicates in cytoplasm of host epithelial cells. The infection is acquired by direct contacts, fomites or autoinoculation. It is also common in immunosuppressed individuals and presents with multiple lesions. Incubation period is about 2 weeks. Clinically it presents as discrete, pearly, skin colored, smooth, dome shaped papules which vary in size from 1-5 mm. There is typical central umbilication from which cheesy material can be expressed<sup>[1,2]</sup>. These papules can occur anywhere in body. But more predilection sites are- face, eyelids, neck, axillae and thighs. Mild surrounding erythema or eczematous dermatitis may accompany the papules. In AIDS patients lesions are large, numerous and on face<sup>[3]</sup>. However these can be seen in children with leukemia, immunodeficiency and atopic dermatitis. Occasionally at the site of molluscum contagiosum lesion pustular eruptions occur. However it is not due to the secondary bacterial infection but immune reaction to molluscum contagiosum virus and is treated with antibiotic. Unfortunately this leads to atrophic scar. Uncomplicated molluscum contagiosum lesion as such is epidermal disease, fortunately self limiting and so it never creates scar.

Eyelid molluscum contagiosum lesion usually presents with chronic unilateral irritation and mild discharge and may lead to follicular conjunctivitis, epithelial keratitis and pannus due to virus entry in tear film<sup>[4]</sup>.

The molluscum contagiosum may have to be differentiated from conditions like trichoepithelioma, basal cell carcinoma, ectopic sebaceous gland, syringoma, hidrocystoma, keratoacanthoma (molluscum sebaceum) and warty dyskeratoma<sup>[5]</sup>. However typical umbilication is a clue for diagnosis of molluscum contagiosum. In case of uncertain diagnosis histopathological examination helps. In molluscum contagiosum, epidermis is hyperplastic, hypertrophied. It extends into dermis and projects above skin surface. Molluscum contagiosum papule consists of lobulated

adhesive mass of virus infected epidermal cells. Eosinophilic viral inclusion bodies i.e. Henderson Peterson or molluscum bodies become more prominent as cells move upward from basal layer to stratum corneum. The central plug which is composed of virus laden cells may be shelled out from a lesion and examined under microscope with 10% KOH or Wright or Giemsa stain. The rounded cup shaped mass of homogenous cells often with identifiable lobules are diagnostic<sup>[6]</sup>.

### MANAGEMENT OF MOLLUSCUM CONTAGIOSUM

(i)- NO TREATMENT: Molluscum contagiosum lesions are self limiting. Attack may last for 6-9 months or can spread to distal sites or transmitted to others.

(ii)- PROPHYLAXIS: It is important and one should avoid shared baths or towels till infection clears.

(iii)- TREATMENT OF EYELID LESIONS: It is indicated for cosmetic reason or if there is follicular conjunctivitis or keratitis or pannus. Here removal of lesion is the treatment of choice. It can be done with nick incision at margin of lesion with needle tip with or without application of tincture iodine cautery or pure carbolic acid cautery or shave excision (as in this case), or destruction of lesion with cautery or cryo or laser<sup>[7]</sup>. However this is hazardous due to subsequent scarring, depigmentation or loss of eyelashes.

(iv)- TREATMENT OF LESIONS NOT INVOLVING FACE OR LIDS: Here canthardin with band aid application helps. It forms blister which ruptures and heals with scarring.

(v)- TREATMENT OF FACE LESIONS: Imiquimod which is nonirritant can be used.

### CONCLUSIONS

Though multiple lesions due to molluscum contagiosum are seen commonly in immunocompromised children one should remember that it can present as multiple lesions on eyelids even in healthy child.

Though it is an epidermal disease which is self limiting and resolves without scar, treatment is indicated for large lesion, multiple lesions and for cosmetic reason. One should not over treat and create scars iatrogenically.

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