Molluscum contagiosum
To treat or not and how

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No conflict of interest to disclose
Molluscum Contagiosum virus MCV

- Self limiting infection of the skin and mucosa
- Pox virus family member
- Linear dsDNA genome 190,000 BP
- Specific to the human host
- 4 subtypes: MCV 1 – 4
  - No relationship between type and:
    - morphology
    - distribution
  - Geographical variation
- MCV-2 primarily in STD infection
Molluscum Contagiosum virus MCV

- Overall incidence rate of 12-14 per 1000 people
- Prevalence in children between 5-11%
- Minimal variation between sexes
- Risk factors for infection:
  - Sharing of fomites
  - Swimming pools
  - Close contact: outbreaks, STD
  - Atopic dermatitis
  - Immunosuppression
Molluscum Contagiosum virus MCV

- Incubation period of 2w-6m
- Peak incidence between diaper age – early grade school
- Discrete dome-shaped umbilicated papule
- Usually 1-5mm, occasionally giant lesions
- From few up to more than 100 lesions
- Spontaneous resolution:
  - Heralded by inflammation, suppuration, crusting
  - Leaving a transitory small atrophic scar
  - Mean time to resolution 13.3m
  - 30% resolve after 18m, 13% resolve after 24m

Lancet infec Dis 2015;15:190-95
Do we need to treat MCV?

– **Benign neglect approach:**
  - Self limiting disease
  - Time to resolution is short, few weeks to months
  - Not effective enough treatment modalities
  - Treatment not cost effective
  - Treatments too painful
  - The molluscum does not cause substantial
Reasons to treat MC

» Widespread dissemination
» Substantial eczema, Id reaction, up to 30-50%
» Gianotti-Crosti syndrome like
» Secondary infection: abscess formation, cellulitis, up to 22%

» Spread to face:
  • Eyelid, conjunctival, and intraocular involvement
  • Scar formation

» Contagious disease
  • Outbreaks
  • Social stigma, exclusion from the society, embarrassment
  • Ethical and legal implications of not treating contagious disease
Common Skin Diseases With High Rate of Returning Visits & Referrals

Molluscum Contagiosum

Incomplete, or no treatment strategy, causes high returning visits and referral rates
Treatment modalities

- Destructive:
  - Curettage
  - Cryotherapy
  - Cantharidin
  - Keratolytics
  - Electrosurgery
  - Topical potassium hydroxide
  - Laser treatment
  - Duct type
  - Topical cytotoxic

- Immune modulating:
  - Imiquimod
  - Candida antigen
  - Antiviral agents
    - Nitric oxide
    - Cidofovir
<table>
<thead>
<tr>
<th>Article</th>
<th>Treatment modality</th>
<th>Nº of patients</th>
<th>Nº of treatments/ success rate; clearance</th>
</tr>
</thead>
</table>
| Harel et al     | Curettage          | 1878           | 1 treatment: 70%  
2 treatments: 26%  
3 treatments: 4%  |
| Simonart et al  | Curettage          | 73             | 4 weeks: 34%  
8 weeks: 55%  |
| Hanna et al     | Curettage          | 31             | 1 visit: 80.6%  
2 visits: 16.1%  
3 visits: 3.2%  |
| Hanna et al     | Cantharidine 0.7%  | 30             | 1 visit: 36.7%  
2 visits: 43.3%  
3 visits: 20%  |
| Coloe Dosal et al | Cantharidine 0.7% | 29             | 5 - 15%  |
| Silverberg et al | Cantharidine 0.7% | 300            | 2.1 average treatments for clearance  |
| Moye et al      | Cantharidine 0.7%  | 405            | 2.6 average treatments for clearance  |
| Al Mutairi et al | Cryotherapy 1/w    | 37             | 3 weeks: 73%  
6 weeks: 100%  |
| Gamble et al    | Cryotherapy 1/w    | 37             | 3 weeks: 70.3%  
6-12-16 weeks: 100%  |
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<tr>
<td>Theos et al</td>
<td>Imiquimod 5% 3/w</td>
<td>12</td>
<td>4 weeks: 58.3% partial clearance</td>
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<td>12 weeks: 66.7% partial and 33.3% clearance</td>
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<td>Bayer et al</td>
<td>Imiquimod 5% 3/w</td>
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<td>16 weeks: 15% complete clearance</td>
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<td>54% partial clearance, 31% no response</td>
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<td>3 weeks: 2.7%</td>
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<td>6 weeks: 10.8%</td>
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<td>12-16 weeks: 91.9%</td>
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<td>Imiquimod 5% 3 times a week</td>
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<td>1 visit: 55.2%</td>
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<td>2 visits: 41.4%</td>
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<td>Can et al</td>
<td>10% Potassium Hydroxide 2/d</td>
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<td>Kose et al</td>
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<td>6 weeks: 83.3%</td>
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<td>Hanna et al</td>
<td>Salicylic acid 16.7% and lactic acid 16.7%</td>
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<td>1 visit: 53.6%</td>
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<td>3/w</td>
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<td>2 visits: 46.4%</td>
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<td>3 visits: 0%</td>
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<td>Kose et al</td>
<td>Salicylic and lactic acid 2/d</td>
<td>14</td>
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35% treated before with insufficient results:
  - Keratolitic agents, Cryotherapy, Cantharidin
70% disease duration of more than 1 year
78% more than 20 lesions, with infection or eczema
76% were advised not to treat
1878 treated with curettage part of them under sedation
  - 70% cured after 1 treatment
  - 26% cured after 2 treatments
  - 4% cured after 3 or more treatments
More than 95% satisfied
"...Don't treat it. It will pass"

"If it is so simple why wasn’t I told about it?"

Thank you