



Warts & Molluscum

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LEADING THE WAY 

*Growing the Ability to Deliver Quality Healthcare to
American Indian and Alaska Native People.*

Objectives

- Review clinical presentation of warts and molluscum in children and adults
- Discuss various treatment options



Wart

Epidemiology

- Peak prevalence is during adolescence (13-16 yo)
- ~5-20% of teens are affected
- ~1-5% school aged children (5-12yo) are affected

Role of HPV in Cutaneous Disease

- HPV can be transmitted by skin-to-skin contact or through contaminated surfaces
- The type of HPV influences the wart morphology



Verrucae Planae: Flat Warts



- Skin colored or pink
- Smooth surfaced, slightly elevated, flat-topped papules
- Dorsal hands, arms, face
- HPV Type: 3 and 10

Verrucae Planae: Flat Warts



Palmoplantar Verruca



- Thick, endophytic papules
- Mosaic warts: plantar warts coalescing into large plaques
- HPV Type: 1
- Can accumulate a thick callus over and around the wart
- Can be painful

Palmoplantar Verruca



Condyloma acuminata: Genital Warts



- HPV Type: 6,11,16,18
- Increased risk with immunosuppression

Condyloma acuminata: Genital Warts



General Treatment Principles

- Observation: Chance of spontaneous resolution at 2 years is over 75%
- Multiple treatments are typically needed
- Treatment will depend on the age of patient
- Treatments are often destructive and/or stimulate the immune system



Treatment: Cryotherapy

- Irritating/destructive
- Most patients will need multiple treatments (every 4-6 weeks)
- Side effects:
 - Post –inflammatory hypopigmentation
 - Scar, pain, blister
 - Ring wart



Treatment: Salicylic acid 17-40%

- Irritating/destructive
- Keratolytic – loosens connections between keratinocytes
- Apply every day to every other day under occlusion (after removing hyperkeratotic skin)
- Side effects: erythema, peeling, irritation



Treatment: Imiquimod

- Primarily immune stimulating
- FDA approved for genital warts (12+ yo)
- Apply three times a week ~8 weeks.



Treatment: Other

- Intralesional candida injection
- Intralesional cidofovir
- Tretinoin cream



Molluscum Contagiosum

- Commonly seen in young, school-age children
- MC is a benign, often asymptomatic viral infection of the skin
- It is caused by a pox virus
- Three main groups at risk for infection (children, sexually active adults, immunosuppressed patients)
- Can develop anywhere but are most commonly seen in areas of friction.
- Can resolve on its own after months to years.



Molluscum Contagiosum

- When MC occurs in the genital region in sexually active patients, it is classified as an STI
- Consider offering additional STI screening



Molluscum Contagiosum



Molluscum Contagiosum

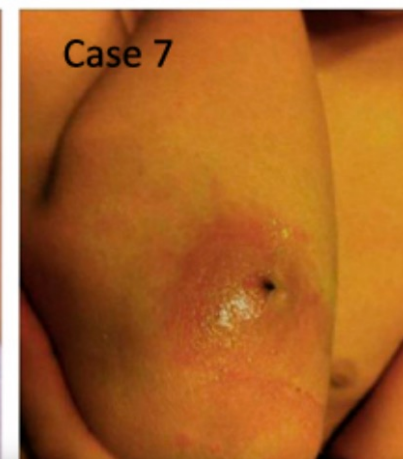
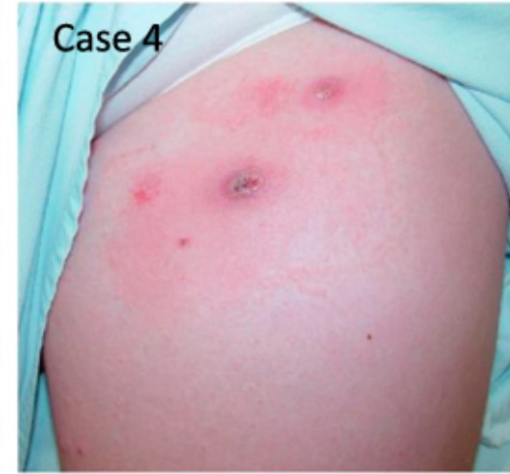


Molluscum Contagiosum

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Molluscum Contagiosum



Molluscum Contagiosum

- Tenderness, crusting and erythema of MC represent the host immune response to the infection
- Beginning of the the end (BOTE) sign
- Treatment with antibiotics is usually not necessary



Molluscum Contagiosum: Treatment

- Consider treatment:
 - Reduce autoinoculation
 - Cosmetic concerns/prevent scarring
 - Prevent secondary infection
 - Prevent spread (genital lesions in sexually active patients)



Molluscum Contagiosum: Treatment

- **Goal of treatment: Induce irritation to increase immune response to virus**
- Cantharidin:
 - Apply a thin layer & wash off 6-8 hrs after
- Cryotherapy
- Tretinoin cream
- Can consider topical steroids if there is an eczematous response surrounding molluscum



Case 1



A 10 yo patient with a history of atopic dermatitis presents with AD flare and a new rash within the last few weeks. Next step?

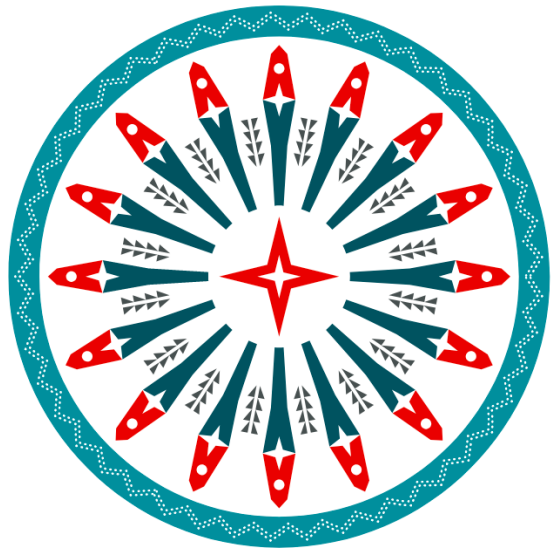
Case 2

- A 50 yo patient presents with a verrucous growth on the foot that has not been responding to cryotherapy x 3.



References

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