* MANAGEMENT OF PLANTAR VERRUCA

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* Define verruca plantaris
* Review epidemiology of plantar verruca
* Review clinical findings for plantar verruca
* List a differential diagnosis for plantar verruca
* Discuss conservative management of verruca plantaris
* Describe the surgical approach to verruca plantaris
* Epidermal lesion
* Etiology is the human papilloma virus
* High rate of recurrence
**Epidemiology**

* 7-10% prevalence - occur commonly in children and young adults
* More common in handlers of meat, fish, poultry
* Worse with decreased cell mediated immunity
* Spread by skin to skin contact
* 2-6 month incubation
* More common in whites
* Spontaneous remission in up to 2/3 within two years
* Recurrence is common
Verruca plantaris
clinical history

* “rock in shoe”
* Corn or callus may have black dots
* Slowly growing in size and/or number
* May bleed
* May be quite tender
* Won’t go away
* Others in family have this
* VERRUCA PLANTARIS

clinical findings

* Punctate black dots
* Lesion very well demarcated
* Devoid of skin lines
* VERRUCA PLANTARIS
clinical findings

* Cauliflower appearance
* Tenderness to lateral pressure >>> direct pressure
* May see satellite lesions
* May present in MOSAIC pattern
* CAN CONFIRM WITH BIOPSY
**VERRUCA PLANTARIS**

differential diagnosis

* Porokeratosis*
* Tyloma (callus)*
* Heloma (corn)
* Foreign body inclusion cyst
* Seborrheic keratosis
* Lichen planus
* Epidermal nevus
* Molluscum contagiosum
* Squamous cell carcinoma
* Irritated achrocordon
* Amelanotic melanoma
* Viral eruptions

*most commonly confused*
**Treatment Alternatives**

* Benign neglect
* **Topicals**
  - Salicylic acid
  - Cantharone
  - Trichloroacetic acid
  - Podophyllin
  - Imiquimod
  - 5-flourouracil
* **Intralesional injections**
  - Candida antigen
  - Bleomycin
  - Interferon alpha
Treatment Alternatives

* Surgical
* Electrocautery
* Liquid Nitrogen
* Laser
**Treatment Alternatives**

*Photodynamic therapy*
- 5-aminolevulinic acid

*Systemic agents*
- Cimetidine
- Retinoids
- Cidofovir
- Vitamin A + Zinc

*Alternative treatments*
- Adhesiotherapy (duct tape, super glue)
- Hyperthermia
- Propolis (botanically derived resin bees use as hive sealant)
- Raw garlic cloves
- Tea Tree Oil
- Hypnosis/Daily Affirmations (especially with kids)
* Selecting A Treatment

* Age
* Immunocompetence
* Location
* Disability/disfigurement
* Pain from therapy
* Side effects or complications
* Cost
* Patient compliance or attitude
* Recurrence rates
*VERRUCA PLANTARIS*

surgical excision
Satellite Lesions
*Verruca Excision - prep*

*For most part LOCAL*
Great opportunity for PT block
Verruca Excision - prep

“Sterile” field
* Check anesthesia

Verruca Excision -prep
* Verruca Excision -prep

*Hemostasis
-epinephrine
-tourniquet
**CLINICAL CORRELATION**

*Epinephrine Tips*
- avoid in patients with cardio-vasculature issues
- avoid in digits {​}
- will prolong anesthesia 😊
* Verruca Excision -procedure

* Debride overlying callus
* Define margin with blade
Verruca Excision -procedure

*Curettage
*Scrape all visible verrucous tissue from surgical site down to the basement membrane*
*Verruca Excision -procedure*

*Cauterize the base*
- phenol
- hyfrecator
- laser
* "LASER"

* Less damage to normal tissue
* Less pain
* Faster healing
* More accurate
* High-tech/marketing
SAFETY TIP

* EYE PROTECTION!

LSG310A
Laser Safety Glasses
* **CLINICAL CORRELATION**

* Stay above the basement membrane
* Perforate into the fat and a scar may result
* This outcome can be illustrated at **HOTH the ICE PLANET**
Verruca Excision -procedure

* Re-curettage/wipe
*Verruca Excision -procedure*

* Dressing wound
  - Silvadene/choice
  - Adaptic/choice
  - gauze
  Coban/choice
* Verruca Excision -post-op

* Activity to tolerance
* Verruca Excision -post-op

* Keep clean and dry
Verruca Excision -post-op

*Soaks{?}
* Verruca Excision -post-op

* Pain control
  - typically mild pain but is dependent on sites in weight-bearing locations
Verruca Excision - complications

* Infection
* Over Treatment
  - chemical/thermal burn
* Recurrence
  - lesion redevelops
  - wasn’t a verruca in first place...Intractable plantar keratosis?
  - didn’t get it all
* Scar
*QUESTIONS???