Case Presentation: A Genital Bump

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Background
- 22 yr old Caucasian Australian female
- Presented with a single vulval plaque on the outer aspect of the left labia minora, increasing in size over 3 weeks, very tender, not blistering.
- Sexual History:
  - Regular male partner of 2 years (oral, vaginal, anal intercourse) no condoms
  - Casual male partner 6 months previously (oral and vaginal intercourse) no condoms

- HIV positive (diagnosed May 2014) on ART (started Eviplera in June 2014)
- May 2014: CD4 count at diagnosis 504, VL: 5000 (log: 3.32)
- Past medical history:
  1. PCOS on Metformin 500mg noce
  2. ADHD on Methylphenidate 20mg OD

Social History:
- Non Smoker, no EtOH, no illicit drugs
- No history overseas travel
- No history dermatological conditions

Examination
- Single well demarcated plaque, measuring 2cm x 1cm, skin coloured, “beefy lesion”, not ulcerating, not pointing, no induration
- Very tender
- No surrounding erythema
- No lymphadenopathy
- Systemic examination: unremarkable
Differential Diagnosis
- Chancroid
- Herpes simplex
- Donovanosis
- Genital Wart
- Syphilis
- VIN/neoplasia

Management
- Swabs: H. ducreyi PCR, K. granulomatis PCR, LGV PCR, HSV PCR, Syphilis PCR, M/C/S
- High Vaginal Swab (CT and NG PCR)
- Syphilis serology

Management
- Treated for Chancroid and Genital Herpes
- Patient was given 500mg Ceftriaxone IV plus 1g Azithromycin PO stat and 500mg Valacyclovir BD for 5 days
- Lidocaine 2% topical pm
- Partner treated with 1g Azithromycin PO stat
- Advised no sexual intercourse for 7/7
- Follow up in 7/7

Follow up
- Lesion still present after treatment
- Still painful (using lidocaine 2% gel pm)
- On examination: no change in size, no change in morphology, contact bleeding+, no lymphadenopathy
- Punch biopsy carried out and sent for histology

Histopathology Report
- Pseudoepithelialomatous hyperplasia of the epidermis arising from adjacent normal skin. PEH is an unusual reactive squamous proliferation that may due to a variety of causes, especially unusual infections, but also occasional non-infectious inflammatory conditions and even neoplasias. In this case, the lack of atypia and the non-specific p16 stain exclude VIN and an invasive squamous cell carcinoma. It doesn’t look like a wart. An infective cause is best identified microbiologically.

Diagnosis: Vulva, left labium minus, biopsy: Pseudoepithelialomatous hyperplasia of the epidermis (cause not identified)

PEH
Post Biopsy

Results

- H. ducreyi PCR: negative
- K. granulomatis PCR: negative
- Treponema pallidum PCR: negative
- Bacterial M/C/S: skin flora (scanty)
- Herpes Multiplex PCR: negative
- CT and NG PCR: negative
- LGV PCR: negative
- Syphilis serology: negative

Outcome

- Lesion resolved spontaneously post punch biopsy.
- She was advised to attend the Clinic if the lesion reoccurred and total excision of the lesion would be carried out.

Pseudoepitheliomatous Hyperplasia (PEH)

- AKA: Verrucoid Epidermal Hyperplasia
- Benign condition, hyperplasia of epidermis resembling squamous cell carcinoma
- Presentation: Usually a well-demarcated plaque or nodule with +/- scaling and crusting
- Lesions are usually skin coloured or tan pink
- Lesions can increase in size or spontaneously regress

Pseudoepitheliomatous Hyperplasia (PEH)

- Conditions associated with PEH: Infections, Neoplasia, Dermatoses, and Miscellaneous processes
- Diagnosis: Biopsy including deep dermis facilitates diagnosis
- A few published case reports have shown the association between PEH with HIV and HSV

Case Report: 51 yr old HIV+ with verrucous mass

- 51 yr old dx with HIV 2007 (CD4 nadir: 13), stable on ART for 2 years (CD4 count: 262) who presented with 2 verrucous masses (2cm x 3cm) over perineal body and labia majora. Clinical diagnosis of recurrent cervical cancer. Histopathology diagnosis was herpes type II infection with PEH.
- Management: Oral valacyclovir for 1 month, then oral acyclovir for 4 months, topical imiquimod, and oral prednisolone. CD4 count and VL during tx (374-480, less than 20-40 copies) respectively.
Discussion

- Unusual infectious/inflammatory lesions are more common in HIV/AIDS.
- Any non-healing lesion should be biopsied.
- Dermatological conditions are more common in HIV infected individuals.
- PEH can occur in association with inflammatory processes elicited by various causes including HIV and HSV.

Presentation: exaggerated inflammatory response to viral infection presenting as tumor mass. This occurs when the immune status of an immunocompromised host has been restored with ART.

Immune reconstitution inflammatory Syndrome (IRIS) occurs in 17-68%. Half of IRIS was associated with HSV II.

During IRIS, overproduction of tumor necrosis factor, increase in interleukin-6 → no apoptosis and hyperkeratosis

Risk Factors for IRIS: low CD4, ART of less than 6 months, younger age at initiation of ART, increase in CD4 more than 4-fold.

Resources

- Australian STI Management Guidelines 2014
- The American Journal of Dermatopathology (vol. 33, 112-126, April 2011)

Thank you!