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

Background

- HIV positive (diagnosed May 2014) on ART (started Eviplera in June 2014)
- May 2014: CD4 count at diagnosis 504, VL: 5200 (log: 3.32)
- July 2014: CD4 count 615, VL: 40 (log: 1.59)
- Past medical history:

1. PCOS on Metformin 500mg nocte
2. ADHD on Methylphenidate 20mg OD

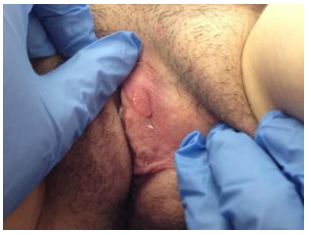
Background

- 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

Examination



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 IM plus 1g Azithromycin PO stat and 500mg Valacyclovir BD for 5 days
- Lidocaine 2% topical prn
- Partner treated with 1g Azithromycin PO stat
- Advised no sexual intercourse for 7/7
- Follow up in 7/7

Follow up

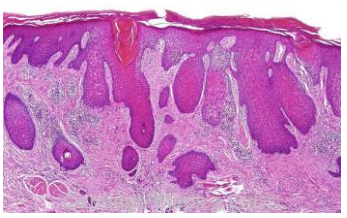
- Lesion still present after treatment
- Still painful (using lidocaine 2% gel prn)
- On examination: no change in size, no change in morphology, contact bleeding+, no lymphadenopathy
- Punch biopsy carried out and sent for histology

Histopathology Report

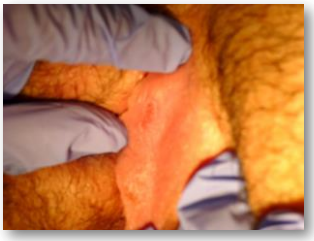
- Pseudoepitheliomatous hyperplasia of the epidermis arising from adjacent normal skin. PEH is an unusual reactive squamous proliferation that may due to a variety of causes, especially unusual infections, but also occasional non-infectious inflammatory conditions and even neoplasias. In this case, the 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: Pseudoepithematous 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.

Discussion

- 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)
- The Journal of Obstetrics and Gynaecology Research (vol. 40, 255-258, Jan. 2014)

Thank you!