showed HIV positive. A positive CSF-VDRL test was shown in seven patients, three had HIV positive. **3)** Peripheral blood $CD4^+$ T cell count The peripheral blood $CD4^+$ T cell count was low (<550 cells/μL) in fifteen out of 26 malignant syphilis, of those seven cases were HIV seropositive. Six out of 26 patients suffered from both malignant syphilis and neurosyphilis but without HIV infection.

Conclusion There is no direct association between HIV infection and malignant syphilis or neurosyphilis. Additionally, we found a new unusual combination of malignant syphilis and neurosyphillis in the absence of HIV infection.

Disclosure No significant relationships.

CCS01.2 A CASE SERIES OF SYPHILIS MASQUERADING AS THORACIC MALIGNANCY

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10.1136/sextrans-2019-sti.98

Background Infectious syphilis incidence is increasing worldwide, particularly amongst men who have sex with men (MSM). We report a case series of two patients with a rare presentation of syphilitic pneumonitis masquerading as thoracic malignancy.

Methods Patient history review via electronic records.

Results Case 1- 54 year old MSM, HIV diagnosed 2011, CD4 nadir 557 cells/μl, current CD4 861 cells/μl and HIV viral load (VL) undetectable since commencing antiretroviral therapy (ART), presented to emergency department (ED) with pleuritic chest pain and normal oxygen saturation. CT scan demonstrated parenchymal and sub-pleural nodules measuring maximum 13 mm, thought likely to represent malignancy and one lesion had features of an infarct. He started Rivaroxaban in ED and subsequently developed a rash suggestive of evolving syphilis. Rapid plasma reagin (RPR) six weeks after initial presentation was 1:32. Treated with 2 weeks of doxycycline, RPR six weeks later was 1:16 and at five months 1:4. CT scan six weeks post treatment showed almost complete resolution of nodules. Case 2- 38 year old MSM, HIV diagnosed in March 2017, CD4 nadir 65 cells/μl, current CD4 219 cells/μl and VL 109 cells/μl on ART. Kaposi's sarcoma (KS) diagnosed in 2017, involving skin, lymph nodes and spleen, treated to remission with ART alone. Presented in July 2018 with deranged liver function tests. CT scan showed multiple subpleural and parenchymal nodules, largest 11 mm, however no progression of lymphadenopathy or clinical progression of cutaneous KS. RPR 1:512 and resolution to 1:16 three months after treatment with intramuscular Benzathine Penicillin. Radiological resolution of lung nodules occurred after 2 months of treatment. Chemotherapy was avoided.

Conclusion Syphilitic pulmonary/pleural nodules resolve with standard antibiotic therapy. Patients with pulmonary nodules usually present to primary care or specialist services where they are investigated for vasculitis/malignancy, but rarely for syphilis. For patients at risk, ruling out syphilis would avoid unnecessary interventions.

Disclosure No significant relationships.

CCS01.3 SYPHILIS AS FIBROMYALGIA WITH UNEXPLAINED HEPATOSPLENOMEGALY

Jackie Sherrard*. *Buckinghamshire Healthcare NHS Trust, Amersham, UK*

10.1136/sextrans-2019-sti.99

Disclosure No significant relationships.

CCS02 – CLINICAL CASE SERIES – CLINICAL CASES FROM EXPERTS

Tuesday, July 16, 2019 7:00 AM – 8:00 AM

CCS02.1 DEQUALINIUM CHLORIDE VAGINAL TABLETS FOR RECALCITRANT *TRICHOMONAS VAGINALIS* (TV): A CASE REPORT

Deborah Goode*, Natasha Astill, Janet Wilson. *Leeds Teaching Hospitals NHS Trust, Leeds Sexual Health, Leeds, UK*

10.1136/sextrans-2019-sti.100

Background Treatment for TV is often ineffective. Even very high-dose tinidazole has 8–10% failure and subsequent treatment options have limited evidence-base. Dequalinium has an EU license for bacterial vaginosis treatment. It is well tolerated, safe and has in-vitro activity against TV, but clinical experience is limited. We present the case of an 18-year old female with a 12-month history of persistent TV despite standard and resistant treatments, which finally responded to prolonged dequalinium.

Methods The patient was white British with no significant medical history. The presumed source of infection was a male living in Dubai. There was no risk of reinfection and adherence was self-reported as excellent throughout. Initial and subsequent presentations were with typical symptoms of vulvovaginitis and purulent vaginal discharge. Investigations were with onsite microscopy and TV nucleic acid amplification tests (NAAT). Treatment initially followed the British Association of Sexual Health and HIV TV Guideline. She received: several courses of 7-day and very high dose oral metronidazole (once with concurrent ampicillin and clotrimazole pessaries); intravenous metronidazole administered alongside vaginal metronidazole gel; oral tinidazole with intravaginal metronidazole. All nitroimidazole courses were up to 14 days duration. Vulvovaginitis symptoms settled during antimicrobial therapy, but recurred soon after cessation of treatment. At each follow-up TV was confirmed by microscopy and NAAT. We retreated with 4-weeks of metronidazole 400 mg twice daily with dequalinium intravaginal pessaries nightly. Symptoms were controlled, but TV NAAT and microscopy remained positive. As there was symptomatic relief from dequalinium, this was continued as monotherapy for a further 14 weeks pending sourcing alternative treatments.

Results Her symptoms remained controlled and microscopy and NAAT became negative. She remained asymptomatic with

negative microscopy and NAAT 2 months after stopping dequalinium.
Conclusion Prolonged dequalinium may offer an alternative treatment option for recalcitrant TV, particularly where high dose systemic antibiotics have been unsuccessful.
Disclosure No significant relationships.

CCS02.2 PENILE INTRAEPITHELIAL NEOPLASIA: MYRIAD PRESENTATIONS AND INTRACTABLECOURSE

Somesh Gupta*. *All India Institute of Medical Sciences, Dermatology and Venereology, New Delhi, India*

10.1136/sextrans-2019-sti.101

Disclosure No significant relationships.

CCS02.3 PERSISTING URETHRITIS IN AN IMMUNOCOMPROMISED PATIENT

William Geisler*. *University of Alabama at Birmingham, Birmingham, USA*

10.1136/sextrans-2019-sti.102

CCS03 – CASES FROM THE CLINIC

Wednesday, July 17, 2019
7:00 AM – 8:00 AM

CCS03.2 NEONATAL HSV: COULD THIS TRANSMISSION HAVE BEEN PREVENTED?

Elizabeth Foley*. *Solent NHS Trust, Genitourinary Medicine, Southampton, UK*

CCS03.3 ZOON BALANITIS IN HIV-INFECTED PATIENT

RC Melo*, M Ramos. *Ambulatório de Dermatologia Sanitária, Porto Alegre, Brazil*

10.1136/sextrans-2019-sti.103

Background Genital lesions lead patients to seek care in sexually transmitted diseases (STD) clinics. The old axiom "all genital lesions must be considered sexually acquired until proved to the contrary" is true today. A high level of suspicion of an STD must accompany examination of patients with genital lesions. Although other causes are also seen, we present a case of Zoon's balanitis in a patient with HIV infection.
Methods A 40-year old, white male, sought attention for a genital lesion evolving over six months. He was on treatment with antiretrovirals, and underwent treatment with topic and systemic antifungal without improvement. He had multiple, well-delimited, moist red-orange lesions on the glans and foreskin. Some lesions had a face-to-face (kissing) disposition. Treponemal and non-treponemal serology was negative. With the hypothesis of plasmacytic balanitis, a biopsy was performed. Histopathologic examination demonstrated a lichenoid inflammation with an inflammatory infiltrate with plasmocytes, lymphocytes and neutrophils. No vascular alteration was found. There was spongiosis and erosion of the epithelium.
Results Zoon balanitis is a chronic, idiopathic, reactive balanoposthitis. It is believed to be associated with irritation in the context of a dysfunctional foreskin. It presents as well-circumscribed orange-redish moist lesions in the glands and foreskin, usually asymptomatic. HIV infection is an acknowledged risk factor for other STDs. Infectious causes such as candidiasis and syphilis are much more common and must be considered. Syphilitic lesions and Zoon balanitis share clinical and histopathological features including a slight thickening of the epidermis, parakeratosis, and patchy lichenoid infiltrates of lymphocytes and plasma cells, making their differential diagnosis complex, hence the need of always performing syphilis serology in such cases.
Conclusion In spite of STD generally being the first hypothesis in patients with genital lesions, many causes must be considered, especially when atypical lesions are present or there is poor response to therapeutic measures.
Disclosure No significant relationships.

Oral Presentations

O01 – DEVELOPMENT OF VACCINES FOR BACTERIAL STIS

Monday, July 15, 2019
10:45 AM – 12:15 PM

O01.1 GENETIC SIMILARITY OF GONOCOCCAL HOMOLOGS TO MENINGOCOCCAL OUTER MEMBRANE PROTEINS OF SEROGROUP B VACCINE

Henju Marjuki*, Nadav Topaz, Sandeep Joseph, Kim Gernert, Ellen Kersh, Antimicrobial Resistant Neisseria gonorrhoeae Working Group, Xin Wang. *Centers for Disease Control and Prevention, Atlanta, USA*

10.1136/sextrans-2019-sti.104

Background Human pathogens, *Neisseria gonorrhoeae* (Ng) and *N. meningitidis* (Nm), share high genome similarity. Retrospective analysis of surveillance data in New Zealand suggests cross-protection against Ng infections conferred by serogroup B meningococcal (MenB) outer membrane vesicle (OMV)-based vaccine. We explored the possible cross-protective mechanisms against gonorrhea conferred by the licensed multicomponent 4CMenB (Bexsero^{TM}) vaccine containing NZ98/254 OMVs.
Methods A dataset of 970 Ng genomes of isolates collected from the Gonococcal Isolate Surveillance Project sites across the United States was analyzed to identify common proteins present in both Ng and NmB, and assess the sequence diversity of vaccine antigens and OMV components between the two bacteria, and within the Ng strains. Bioinformatics tools were applied to predict the subcellular localization of each identified common protein.
Results We found 1525 common proteins shared by both Neisseria species, of which 59 were predicted as outer membrane proteins (OMPs). The 4CMenB vaccine antigen NhbA showed moderate sequence identity (73%) to the respective gonococcal homologs, and was highly conserved within Ng.