infant 1: frontal lobe, worm tracks medulla, inflammation cauda equina. Slow improvement over 5 months. Case 2: 8-month-old female: Admitted fever day 8. Weakness progressed to arms and trunk. Day 10 illness: CSF #2: Visible worms present, WBC 84, 26% eos. PCR positive for AC. Rx: High-dose steroids and albendazole x4 weeks. MRI spine illness day 30: inflammation cauda equina. Weakness improved by illness day 37. McfDNA sequencing of plasma detected AC in acute stage peaks of 123 and 12 molecules/microliter in cases 1 and 2. Serial mcfDNA testing showed a decline in the AC DNA level in plasma which correlated with treatment and clinical response.

Conclusions. AC infection may mimic GBS or transverse myelitis. AC diagnosis requires repeat CSF testing and predominance of lymphocytes, positive PCR in plasma holds promise as rapid, noninvasive diagnosis and assessment of response to therapy. High-dose steroids with albendazole may be effective even in severe AC.

Disclosures. All authors: No reported disclosures.

1410. Serious Cryptococcal Infections with Ruxolitinib Use: A Case of Meningitis and a Review of the Literature
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Session: 155. CNS Infections
Friday, October 4, 2019: 12:15 PM
Background. Ruxolitinib is an inhibitor of Janus kinase (JAK) 1 and 2 and is approved for the treatment of myelofibrosis and polycythemia vera. Infectious complications associated with its use include reactivation of herpes simplex, zoster, hepatitis B, and tuberculosis, mucormycosis, and progressive multifocal leukoencephalopathy.

Methods. Seven cases of ruxolitinib-associated cryptococcal infections have been reported: three cases of meningitis, two cases of pulmonary disease, and two cases of disseminated disease (Table 1).

Results. We present a 72-year-old male with a history of JAK-2 positive polycythemia vera with secondary myelofibrosis, and concurrent multiple myeloma who presented with 3 weeks of chronic cough and 3 days of fever with severe bifrontal headache remodeling a large birdcage in his backyard. The patient was on ruxolitinib, itaximab, and weekly dexamethasone. Cerebrospinal fluid (CSF) analysis showed an elevated open particle agglutination index were calculated: 40 subjects were recruited, 8 were HIV-negative and 32 HIV positive, 12.9% of subjects (12/90) had a positive CSF VDRL and 7/31 (22.6%) had a positive TPPA index, 7/31 HIV positive (22.6%) and 1/8 HIV-negative individuals (12.5%) had neurosyphilis (Table 2). Discordant results with the CSF VDRL were common; 4/31 (12.9%) with a positive CSF VDRL had a positive CSF FTAA, and a TPPA index >2.0 was defined as positive and definitive evidence of neurosyphilis. A TPPA Index >2.0 was defined as definitive evidence of neurosyphilis.

Conclusion. Our investigations demonstrate the value of CSF sampling in persons with any stage of syphilis and establish the utility of T. pallidum-specific antibody testing to greatly facilitate clinical decision-making. The diagnostic tools to evaluate the T. pallidum-specific immunological response of the CNS to syphilis are currently widely available, inexpensive, but woefully underutilized.

Disclosures. All authors: No reported disclosures.

1409. Next-Generation Sequencing-based Detection of Angiostrongylus cantonensis (AC) Using Microbial Cell-free DNA Sequencing of Plasma in Atypical Cases of Rat Lungworm Meningitis Presenting with Ascending Paralysis
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Background. AC or Rat Lungworm meningitis usually presents as a self-limited illness with headache and sensory changes, rarely progressing to coma, death, or peripheral motor dysfunction. The diagnosis is usually made by eosinophil and definitive evidence of neurosyphilis.

Methods. Subjects with suspected neurosyphilis were recruited from the infectious disease clinic after referral to LAC+USC Hospital. Informed consent was obtained and subjects underwent clinical examination, including a standardized neurological and neurocognitive evaluation and CSF sampling. A CSF-specific VDRL, FTAAbs, and a T. pallidum particle agglutination index were calculated.

Results. 40 subjects were recruited, 8 were HIV-negative and 32 HIV positive, of which, 1 declined to continue after CSF sampling (Table 1). Employing the CSF TPPA index, 73/111 HIV positive (22.6%) and 1/8 HIV-negative individuals (12.5%) had neurosyphilis (Table 2). Discordant results with the CSF VDRL were common; 4/31 subjects (12.9%) with a positive CSF VDRL had a TPPA Index < 0.227 (0.227, 0.315, and 0.400) and 4/31 subjects (12.9%) with a negative CSF VDRL had a positive TPPA index (2.234, 3.335, 3.797, and 4.548, Table 3). Neurocognitive and neurologic abnormalities were commonly encountered in this population both with and without documented neurosyphilis.

Conclusion. Our investigations demonstrate the value of CSF sampling in persons with any stage of syphilis and establish the utility of T. pallidum-specific antibody testing to greatly facilitate clinical decision-making. The diagnostic tools to evaluate the T. pallidum-specific immunological response of the CNS to syphilis are currently widely available, inexpensive, but woefully underutilized.

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