= 0.002). Overall, the median (IQR) duration of hospitalization was 23 (11–29) days. A total of 26 (29%) patients had a complication, such as septic shock, hydrocephalus, seizure, and brain edema. The mortality rate was 7.9%.

Conclusion. In this setting, the most common cause of acute meningitis in adults is cryptococcosis. In addition, tuberculosis is not uncommon. Awareness of update epidemiology may guide the physicians to initiate appropriate antimicrobial therapy.

Disclosures. **All authors:** No reported disclosures.

1404. The FilmArray Meningitis/Encephalitis (FA ME) May Be of Higher Yield in the Immunocompromised Patient Population

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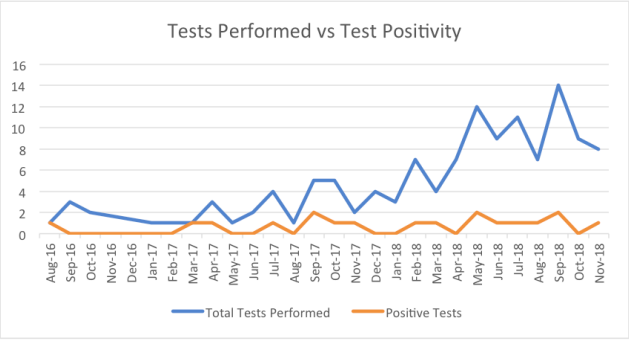
Background. The FilmArray® Meningitis/Encephalitis (FA ME) panel is a PCR-based assay that rapidly detects 14 pathogens directly from CSF specimens. After the introduction of this assay at our institution, there was a steady increase in requests for use; however, the positivity rate remained stable. We sought to understand the characteristics of the patients most likely to have a positive FA ME panel, with particular interest in the immune status of each patient.

Methods. A retrospective chart review was conducted on 124 patients with suspected infectious meningitis/encephalitis at a large academic tertiary referral center who received FA ME testing between October 2016 and November 2018. Patients were considered immunocompromised if they had received chemotherapy, were solid-organ transplant recipients, or were diagnosed with HIV, autoimmune diseases on immunosuppressants, uncontrolled diabetes, cirrhosis, or hematologic malignancy. Clinical CNS infection was determined using chart review based on culture, serologic, or molecular data.

Results. 60 (48%) patients were immunocompromised and 64 (52%) patients were immunocompetent. Clinical CNS infection occurred in ~25% of immunocompetent (17, 26%) and immunocompromised (17, 28%) patients. However, only 6 immunocompetent patients were found to have a positive FA ME; this accounts for only 35% of the total number of positive FA ME assays during this study period ($P = 0.08$). Notably, 4 out of 6 patients with cryptococcal meningitis had false-negative results on the FA ME.

Conclusion. In spite of the relatively small sample size, there was a trend toward significance in the accurate yield of the FA ME panel in the immunocompromised population compared with the immunocompetent. Our immunocompromised patients appear to be more likely to have an infection which is tested for on the panel. The rates of confirmed CNS infections in both populations were very similar, indicating that immunocompromised patients may benefit more from use of this assay. In our study, immunocompetent patients were more likely to have West Nile infection, for example, which is not on the panel. Additionally, had cryptococcal meningitis been accurately diagnosed by the FA ME, an even greater number of immunocompromised patients would have had a positive FA ME.



Disclosures. **All authors:** No reported disclosures.

1405. Infectious Causes of Chronic Meningitis in HIV-Negative Patients: A Case Series

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Background. Chronic meningitis can be defined as inflammation of the cerebrospinal fluid (CSF) with the presence of >5 white blood cells/mm^3 of CSF for 4 weeks. There is little literature available on defining the infectious causes or risk factors of chronic meningitis, and there are no studies that have looked at mortality in this group of patients. Our aim for this study was to evaluate the epidemiology, risk factors, and mortality of infectious causes of chronic meningitis within our healthcare system.

Methods. A total of 59 cases were identified through a systematic retrospective review from our electronic medical record database from 2004 to 2018 and were identified by having the presence of two consecutive lumbar punctures with a white blood cell count in CSF >5 WBC/mL^3 in a 4-week period, or by having 4 weeks of meningeal symptoms with one lumbar puncture with >5 WBC/mL^3. All cases were manually reviewed. We excluded patients with diagnosis of human immunodeficiency virus (HIV) infection. We included a review of comorbidities that could impair the immune system such as diabetes mellitus, alcohol use, chronic kidney disease (CKD) stage III or greater use of chemotherapy, immunotherapy, or chronic use of steroids and previous transplant recipients. The study was approved by the institutional review board

Results. 59 cases of chronic meningitis attributable to an infectious etiology were identified. The most common pathogens were *Borrelia burgdorferi* (37%), *Cryptococcus* sp. (27%), and *Candida* sp. (10%). Other etiologies which were less common included viral etiologies (13%). Finally, there were two cases secondary to *Streptococcus pneumonia*. Regarding the total number of patients with the comorbidities studied, 13 (22%) had diabetes, 12 (20%) had CKD, 12 (20%) were under some form of chemo/immunotherapy including chronic steroid use and 3 (5%) of patients were transplant recipients.

Conclusion. Our study identified common infectious pathogens causing chronic meningitis in a rural, HIV-negative population. Our findings indicate that cryptococcus should be considered even within HIV-negative individuals, and Lyme disease should be considered in all endemic areas. Mortality was significant among patient with cryptococcal meningitis, where patients with Lyme meningitis did very well.

Etiology	Number of cases (%)	Mortality at 1 year	Diabetes	Alcohol use	CKD	Chemo/Immuno therapy**	Transplant recipients
Cryptococcus sp	16 (27%)	7	3	2	3	7	2
Borrellia Burgdorferi (Lyme disease)	22 (37%)	0	4	6	0	0	0
Candida sp	6 (10%)	2	1	2	1	1	1
Herpes Simplex	3 (5%)	1	1	1	0	0	0
Varicella zoster	2 (3%)	1	1	0	1	1	0
Streptococcus pneumoniae	2 (3%)	0	1	1	0	1	0
Other cases	8 (13%)	4	2	3	1	2	0
Total	59	15 (25%)	13 (22%)	15(25%)	12 (20%)	12 (20%)	3 (5%)

*Includes one of the following: Treponema pallidum, Aspergillus sp, Creutzfeld Jacob disease (CJD), Pseudomonas aeruginosa, Enterovirus, West nile virus (WNV), Cytomegalovirus (CMV), Mycobacterium tuberculosis

** Includes chronic use of steroids

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1406. Steroid-Sparing Agents to Control Inflammation in Complicated Neurocysticercosis: Three Cases

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Background. Clinical manifestations of neurocysticercosis (NCC) are primarily due to the inflammatory response against degenerating cysts of the Taenia solium tapeworm. Inflammation can occur when cysts lose their ability to evade the host immune response during their natural life cycle or result from antihelminthic therapy. A subset can develop chronic perilesional edema requiring immunosuppressive therapy. Although guidelines recommend methotrexate (MTX) as an alternative to long-term steroids, limited information is available regarding when to start a steroid-sparing agent (SSA) and alternative SSAs in case of MTX failure or intolerance.

Methods. Retrospective chart review.

Results. Three patients with complicated NCC followed at a single tertiary care center are described in this study: Patient 1 with subarachnoid NCC (age 64, female), patient 2 with subarachnoid and intraventricular NCC (age 48, male) and patient 3 with parenchymal NCC (age 43, male). Patients 1–3 were followed clinically and radiographically for 8, 1.5 and 3 years, respectively. Patient 1 was treated with antihelminthic therapy and steroids for 24 months. She was transitioned to MTX for 1 month, but developed ulcerative stomatitis, leukopenia and transaminitis. She completed a treatment course of steroids, complicated by osteoporosis. Patient 2 was treated with 12 months of antihelminthic therapy and steroids with resolution of a previously positive cysticercal antigen in spinal fluid. Imaging revealed persistent inflammation in spite of adequate antihelminthic therapy. He was started on MTX and has remained on this medication for 5 months. Patient 3 was treated with two courses of antihelminthic therapy. He developed perilesional edema despite treatment with steroids and MTX uptitrated to 20 mg weekly. Adalimumab was added to his regimen and he had a rapid radiographic resolution of edema and clinical improvement in seizures. His seizures returned during an interruption in his adalimumab treatment and again resolved with re-initiation of this medication.