FilArray Meningitis/Encephalitis Panel, a multiplex PCR meningitis/encephalitis panel (MEP) (bioMérieux, Marcy l’Étoile, France) requires only 200 μL of cerebral spinal fluid (CSF) and takes less than 1 hour to simultaneously detect 14 pathogens. The objective of the study was to evaluate the outcome of MEP at our medical center.

Methods. Retrospective review of 433 patients with an MEP performed from April 2017 to March 2018. Demographics characteristics, signs and symptoms, immune status, laboratory and radiology results and antibiotic use were collected.

Results. Twenty-nine unique patients with positive CSF samples (Table 1). The mean age was 41 years old with 55% female predominance. The most common presentations were headache (65%) and fever (38%). Patients with H. influenzae B and group B Streptococcus had positive blood culture (CX) but negative CSF CX. Both the CSF and the blood CX were negative for the patient with L. monocytogenes. MEP identified six Cryptococcus sp. with concurrent positive CSF CX and Cryptococcus antigen. However, three patients were positive on CSF but MEP was negative. Only one of six patients with HHV-6 received treatment.

Table 1. Pathogen Identified With FilArray MEP Panel

| Pathogen Detected | Positive MEP | # of Patients |
|-------------------|--------------|--------------|
| Human herpes virus-6 (HHV-6)* | 6 | 1 |
| Cryptococcus gattii/neoforans* | 5 | 1 |
| Enterovirus | 4 | 1 |
| Human simplex virus (HSV)-2 | 3 | 1 |
| Varicella zoster | 2 | 1 |
| HSV-1 | 1 | 1 |
| Streptococcus agalactiae | 1 | 1 |
| Haemophilus influenzae | 1 | 1 |
| Escherichia coli | 1 | 1 |
| Listeria monocytogenes | 1 | 1 |
| Streptococcus pneumoniae | 0 | 1 |
| Human parechovirus | 0 | 1 |
| Neisseria meningitidis | 0 | 1 |

*One patient with Cryptococcus and HHV-6 co-infection

Conclusions. The FilArray MEP can rapidly diagnose ME infections, help to target therapy and allow for discontinuation of unnecessary empiric agents. Followed by emergency department, 313 delays (95% CI 252–354), and inpatient settings, 1,355 (95% CI 1,195–1,490) visits represented likely diagnostic delays with around 20% mortality (see figure). Prior to the index diagnosis we identified 2,459 visits, from 938 patients, 1,871 (95% CI 1,749–1,972) representing diagnostic delays.

Disclosures. All authors: No reported disclosures.

336. Characteristics of Acute Bacterial Meningitis and Predictors of Mortality Sireethorn Nimittivak, MD1 and Janya Surapak, BD1; 1Internal Medicine, Nakhonpathom Hospital, Nakhonpathom, Thailand, 2Microbiology, Nakhonpathom Hospital, Nakhonpathom, Thailand

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Background. Acute bacterial meningitis is a medical emergency associated with morbidity and mortality. The aim of the study was to describe clinical features, causative organisms and predictors of death among patients presented with community-acquired acute bacterial meningitis.

Methods. This retrospective study was conducted at Nakhonpathom Hospital, a 700-bed tertiary care hospital in Thailand during July 2013 and August 2017. The data on demographics, clinical presentation, and outcome were collected. Factors associated with death were analysed.

Results. During study period, there were 55 patients. Median age was 45 (range 19 to 89) years and 38 (69%) were male. Male duration of symptom before hospitalization were 2 (range 1 to 6) days. The most common presenting symptoms were fever (98%), headache (94%), and decreased level of consciousness (75%). The classic triad of fever, headache, and neck stiffness was documented in 53%. Computed tomography scan of brain was abnormal among 57% of 35 patients. Bacteria was isolated in CSF or blood in 40 patients (73%). The most common isolates were S. agalactiae (17 cases), S. pneumoniae (4 cases) and Streptococcus group D (4 cases). All isolates of S. agalactiae and S. pneumoniae were penicillin sensitive. The in-hospital mortality was 20%. Factors associated with death were age more than 65 years (44% vs. 13%, P = 0.047), low CSF WBC (178 vs. 439 cells/μL, P = 0.009), and the presence of hydrocephalus on imaging (67% vs. 9%, P = 0.047). The time interval between patients’ presentation and appropriate antibiotics administration differed significantly for patients who survive and die (22 vs. 0.5 hour, P = 0.016).

Conclusion. Acute bacterial meningitis remains associated with mortality. Age, CSF WBC, hydrocephalus, and delay antibiotics therapy was associated with outcome.

Disclosures. All authors: No reported disclosures.

337. The Use of Adjunctive Steroids in 438 Adults With Herpes Simplex Virus Encephalitis Hakan Erdem, MD1; Yasemin Cag, MD3; Derya Ozturk-Engin, Associate Professor; Silvane Defres, MD1; Selcuk Kaya, Associate Professor1; Lykke Larsen, MD1; Mario Poljak, MD1; Bruno Barsic, MD2; Xavier Argemi, MD, Signe Maj Sorensen, MD3; Anne Lubelh Boehr, MD1; Pierre Tattevin, MD, PHD2; Jesper Damgaard Guntz, MD1; Lienka Baitakov1, MD1; Matija Jerch, MS2; Rodrigo Hashun, MD, MPH4 and Infectious Diseases International Research Initiative Group1; Prof, Gulhane Medical, Ankara, Turkey, 2Istanbul Medeniyet University, Faculty of Medicine, Istanbul, Turkey, 3Haydarpasa Numune Education and Research Hospital, Istanbul, Turkey, 4Institute of Infection and Global Health, University of Liverpool, Liverpool, United Kingdom, 5Department of Infectious Diseases and Clinical Microbiology, Karadeniz Technical University, Medical Faculty, Trabzon, Turkey, 6Odense University Hospital, Department of Infectious Diseases Q, Odense, Denmark, 7onder, Department of Microbiology and Immunology, Faculty of Medicine, University of Ljubljana, Ljubljana, Slovenia, 8Department of Infectious Diseases and Hospital for Infectious Diseases, Department of Infectious Diseases, University of Zagrbe School of Medicine, Croatia, 9Zagreb, Croatia, 10Novel Hôpital Civil, Department of Infectious Diseases, Strasbourg, France, 11Aalborg University Hospital, Department of Infectious Diseases, Aalborg, Denmark, 12Copenhagen University Hospital, Institute of Inflammation Research, Department of Infectious Diseases and Rheumatology, Rigshospitalet, Copenhagen, Denmark, 13Infectious Diseases and
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Background.
Herpes simplex virus (HSV) encephalitis is associated with adverse clinical outcomes in 50% of patients. The use and impact of adjunctive steroids in improving the prognosis of this devastating disease is unknown.

Methods.
A multicenter international retrospective study of adults (age ≥15 years) with HSV encephalitis. An adverse clinical outcome was defined as death or survived with sequelae.

Results.
A total of 438 adults with HSV encephalitis were enrolled. The mean age was 50.58 years (15.94, SD), 226 (51.6%) were female and 59 (13.5%) were immunosuppressed. New onset seizures were seen in 91 (20.8%) patients and the median Glasgow coma scale was 14 (13–15, IQR). A total of 73 (16.6%) patients received adjunctive steroids during their hospitalization. Adjunctive steroids were given more frequently to patients with fever (84.5% vs. 66.7%, P = 0.003), seizures (38.3% vs. 17.3%, P < 0.001), abnormalities on MRI (77.6% vs. 61.8%, P = 0.017), lower mean Glasgow coma scale (10.42 vs. 11.3, P = 0.013) and it was also associated with a longer length of stay (median duration of 23 days vs. 20 days, P = 0.012). Adjunctive steroids were not associated with an impact on adverse clinical outcomes (46.6% vs. 46.9%, P = 0.95).

Conclusion.
Adjunctive steroids in HSV encephalitis are used more commonly in the sickest patients and are not associated with a benefit in clinical outcomes.

Disclosures.
All authors: No reported disclosures.

338. The Use of Multiplex PCR Panel in the Diagnosis of Meningitis in Children

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Background.
Cerebrospinal fluid (CSF) culture remains the gold standard for the diagnosis of bacterial meningitis, with viral PCR considered when clinically indicated. These tests can take 48–72 hours to result, during which patients receive empiric antimicrobial therapy and remain hospitalized. BioFire FilmArray™ Meningitis/Encephalitis panel corresponds to the MEP positive for bacterial and viral pathogens. Its impact on clinical management has not been well evaluated. Our aim was to describe the experience using the ME panel since its implementation at an urban tertiary care center.

Methods.
We conducted a retrospective chart review of all patients aged ≥21 who had CSF samples analyzed by the ME panel from January 1 to July 31, 2017. We abstracted demographic, clinical, laboratory, and imaging data to assess ME panel results and their influence on clinical management.

Results.
We reviewed the charts of 93 patients aged 21 to 85 who had the ME panel performed. Forty-nine (53%) were males and eight (9%) were immunosuppressed. Eight (9%) had a positive ME panel. Four patients had a positive result for a viral target only, while two had a positive result for a bacterial target only. Three patients had a positive result for both a viral and a bacterial target. Two patients had a positive result for the H. influenzae. Of the 49 ME panel tests with positive results, four patients had a positive result for a bacterial pathogen and five patients had a positive result for a viral pathogen. All patients were treated according to the results. Four of the five patients with positive results had received broad-spectrum antibiotics prior to lumbar puncture. In all five, antibiotics were modified (either started or de-escalated) based on the pathogen identified on the ME panel. All four patients with a positive result for a viral target received anti-viral therapy in one case this was started empirically, while in the remaining three treatment was started only after the ME panel had resulted. Antibiotic management in the 85 patients with a negative ME panel varied widely based on clinical suspicion and other laboratory data. Three (3%) of the 93 patients had positive cultures for pathogens that are not ME panel targets (S. aureus and S. hominis).

Conclusion.
The ME panel yielded positive results in cases where conventional tests did not, including when antibiotics had been initiated prior to CSF sampling. While a positive ME panel prompted changes in therapy, negative results, in the majority of cases, did not supersede clinical suspicion.

Disclosures.
N. Miller, BioFire Diagnostics: Paid speaker, single day event (1 time only): 4/6/2017, BioFire Diagnostics, Syndromic Testing Symposium, Burlington, MA, Speaker honorarium.

341. Characteristics, Risk Factors, and Outcomes of Encephalitis in Older Adults

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Background.
Encephalitis is a serious medical condition with adverse clinical outcomes seen in 50% of individuals. Older adults have higher rates of adverse outcomes in community-acquired meningitis but studies in encephalitis are lacking.