1012. Hearing Loss in Cryptococcal Meningitis Survivors

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Background. Hearing loss is a known complication of cryptococcal meningitis (CM); however, there is a paucity of data. We aimed to describe hearing loss in CM survivors.

Methods. We assessed hearing via audiometry 8 and 18 weeks after diagnosis of CM in 2015-2016. We measured at 0.5, 1, 2, 4, and 8 kHz. Normal hearing was defined as minimum hearing level at <25 decibels (dB), mild at 25-39 dB, moderate at 40-69, severe at 70-89, and profound hearing loss at 90+ dB. We compared clinical factors, fungal burden, and CSF parameters to evaluate for factors associated with improvement (change in hearing loss category).

Results. We evaluated hearing symptoms via audiogram at week 8 (n = 117) and week 18 (n = 98). At 8-weeks, 6% (5/83) participants had normal hearing, 36% (31/83) had mild hearing loss, 72% (26/83) had moderate hearing loss, 3% (3/83) had severe hearing loss and none had profound hearing loss. Of those with hearing loss, 63% (54/83) had mixed conductive + sensorineural hearing loss, 15% (13/83) had sensorineural hearing loss, and 14% (12/83) had conductive hearing loss. An additional 19% (16/83) had sensorineural loss but unknown air conduction, and 3% (3/83) did not have sensorineural loss but unknown bone conduction. We compared risk factors for hearing loss summarized in Table 1. We assessed 66 participants who had repeated audiograms at week 8 and week 18. Of those 31 (47%) had no change, 30% (16/54) had improvement, and 5% (4/83) had worsening.

Conclusion. Moderate/severe hearing loss was common 8 weeks after diagnosis of CM. Mixed hearing loss and 20% had conductive hearing loss which represents a higher incidence than noted in other types of meningitis. The data is complicated by advanced HIV. Further research is needed evaluating immunologic factors causes hearing impairment in those who survived CM.

Disclosures. No authors: No reported disclosures.

1013. Infectious Causes and Infectious Mimics of Acute Encephalitis: a Prospective Study from Thailand

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Background. Previous reports of infectious encephalitis in Thailand showed viruses as major pathogens similar to worldwide data. Major viruses in studies varied among Japanese encephalitis, Enteroviruses and Herpesviruses. Infectious etiologies vary by regions, seasons and preventive strategies done. Dynamic change of pathogen is believed to occur continually. Local data in each region is important to develop an algorithm of investigations for the cost-effectiveness.

Methods. This is a prospective study of patients with encephalitis between January 2014 to March 2017 at a tertiary hospital in Bangkok. Microbiological and serological studies were done according to an algorithm based on initial cerebrospinal fluid analysis. Initial tests were for bacteria, fungus, mycobacterium and commonly prevalent viruses. Further tests for infectious etiology were done by stepwise approach if initial tests yielded negative.

Results. Fifty-two patients were enrolled. Twenty-seven (51.9%) patients had no etiology identified. Three patients (5.8%) had bacterial etiology, 10 (19.2%) had viral etiology, and 23% had immune-mediated encephalitis. Among viral etiologies, VZV was identified in 4 cases, HSV in 3 cases, CMV in 2 cases and measles in 1 case. Baseline characteristic of HIV infection or skin rash was associated with viral infection (p = 0.031, p = 0.006). Patients with VZV encephalitis might not have active skin lesion. The presence of prorome, duration of prorome, neurological onset to peak and physical examination of focal neurologic, mental irritation signs, and reflex were similar across all etiologies. White blood cell [mean 7.0 (range 0–30) cells/µL] and protein [mean 32.5 (range 11–70.4) mg/dL] from the cerebrospinal fluid of noninfectious etiologies tended to be lower than the levels of infectious causes (p = 0.009, p = 0.020). All patients survived at 7 days after admission.

Conclusion. A quarter of patients presenting with acute encephalitis in this study had autoimmune and paraneoplastic encephalitis. Infections caused by herpesviruses was the most prevalent viral etiology. Autoimmune and paraneoplastic encephalitis should be kept in the differential diagnosis in patients with acute encephalitis.

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1014. Long-term Outcomes of Acute Aseptic Encephalitis In Adults - a Single Center Study

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Background. Encephalitis is a heterogeneous syndrome associated with significant mortality and neurophysiological sequelae. The etiology is identified in only 20–50% of cases, and long-term outcomes of survivors are underinvestigated, especially in patients with unknown etiology. The aim of this study was to describe long-term outcomes of patients with aseptic encephalitis of various etiologies.

Methods. The study population consisted of a retrospectively identified cohort of consecutive adult patients diagnosed with viral and etiologically undiagnosed encephalitis during a 24-month period (2014–2015) at the University Hospital for Infectious Diseases Zagreb, Croatia. Clinical, laboratory data and short-term outcomes were