Session #49: HIV-Associated Infections and Malignancies Thursday, October 18<sup>th</sup> 2012: 12:30 p.m. – 2:00 p.m.

## #273. Outcomes of cryptococcal meningitis in HIV-infected patients at Chiang Mai University Hospital, Thailand

Part of Session: 49. HIV-Associated Infections and Malignancies

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**Background:** Cryptococcal meningitis is one of the most common subacute central nervous system infections in HIV-infected patients. The mortality rate in these patients from previous reports was still high and the data from Thailand are limited. This study aimed to determine all-cause mortality in HIV-infected patients who had cryptococcal meningitis. The secondary objectives were to determine the possible risk factors related to death and immune reconstitution inflammatory syndrome (IRIS).

**Methods:** A retrospective cohort study was conducted among HIV-patients who diagnosed with cryptococcal meningitis receiving care at Chiang Mai University Hospital from January 1, 2005 to December 31, 2010.

**Results:** Seventy-nine patients met the inclusion criteria; 45 patients were male (57%) and the mean age was  $35.1\pm7.2$  years. Eleven patients had previous opportunistic infections. The most common presenting symptom was headache (63 patients, 79.8%). Median duration of symptoms before seeking medical care was 5 days (IQR 3, 10). Thirty-one patients (39.2%) had concurrent extracranial infections. Median CD4 cell count at the time of cryptococcal meningitis diagnosis was 20 cells/mm3 (IQR 10, 53). Twenty nine patients (36.7%) received combination antiretroviral therapy (cART). Median duration from initiating treatment of cryptococcal meningitis to cART initiation was 48 days (IQR 23, 87). The overall mortality was 50% (37/74 patients). The risk factors of death were older age at cryptococcal meningitis diagnosis (OR 2.36, 95% CI 1.15, 4.88), altered mental status at presentation (OR=7.44, 95% CI 1.82, 30.44) and lower CSF protein level (OR 0.91, 95% CI 0.84, 0.98). IRIS occurred in 4 patients (16.7%). Risk factor of IRIS was undetermined due to small number of events. **Conclusion:** Mortality of cryptococcal meningitis in HIV-infected patients was high regardless of cART era. Patients had low CD4 cell counts when cryptococcal meningitis was diagnosed. Early HIV detection to prompt initiate cART may prevent immune deteriorate, and hence prevent diseases. Appropriate time to initiate cART to reduce the incidence of IRIS remains undetermined.