

## Actualités du Pharo 2022 – Session 6

### **Competitive risk of mortality on anti-tuberculosis treatment among patients hospitalised for neuro-meningeal tuberculosis in the Infectious Diseases Department of the University Hospital of Brazzaville, Republic of Congo**

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**Martin Herbas EKAT**

[ekatmartinherbas@yahoo.fr](mailto:ekatmartinherbas@yahoo.fr)



**Objective:** The diagnosis of neuro-meningeal tuberculosis remains difficult in countries with limited technical facilities. Mortality is high between admission to the care unit and the decision to start anti-tuberculosis treatment. To determine the rate of initiation of anti-tuberculosis treatment in patients hospitalised for neuro-meningeal tuberculosis (NMT) in the Infectious Diseases Department of the University Hospital of Brazzaville, Republic of Congo.

**Patients and Methods:** This was a retrospective cohort study. Records of patients (aged 20 years and older) hospitalised for TNM in the Infectious Diseases Department of the University Hospital of Brazzaville from March 2014 to March 2019 were collected. In accordance with the diagnostic schemes established by the British Infection Society, the diagnosis of TNM was retained on the basis of epidemiological, clinical, biological and morphological arguments. Any lymphocytic meningitis associated with the detection of BK in any biological fluid other than CSF and/or associated with pulmonary radiological abnormalities was considered TNM. The primary outcome was initiation of TB treatment, and death before initiation of TB treatment was considered a secondary outcome. Factors associated with initiation of TB treatment were identified with the competitive risk model.

**Results:** A total of 48 patients were included, 66.67% of whom were female, median age 42 years (Interquartile range (IQR): 34.5 - 51.5). 20.8% had a history of tuberculosis and 85.11% of patients were HIV positive. After a median hospital stay of 5 days (IQR: 2.5 - 9), 41 (85.42%) of the 48 patients had been started on treatment for a participation time of 291 person-years, and the incidence of treatment initiation was 14.09 per 100 person-years (10.37 - 19.14). During hospitalisation 14.58% of patients died before being started on TB treatment. Adjustment for the competitive event (death) independently increased the incidence of initiation of TB treatment in patients with GCS score between 5 and 7 (aSHR: 4.51 (95% CI: 2.11 - 9.64),  $p < 0.001$ ).

**Conclusion:** In resource-limited countries, the presence of a stage 3 coma allows treatment to be initiated in patients with suspected neuromeningeal TB and further investigation.