

Neonatal seizures in the pediatric teaching hospital in Bangui: epidemiology, etiologies and outcome

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Objective. The highest incidence of seizures is noted in the neonatal period. It affects 1.5-3.5 per 1000 live births. The etiologies are diverse and it constitutes the most frequent marker of cerebral injury.

To describe the profile of neonatal seizures managed in a hospital setting in a low income country.

Materials and Methods. A single-center, cross-sectional, descriptive study was conducted over a 6-month period (January to June 2022). Newborns with seizures upon admission or during hospitalization were included.

Results. Out of 770 newborns admitted, 100 presented seizures; a hospital frequency of 12.98%. The sex ratio was 1.5 and the mean age was 3.2 days. Among the mothers, those under 25 years represented 59% and 54% were primiparous. Antenatal

cares were poorly attended in 70% of cases. In 29% of cases, no antenatal care was performed. The mothers lived in rural areas in 13% of cases. Fifty-nine percent of newborns were sent from a hospital. Twenty-nine percent of transfers were medicalized. Forty-five percent of seizures were observed upon admission and 55% occurred in the ward. Tonic seizures were observed in 45% of cases. Status epilepticus were observed in 47% of cases. The main etiologies were: hypoxic-ischemic encephalopathy (44%), neonatal infection (20%) and sepsis (16%). Death was noted in 28% of which 71.42% (n = 28) after 24 hours.

Conclusions. Neonatal seizures are common at CHUPB. Asphyxia and neonatal infection are at the origin. Reducing the frequency of seizures requires strengthening antenatal care and monitoring delivery.