

## FP90

**Presentation, pathology, and treatment outcome of brain tumors in 172 consecutive children at CURE Children's Hospital of Uganda. The predominance of the visible diagnosis and the uncertainties of epidemiology in sub-Saharan Africa**

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**Introduction:** This study reviews the first operative series of pediatric brain tumors from Uganda, the largest series from Sub-Saharan Africa, and explores the challenges to progress in pediatric neuro-oncology in the region.

**Methods:** This is a retrospective operative series of brain tumors in 172 children at Cure Children's Hospital of Uganda over 10 years. Demographics, clinical presentation, lesion location, histopathology, operative management, and outcome were investigated. Survival was assessed using Kaplan-Meier method.

**Results:** There were 103 males (59.9 %) and 69 females (40.1 %; mean age at diagnosis 6.5 years with 29 % < 2 years). The most common histologic types were pilocytic astrocytoma (23.2 %), ependymoma (16.3 %), craniopharyngioma (9.9 %), choroid plexus papilloma (9.3 %), and medulloblastoma (8.1 %). Supratentorial tumors (62.2 %) were more common. Symptomatic hydrocephalus predominated at presentation (66.9 %). 71 Patients (41.3 %) showed at presentation macrocephaly or a visible mass. Estimated 5-year survival was 60 %.

**Conclusions:** The majority of pediatric brain tumors in the region likely go unrecognized. Most that do come to attention have a "visible diagnosis." Unlike operative series from developed countries, information about the incidence, prevalence, and overall burden of disease for different tumor types cannot be deduced from the various operative series reported from limited resource countries because of the selection bias that is unique to this context. Delayed presentation and poor access to adjuvant therapies were important contributors to the high mortality. The epidemiology of pediatric brain tumors in sub-Saharan Africa is obscure.