Hidrocefalia

(1102) - INFANT HYDROCEPHALUS IN SUB-SAHARAN AFRICA: THE REALITY ON THE TANZANIAN SIDE OF THE LAKE.

Maria M. Santos[1]; Derick K. Rubagumya[2]; Soledad Colombe[3]; Roger Hartl[4]

1 - Hospital de Santa Maria, Servico de Neurocirurgia; 2 - Catholic University for Health and Allied Sciences; 3 - Weill Cornell Medical College, Center for Global Health; 4 - Weill Cornell Medical College, Department of Neurological Surgery

Infant hydrocephalus affects more than 100,000 new infants per year in sub-Saharan Africa (SSA). Bugando Medical Centre (BMC), a government funded and patient cost-shared referral center, serves over 13 million people in Tanzania. The goals of this study were to characterize the infant population affected by hydrocephalus who were presented to BMC and treated with a ventriculo-peritoneal shunt (VPS), to determine the early complication rate of this surgical procedure and to assess its potential risk factors.

Data was prospectively collected from every patient aged less than 1 year old who were diagnosed with hydrocephalus and admitted to BMC for primary VPS, over a period of 7 months.

125 infants were included for analysis. 75% were younger than 6 months of age, and 56% were males. Only 7% mothers had a gestational ultra-sound. Congenital hydrocephalus accounted for the majority (56%) of the hydrocephalus etiologies. The mean head circumference on admission was 51.4 cm +/- 6.3 cm. Over a 1/3 of patients were operated without a radiologic exam. Overall, at least one surgical complication was found in 33.6% of patients up to the first follow-up assessment (median follow-up time of 70 days); VPS infection was the most common complication. The post-operative mortality was 9%. The risk factors associated with early surgical complications were tumor-related etiology, larger head circumference and longer post-operative hospital stays.

This study shows that the positive results previously reported by SSA mission hospitals, sub-specialized in pediatric neurosurgery, are still not generalizable to every hospital in East Africa.

Palavras-chave : infant hydrocephalus; sub-Saharan Africa; ventriculo-peritoneal shunt; Tanzania.