

Epidemiology/Genetics Abstracts

Title: TREATMENT AND FOLLOW UP OF CHILDREN WITH NEURAL TUBE DEFECTS IN NORTHERN TANZANIA

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Background: Incidence of neural tube defects remains high in developing countries due to low socioeconomic circumstances, lack of antenatal diagnosis and primary prevention. Surgical treatment improved in the last 10 years but lifelong care and follow up remain challenging. This presentation describes adaptation of follow up to limited resources in a referral hospital in Northern Tanzania.

Method: Data of a cohort of patients with Neural Tube defects were collected over 10 years. Seasonal, geographical, tribal distribution and clinical features as well as outcome of surgery, development and continence management are described.

Results: 342 patients with Neural Tube defects were registered. Seasonal clustering occurred during April/May and September to November. Overall mortality was 24.9%. 20.5% had a VP Shunt and mortality of this subgroup (32.9%) was approximately double the mortality of non-shunted children after Cele closure.

While most children had ventricular dilatation during neonatal period, the increase of head circumference slowed down and signs of raised pressure subsided in many within the first 3-5 months. Good cognitive outcome was observed in 41.4% of shunted children compared to 84.1% without VP Shunt.

Simple cystometry with pressure measurement at leakpoint, volume charting and renal ultrasound identified a hyperactive bladder needing intravesical Oxybutinine.

Bowel management with enemas and digital evacuation was sufficient in young children. Bowel washout was taught to older patients. Education during parent meetings was essential for compliance. Pressure sores treated with honey, vinegar and salt water washing rarely required surgical intervention.

Conclusion: VP Shunting is associated with high mortality and poor cognitive outcome in our setting and can be avoided in a good number of patients. A good quality of life can be achieved in a resource limited environment.