

**Neurosurgery Abstracts**

**Title:** CORRELATION OF SURGICAL HISTORY AND QUALITY OF LIFE OUTCOMES FOR CHILDREN WITH OPEN SPINA BIFIDA

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**Background:** Intro-The prevalence of myelomeningoceles (MMC) has decreased with folate supplementation to a national level of .34 per 1000. Coordinated management in multi-disciplinary clinics allows children with MMC to achieve better outcomes. We undertook this study to ascertain current outcomes and quality of life (QOL) particularly with relation to surgical history.

**Method:** After IRB approval and phone consent the Hydrocephalus Outcome Questionnaire was administered and medical records reviewed. Statistical analyses were performed using SPSS with p below .5 considered significant

**Results:** The 55 study patients did not differ from non-study MMC clinic patients. Mean age was 14 years (range 1.33-46) and 21 were male. Most (85%) had a shunt and 2 subsequently had a ETV. No shunt revisions were required in 32% and 1-3 revisions occurred in 82% of the remaining patients. De-tethering was performed in 11% and hindbrain decompression in 20%. Among children over 3 years 41% use a wheelchair. Almost half over 7 had urinary diversion procedures (45%) and 24% also had stool diversion surgery. Almost half (43%) required special education for cognition but only 18% were not at expected grade level. Physical and overall scores were significantly worse for patients with thoracic MMC. History of shunt revision but not shunt presence lowered the physical score.

**Conclusion:** The HOQ is valid for MMC patients and current outcomes appear improved compared with the literature.