

OP35

A retrospective analysis of outcome after epilepsy surgery in a regional paediatric neuroscience centre

Dmitri Shastin, Suresh Chandrasekaran, G. Sivakumar, C. Ferrie, M. Morrall, V. Gayatri, D. Warren, M. Ray, Paul Chumas

Leeds General Infirmary, United Kingdom

Introduction: In England approximately 110 children undergo epilepsy surgery per annum and approximately half of all these procedures were undertaken in one centre. It is estimated that three to four times this number of children would benefit from epilepsy surgery. To bridge this gap, children's epilepsy surgery has recently been commissioned nationally in four centres. However, the work-up for epilepsy surgery is time consuming and the risk is that further travel will limit, not expand the number of patients receiving the service. Here we review our results.

Methods: We retrospectively analysed paediatric patients referred to our service who were offered resective surgery for intractable epilepsy between 2002-2013. Data was obtained from the Epilepsy Surgery database. We looked at diagnosis, type of surgery, age at operation, follow-up period, outcome, morbidity and mortality. Outcomes were based on follow-up entries in the medical notes and stratified according to the Engel classification system.

Results: A total of 45 cases fulfilled selection criteria. Neoplasms were the most prevalent (14), followed by mesial temporal sclerosis (11), cortical dysplasia (6), hemimegaencephaly (4), cavernoma (3), and other (7). The most common operation was lesionectomy (26), followed by temporal lobectomy (14), and functional hemispherectomy (5). Median age at operation was 12 years (range: 6 months to 17 years). The distribution of outcomes was Engel I: 31, Engel II: 6, Engel III: 2, Engel IV: 6. Complications included visual field defect (4), re-operation (3), wound infection (1), mortality (0).

Conclusion: We demonstrate good outcomes of paediatric epilepsy surgery based on the Engel classification system even though we are a small epilepsy surgery centre. This raises questions on the need for patients to travel further for surgery - unless it can be proven that they would obtain a better outcome.