

Poster presentation

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Utilization of medical care among children with spina bifida

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Background

Children with spina bifida are at risk for developing multiple medical problems that often lead to hospital care. During 2003 we performed a retrospective study including all children with spina bifida, born between 1984 and 1991, and living in Uppsala county. The aim of the present study was to investigate the occurrence and nature of all events of hospital care during the study period. We also analyzed risk factors associated with a high utilization of medical care.

Materials and methods

The study population consisted of 15 children (6 girls and 9 boys) with a median age of 16.8 (14.0 – 18.9) years. Five children were ambulant and 10 were non-ambulant. Fourteen children had hydrocephalus and 11 of these had a shunt inserted. All except one child had some degree of impaired urinary bladder function. Two children had mental retardation. For all patients medical records were reviewed from all inpatient departments at University Hospital, Uppsala. Data were also collected regarding perinatal problems and other medical and functional problems.

Results

During the study period the children with spina bifida had been hospitalized for a mean number of 200 (43–491) days. The most frequent causes for admission were neurosurgical, urological and orthopedic. High number of days in hospital was associated with non-ambulation, complication affecting the shunt, high-pressure urinary bladder and scoliosis, but not with increasing age of the child. For the group of children the mean number of operations was 14 (2–32). The most frequent cause for operation was neurosurgical, including one or more shunt revisions (11 children), decompression operation (4 chil-

dren) and release of a tethered cord (3 children). Analysis of perinatal riskfactors showed that both high medical consumption (more than 300 days) and a high number of operations (15 operations or more), were strongly associated with complicated primary closure of the cele.

Conclusion

Although the health of children with spina bifida has steadily improved, many continue to have frequent and severe complications, requiring hospitalization and also often operation. Complicated primary closure of the cele might be a risk factor for a later high utilization of medical care.