EFFECTIVENESS OF CALLOSOTOMY IN DRUG-RESISTANT EPILEPSY IN CHILDREN – PERSONAL EXPERIENCES

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Summary
Aim. We present distal results of callosotomy in the treatment of drug-resistant epilepsy in children treated at the Department Of Neurosurgery of the Child's Health Centre Memorial Hospital in Warsaw.

Material and method. We have performed callosotomy in 30 children (mean age 9.1 years) with catastrophic forms of epilepsy and generalised seizures occurring up to several dozen a day. Mean duration of disease was 7.4 years. The study was performed by the method of retrospective analysis of medical documentation.

Results. Within a mean follow-up time of 40 months, the following results were obtained (according to the ILAE classification): class I – 10%, class II – 16.6%, class III – 33.3%, class IV – 26.6%, class V – 13.3% and class VI – 0%. There were no cases of permanent new deficits, exacerbation of epilepsy or death attributable to surgery.

Conclusions. (1) Callosotomy resulted in a significant decrease in frequency and severity of seizures in over a half of the treated patients with severe, drug-resistant generalised epilepsy. (2) Complete callosotomy was no more effective than anterior callosotomy; extension of callosal transection did not significantly improve the treatment outcome. (3) Perinatal trauma and structural brain pathology visible in imaging studies were risk factors predicting worse outcome. (4) Callosotomy may induce a change in the pattern of seizures, disclosing well-defined epileptogenic focus, which may require additional resection.

Key words: Callosotomy – Drug-resistant epilepsy – Children

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