

Summary

The study presents analysis of group of 110 patients treated for craniocerebral trauma by means of decompressive craniotomy between January 1999 and December 2003. The influence of different factors to the outcome of patient one year after injury was evaluated. Among the factors in view we included age, clinical status and its worsenig after admission, accompanying injuries, time period between injury and operation, finding during operation, intracranial pressure and postoperative complications. In addition to evaluation of particular factors to the outcome of patients we followed the correlation between various factors.

Results: perimesencephalic cisterns and thickness of subdural hematoma were evaluated. In the subgroup of patients with subdural hematoma (n=63) it was found, that worsening of the outcome correlated with the thickness of subdural hematoma ($p = 0.,025$) and with the shift in the CT ($p = 0.0001$). Correlation between shift or width of cinsterns to the outcome of all patinets (n = 110) was not found.

The perioperative measurement of dural gap before the duroplasty is the speciality of this work. In all patients (n = 110) the correlation between dural gap and the outcome was not found. In older patients the dural gap was lesser ($p = 0.021$). But in older patients the subdural hematoma was thicker and the shift in the CT bigger. This correlation we can interpret so, that bigger subdural hematoma was evacuated in older people and that the atrophic old brain has lower inclination to edema. The dural gap was significantly bigger in patinets with closed cisterns in the CT ($p < 0.0001$). It was a strong correlation between the dural gap and the outcome in the soubgroup of patients with closed cisterns on CT ($p = 0.0021$).

Conclusion:

Decompressive craniotomy should be indicated early – more likely as pervention of secondary brain injury. Criteria for indication are still discussed. Our results indicate, that active approach of the neurosurgeon and the early indication of decompressive craniotomy are helpfull for younger patients.