



DOI: 10.1515/afmnai-2017-0028

Original article

Surgical Outcome in Patients with Spontaneous Supratentorial Intracerebral Hemorrhage

Vladimir Rendeovski^{1,2}, Dragan Stojanov^{3,4}, Boris Aleksovski⁵, Ana Mihajlovska Rendevska⁶, Aleksandar Chaparoski^{1,2}, Doga Ugurlar⁷, Vasko Aleksovski⁸, Natalija Baneva^{1,8}, Icko Gjorgoski⁵

¹Medical Faculty, "Ss. Cyril and Methodius" University, Skopje, Macedonia

²University Clinic for Neurosurgery, Skopje, Macedonia

³University of Niš, Faculty of Medicine, Niš, Serbia

⁴Center of Radiology, Clinical Center Niš, Niš, Serbia

⁵Faculty of Natural Sciences and Mathematics, "Ss. Cyril and Methodius" University, Department for General Physiology and Immunology, Skopje, Macedonia

⁶University Clinic of Radiology, Skopje, Macedonia

⁷University of Medical Sciences Haseki Research and Training Hospital, Istanbul, Turkey

⁸University Clinic for Neurology, Skopje, Macedonia

SUMMARY

The aim of the paper was to evaluate the surgical outcome in patients with spontaneous supratentorial intracerebral hemorrhage (ICH) after surgical intervention, in respect to the initial clinical conditions, age, sex, hemispheric side and anatomic localization of ICH. Thirty-eight surgically treated patients with spontaneous supratentorial intracerebral hemorrhage were included in the study. The surgical outcome was evaluated three months after the initial admission, according to the Glasgow Outcome Scale (GOS). The surgical treatment was successful in 14 patients (37%), whereas it was unsuccessful in 24 patients (63%). We have detected a significant negative correlation between the Glasgow Coma Scale (GCS) scores on admission and the GOS scores after three months, suggesting worse neurological outcome in patients with initially lower GCS scores. The surgical outcome in patients with ICH was not affected by the sex, the hemispheric side and the anatomic localization of ICH, but the age of the patients was estimated as a significant factor for their functional outcome, with younger patients being more likely to be treated successfully. The surgical outcome is affected from the initial clinical state of the patients and their age. The treatment of ICH is still an unsolved clinical problem and the development of new surgical techniques with larger efficiency in the evacuation of the hematoma is necessary, thus making a minimal damage to the normal brain tissue, as well as decreasing the possibility of postoperative bleeding.

Key words: intracerebral hemorrhage, surgical outcome, Glasgow Coma Scale, Glasgow Outcome Scale

Corresponding author:

Vladimir Rendeovski

Email: vladimirrendeovski@yahoo.com