

## The Geriatric Scoring System (GSS) in meningioma patients—validation

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**Background:** Meningiomas are the most common primary brain tumor, the incidence of which rises with age. The Geriatric Scoring System (GSS) was constructed in an attempt to answer which elderly subpopulation will benefit from a surgical intervention in terms of their overall physical and functional state of health. The GSS incorporates different prognostic indicators, both clinical and radiological, for risk stratification.

**Objective:** The purpose of the study was to validate the previously defined GSS for the evaluation and risk stratification of elderly patients suffering from intracranial meningioma.

**Methods:** One hundred and twenty patients aged over 65 years admitted to the RAMBAM Medical Center with meningiomas during the years 2005–2010 were characterized, forming an independent cohort. We report the presenting symptoms, chronic illness and radiological features, as well as perioperative and long-term follow-up results up to 5 years after the surgery.

**Results:** Nine outcome parameters were tested against the GSS score on admission. Survival, Barthel Index, Karnofsky Performance Scale (KPS), consciousness expressed by the Glasgow Coma Scale (GCS) score 5 years after surgery, recurrence within and beyond

12 months of surgery, the length of hospitalization both overall and in a neurosurgical intensive care unit. A GSS score higher than 16 was associated with a significantly more favorable outcome.

**Conclusion:** The present results suggest that common experience-based considerations may be optimized and implemented into a simple scoring system that in turn may allow for outcome prediction and evidence-based decision making.

### Biography

Or Cohen-Inbar has completed his M.D. at the Technion Israel institute of technology, currently completing his Ph.D studies at the field of molecular immunology and cancer immunotherapy. He is a 5th year resident of neurosurgery at the department of neurosurgery at Rambam health care campus. He is a member of both the Congress of neurological surgeons and the EANS, and has published over 6 peer review papers in both clinical and basic science fields.

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