

Decompressive Craniectomy Following Ischemic Stroke: First Year Experience of a Referral Center

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Introduction

Decompressive craniectomy is indicated to prevent and treat malignant intracranial hypertension in the ischemic stroke scenario. Nevertheless, controversy exists on indications, techniques and overall benefits of this therapeutic option.

Methods

Our institution is a 160-bed, tertiary level of care facility, specialized in the treatment of cerebrovascular diseases and the only institution performing venous and arterial thrombolysis for the treatment of acute ischemic stroke in our region. Since inauguration, in December 2011, until December 2012, 1900 patients with ischemic stroke have been treated in our hospital and a total of 705 neurosurgical procedures have been performed. Review of medical records was undertaken.

Results

In this period, thirty-one patients (4,4% of neurosurgical procedures and 1,6% of ischemic strokes) have been submitted to decompressive craniectomy, as part of the treatment offered to an ischemic cerebral insult according to our Institutional protocol. Conventional and in-window decompressive craniectomies have been performed. Mean age was 45,8 years and 32% of patients were women. Timeline for decompressive craniectomies closely resembled that for thrombolytic treatment. Transop blood transfusion was required in 9,6% of the cases.

Conclusions

This study offers insights into the role of decompressive craniectomies following ischemic stroke in a referral center.

Learning Objectives

1) Understanding the role of decompressive craniectomy in stroke.2) Evaluate results after decompressive craniectomy following an specific institutional protocol.

References

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