Survival analysis of surgically evacuated supratentorial spontaneous intracerebral haemorrhage with intraventricular extension

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Introduction

Intraventricular extension (IVH) is an **independent factor associated with poor outcome** in patients with supratentorial spontaneous intracerebral hemorrhage (SSICH):

- ✓ **increases risk of death** from 20% to 51%
- ✓ **decreases rate of good outcome** from 31% to 15%

❖**Hypothesis:** Surgical treatment (craniotomy and evacuation) can improve survival in patients with SSICH with IVH

Material and Methods

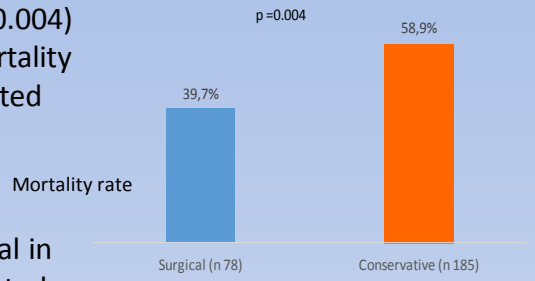
263 consecutive patients with SSICH
ICUs of three spanish Hospitals (Granada, Málaga, Jaén)
2009-2012

- **Age** 59.74 ± 14.14 years
- **GCS** on admission 8 ± 4 (30% of **pupillary anomalies**)
- **APACHE-II** 20.7 ± 7.68
- **ICH score** 2.32 ± 1.04
- ❑ 54% **lobar**
- ❑ 71.9% **> 30 cc**
- ❑ **IVH** in 62%

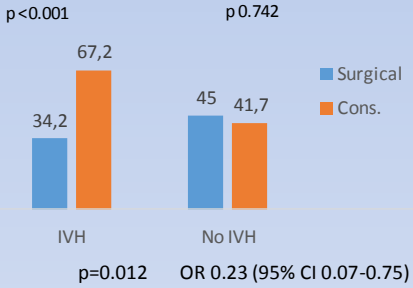
- ➢ 29.7% **craniotomy** and evacuation (16.7% **EVD**)
- ➢ 30-day **mortality rate** 51.3% (45.3% by ICH-score) **Hospital mortality** 53.2%

Results

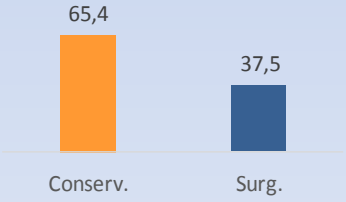
- A significant difference (p=0.004) was observed in hospital mortality rates between surgically treated patients vs. conservatively managed



- This difference was specifical in those with IVH surgically treated vs. non-operated IVH, p<0.001. No significant difference was noticed between mortality rates in patients without IVH



- Multiple logistic regression :
  - ➢OR for surgery of 1.04 (95% CI 0.33-3.22) without IVH vs. 0.19 (95% CI 0.07-053) in patients with IVH (decreased mortality with surgical treatment)
- Propensity score analysis for IVH patients showed improved survival of operated group



Conclusions

Hospital mortality was lower in patients who underwent surgery in comparison to patients conservatively managed, specifically for the subgroup of patients with intraventricular haemorrhage

References

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