2745: The Safety and Efficacy of Post-Operative Enoxaparin after Brain Tumor Resection in the Acute Post-Operative Period: A Single Institution Experience

Robert Grady Briggs
Andrew Conner
Wenjia Xu
Phillip Bonney
Parker Allan

Adam Smitheman
Arpan Chakraborty
Cameron Nix
Luke Fletcher
Michael Sughrue
Disclosures

No disclosures relevant to the subject material of this presentation.
Introduction

• The benefit of anticoagulation in brain tumor patients must be weighed against the risk of tumoral cavity hemorrhage when selecting agents and timing
• Limited data guide the use of low molecular weight heparin in the early period after craniotomies for brain tumor
Methods

• Retrospective review of brain tumor patients from 2015 and 2018
• Data collected included
  • Enoxaparin dosing/timing
  • Rates of DVT
  • Hemorrhagic complications
Results

• 1,114 patients
• Timing of enoxaparin
  • POD1: 53 patients
  • By POD2: 236 patients
  • By POD3: 335 patients
  • By POD5: 423 patients
  • By POD7: 462 patients
Results

- DVT: 41 patients (3.7%)
- Enoxaparin within 72 hours
  - 1.2% with vs. 4.8% without (p = 0.005)
  - HR 0.33 (95% confidence interval 0.11-0.95, p = 0.04) in multivariate analysis

- Cerebral hemorrhage
  - 1.4% anticoagulated vs. 1.2% non-anticoagulated (p = 0.79)
- Return to OR for evacuation
  - 1.2% vs. 0.7% (p = 0.53)
Discussion

• Earlier enoxaparin initiation was associated with a reduction in DVT without increasing cerebral hemorrhage rates
Summary Points

• Consideration should be given to starting enoxaparin within 72 hours after brain tumor surgery