Cervical Trauma
The Belfast Millennium Experience

R Dhokia, N Eames

Liverpool 2013
Objective

• To record our experience in the management of cervical trauma
• In particular compare the patterns of management of
  – Atlanto-axial
  – Sub-axial
  – and isolated PEG injuries
Methods

• A retrospective review of the Fracture Outcome Research Database (FORD) for Northern Ireland (NI).
• We reviewed 2395 patients admitted with cervical injuries to Royal Victoria Hospital, Belfast
• between January 2000 and December 2010.
Results 1

• Cervical trauma represented a mean 46% of all spinal trauma admissions per year.

• 1251 were male and 783 female.

• 33% patients were aged 65+.
Results 2

- NI population has increased 9%
  - (1.66million, 2001; 1.81million, 2011)
- There is no significant increase in cervical trauma admissions.
Results 3

- Mean conservative 71% and surgical 29%
  - Trend towards surgical management
Results 4

• The average proportion per year
  – Atlanto-axial 31%
  – Subaxial 69%

Mean Age
- Atlanto Axial: 53 years
- Subaxial: 46 years
Results 5

• Method of fixation

[Bar graph showing distribution of method of fixation across different regions.]
Results 6

- Total of 365 PEG and associated segment injuries.
- Of these 266 were isolated PEG fractures – (Mean 24/year).
Results 6

• All isolated PEG fractures surgically fixed were aged under 65.

• For isolated PEG fractures the Mean age of surgical fixation was 42 and those treated conservatively 69.
Conclusions 1

• Cervical trauma admissions in NI represent a steady but significant proportion of spinal trauma.

• Cervical Trauma admissions remain in proportion with population increase
Conclusions 2

• Cervical tumours are increasing at a rate of 50% every 5 years

• Trend towards increasing surgical fixation
Conclusions 3

• All isolated PEG fractures aged greater than 65 have been treated conservatively

• Surgical fixation has been employed to patients aged 65 or under.

• This is in keeping with the literature where patients achieve fibrous union

(Hart et al. Spine 2000)
• Further area of discussion – should isolated PEG fractures be treated conservatively in the elderly population

• Prospective trial in Belfast awaiting approval
  – Soft collar for those low demand aged 65 Years +
Thank You

DISCLOSURES NONE
CONFLICT OF INTEREST NONE