History of Head Injury Treatment

Edward Mee 2007
Chirurgia 1180
Roger of Salerno 13 C
1535 Berengario da Carpri

14 C Roger of Salerno

Composite view of Different Head Wounds

Compound skull Fracture
De fabrica pub 1543 663 folio
pages age 28
Master anatomist
Believed all previous
descriptions of the body
were incorrect
Debunks rete mirabile
Reversed ventricular fluid
theory
Masterful promotion of his
work
Publishes in Basel
Mystery and Communality of Barbers and Surgeons of London
Craniotomy at Home

16 Century
Deathbed of Henri II July 10 1559

Subdural Haematoma from a penetrating wound sustained during a joust.
First Hand Trephine 1639

Woodall’s *The Surgeons Mate*-designed for one handed use
Astley Paton Cooper 1768-1842

First description of dilatation of the pupil in brain compression
Ancient Egyptians 2500BC
Intracranial Pressure

- causes decreased alertness
- decreased eye opening
- focal motor deficits
- elevated BP
- slowing of pulse
- altered respiration
- respiratory arrest
Astute Clinicians

• 1745 Company of Surgeons est by Henry VIII

• Jean Louis Petit 1674-1750
  – Defined the lucid interval
  – Drowsiness some time after the injury was a sign of brain compression

• Percivall Pott 1713-1788 St Barts
  – Advocated a surgical approach
Burr hole
...from external violence

- **Head injuries...**

  are accompanied with more uncertainty, creates more anxiety and more hazard to the patient, than almost any other ill, to which the human frame is liable from external violence

  *Percival Pott 1760*
Benjamin Bell 1749-1806

- 1785  *A System of Surgery*
- Indication for surgery should be based on the neurological examination of the patient
- awareness of this important neurosurgical principle
Johnathan Hutchinson 1828-1913

- 1867 in the same year as Lister wrote on antisepsis he noted
- Lucid interval often present
- The dilated pupil is on the side of the clot
Paul Broca

- Born 1824 near Bordeaux
- Brilliant student and appointed surgeon to Bicetre Hospital
- April 12, 1861
  Leborgne admitted under his care with gangrene
Sir William Macewen

- Born 22 June 1848 Isle of Bute
- Youngest of 12 children
- Attributed his dexterity to time spent using tools in the shipyard
- Performed first planned brain operation on a dead boy
  - Operation consent
  - Autopsy granted
Function of the Frontal Lobe

1848 Phineas Cage
No autopsy
3D CT of Paankkenamun
Cushing 1900 Op Art
3-D CT Angiogram
Herophilus and Erasistratus 300BC

First to dissect beasts and humans
Located intelligence in the ventricles of the brain
Vivisections of condemned criminals
Alexandria was the centre of learning

The new Library of Alexandria
Egyptian and Babylonian Medicine

Edwin Smith papyrus

Oldest surgical text 1700BC
A papyrus scroll 15 feet long, 1 foot wide
48 cases
Incan Era

536 trepanned skulls found in Peru 400BC-200AD
Greek Medicine  Hippocrates 460-370

Describes use of the trephine
Avoid the midline
Cool the tip with water
Convulsions occur if the brain is cut
Luke the Evangelist
Cervical injury can affect the arm
Hemi cord syndrome
Elevation of fractures
Removal of bone from brain
Use of trephine-do not violate the dura