History of Head Injury Treatment

Chirurgia 1180

Roger of Salerno 13 C

1535 Berengario da Carpri

14 C Roger of Salerno

Vesalius 1514-1560

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

Middle Ages 1543

Autopsy 1580

Craniotomy at Home

Deathbed of Henri II July 10 1559

Subdural Haematoma from a penetrating wound sustained during a joust

First Hand Trephine 1639

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 HenryVIII
- 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

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 antisespis 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
- April12 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

Macewen's "Egg" 1876

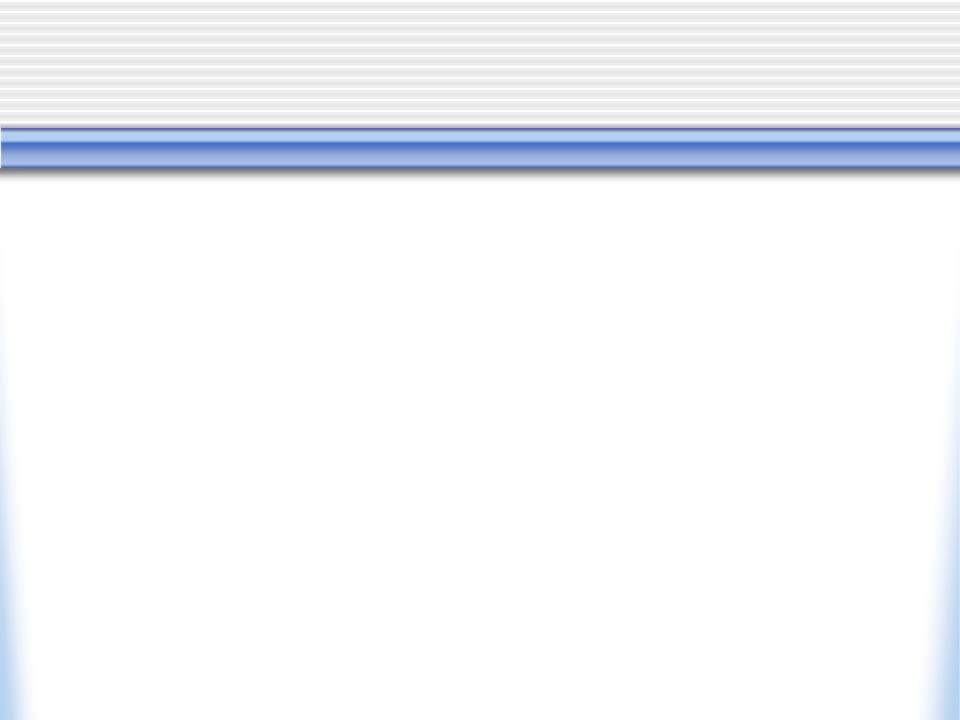
Function of the Frontal Lobe

1848 Phineas Cage No autopsy

3D CT of Paankenamun

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

First Icon Painter

Galen 129-210

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