Orthopaedic Traction Methods

Skin Traction

Indications for Skin Traction
- Children
- Temporary traction
  - preoperative
  - pain

Skin Traction

Contraindications
- Force required > 5kg
- Skin damage or sepsis in area

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Skin Traction

Dangers of Skin Traction

- Distal Oedema
- Vascular obstruction
- Peroneal nerve palsy
- Skin
  - allergy
  - pressure points

Femoral Traction

Gallows

Indications

- Child < 12 kg
- Femoral fractures
- Skin must be intact

Femoral Traction

Older Child

Indications

- Child > 12 kg
- Femoral fractures
- Skin must be intact

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Femoral Traction
Older Child

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Femur Fractures Forces Displacing

Abducted

Patas

Flexes

Adductors

Distal only

Forces Displacing

Treatment

• align
distal with proximal
  = Flexion and Abduction

Conservative Adult

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Conservative Adult Denham Pin

Conservative Adult Denham Pin

Cervical Traction Halter

Halter - for short-term cervical traction
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Cervical Traction
Halter

Problems
- Uncomfortable
- Pain tempo-mandibular
- Contraindicated in mandible fractures
- Difficult to control flexion - extension

Cervical Traction
Skeletal

Indications Cones Calipers
- Long term cervical injuries
- Fractures
- Instability

Cervical Traction
Skeletal

Direction and Weights
- Force - 2.5 kg head + 1/2 kg for each vertebra*
- Direction Neutral - line with auditory meatus
- Flexion needed - raise pulley
- Extension needed - use double mattress ending @ shoulders

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Cervical Traction
Skeletal

**Complications**
- Bleeding - temporal artery
- Pressure sore on skull - avoid downwards vector to rope
- Sepsis - from skin to subcutaneous abscess
- Worsening neurological status
- Squint from 6th nerve fallout

**Contraindications**
- Children
- Local sepsis
- Skull fracture

**Reduction of vertebrae**
- Locked facets etc
- Load - serially up to 15 kg with neck flexed
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Dunlop Traction

- Supracondyalar fractures in children
- Allows swollen elbow to settle
- Contraindicated in open fractures and skin defects

Backache

Pelvic traction for sciatica

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- Website
  http://www0.sun.ac.za/ortho
- Podcast/rss feed
  http://www0.sun.ac.za/ortho/audio/orthopod.xml