

Halo Mysticism Explained



G S Roysam



Cervical Immobilization



Prevent further damage Protect uninjured cord

Simple & Reliable Two sandbags Phili collar Spine board Tape





Soft Collar : Useless

Hard Collar : Weaning phase



Philadelphia Collar:

Useful in acute immobilization phase Through x-ray & evaluation phase





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Sternal, occipital, mandibular immobilizer 4 post brace





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When longer duration is required





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When longer duration is required C5-T1 difficult to control (snake phenomenon)

Rule of Thumb : Minimum wt



Minimum Weight in Ibs





Max Weight 10 lbs for skull For every vertebra add multiples of 5 lbs

C1 : 10 +5 [15 lbs max] C5 : 10+25 [35 lbs max]







- Closed manipulation awake patient No role
- Halo traction
 Initial 15 lbs



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If facets are perched - add some flexion and weight

Once disengaged extend gently - reduce weights

Remember !





Stop Traction

- When reduction is achieved
- Locked facets
- Dangerous distraction
- Worsening neurology
- Max 25 kgs is reached

Halo Contraindications





Type IIA : Hangman's



Occipito-cervical distraction injury

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Complication of Halo



- Pin loosening (36%)
- Pin site infection (20%)
- Pressure sores (11%)
- Nerve injury (2%) Abducens / Supra trochlear
- Dural penetration (1%)
- Disfiguring scars (9%)
- Skull osteomyelitis / dural abscess









Minimum 2 people needed - 3rd useful to maintain the ring position at application

Ant pins : Middle to lateral third of eyebrow Too medial injury to Frontal sinus / Supraorbital & Supra trochlear ns





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Post pins : 1 cm above the tragus - pins on mastoid bone

After the application of Halo





Pins to be retightened in 24-48 hrs

Adult 6-8lb/in : Child 4-6 lb/in

A pin without resistance must be changed to another position in skull



Open back design eliminates the need for a 'head-spoon'

Halo crown applies easily when head is on a firm surface use the enclosed corrugated 'head pad'

EΧ





















































Measure the circumference of head









Use smallest possible size





Use smallest possible size

Small : 48-58 cm





Use smallest possible size

Small : 48-58 cm Large : 58-66 cm









Supra-trochlear n





Supra-orbital n Supra-trochlear n



























Place the halo on patient's head

Adjust the position pads 1 cm separation between the crown & head

Snug position pads to maintain halo Position 1 cm at the pin sites 1 cm above the eye brows Not touching the ears Posterior pin sites below the equator capital arch not touching the top of the head



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With patient's eyes closed maintaining halo position insert halo pins thru' the selected holes in halo Tighten the pins by hand until pins penetrate the skin

Place torque limiting caps on each of the four pins and simultaneously tighten the opposing pins slowly two turns at a time









Continue to alternate between Opposing pins, tightening two Turns each time until the torque Limiting caps break off.

Remove all three positioning Pads and pins and discard.



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Post Halo Application protocol

After 15 mins re-torque skull pins







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If patient complains of pain at pin site : suggests loosening : re-torque but not more than 4lbs/ in



Apply traction hoop attachment by placing the bolts in the holes at the junction of halo arch and capital arch

To adjust flexion/extension maintain head position loosening the traction hoop bolts

Now carefully rotate patient's head to desired position and retighten bolts

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