Management Of Cervical Unifacet Subluxation Using A Handmade Halter Traction Device

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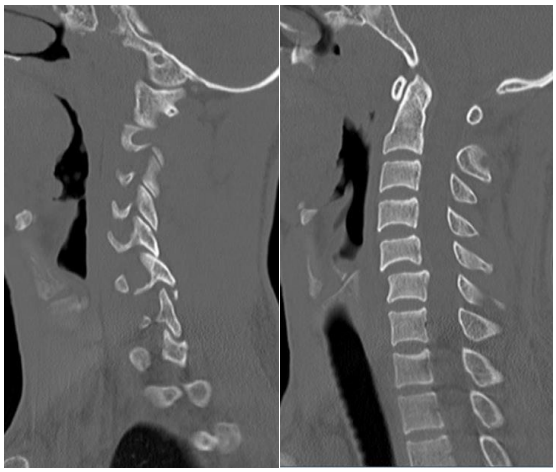
INTRODUCTION:

We report a case where due to unavailability, our team developed a simple handmade cervical Halter traction device for treatment of a unifacet subluxation.

CASE REPORT:

A 37 year old was brought to our center after-having a fall from height sustaining neurological motor deficit of 4/5 in right C5 to C7 and 3/5 in right C8 and T1. Sensation was intact. A CT showed fracture of the right C6 facet with unilateral subluxation. An MRI done showed a minimal disc bulge with cord oedema at C5-C6.

Figure 1 and 2: CT sagital images showing unilateral fracture subluxation with 3mm listhsis



He was advised for Halo traction however strongly refused. During consultation regarding other options of treatment, an agreement was made for an attempt at Halter traction for reduction of the subluxation. At the time of patients admission, no Halter traction device was available at our center, thus we developed a simple handmade cervical traction device.

Our device successfully reduced the facet subluxation and after 10 days of tractioning, the patients symptoms had resolved. He was treated conservatively with hard collar immobilisation

Figure 3: Picture of handmade Halter device
Figure 4: X-ray showing successful reduction of listhesis

DISCUSSION:

Johnson et al had described use of a Halter traction for initial management of cervical facet subluxations/dislocations in the district hospital setting (1). Cervical Halter traction requires a traction apparatus with weights attached by connected ropes to two padded straps placed at the chin and occiput. With this knowledge, it is possible to use basic items available in most Orthopaedic wards to make a Halter device. Such a practice of a handmade Halter device has been reported such as by Masoudi et al (2).

CONCLUSION:

At times the Orthopaedic teams are required to think outside the box. We describe this case as a means of showcasing how creative thinking can improve our standard of care for patients. Especially to patients of poorer financial status or in lesser equipped, district level hospitals.

REFERENCES:

1. OK Johnson Jr, RN Das. Halter traction for cervical spine injuries - initial treatment in the district hospital. Rural and Remote Health. 2015; 15: 3082
2. Masoudi, Mohammad Sadegh et al., Management of Pediatric Atlantoaxial Rotatory Subluxation with a Simple Handmade Cervical Traction Device: Doing More with Less. World Neurosurgery. 2017; Volume 106 , 355 - 358