Cervical traction for cervical disc herniation

(e.g. gradually escalating 10-15 lbs for 10-15 minutes 2-3 x daily).

Intermittent traction

Tension is applied for a "hold" period at a prescribed load (weight) for a prescribed amount of time (seconds) followed by a "rest" period at a lower load (weight) for a prescribed amount of time (seconds).

Intermittent traction works well for joint hypomobility and degenerative disc disease with shorter rest and hold times (mobilizing effect). For intermittent traction, generally there is a 20-30% difference in the "maximal" amount of tension during the "hold" period and the "minimal" amount of tension during the "rest" period.

Releasing the tension during the "rest" period by a relatively small percentage of the maximum assures that some tension will always act on the tissues without causing irritation or placing too high a demand on them. The method of traction is based on the type of condition being treated, goals of treatment, and the patient's response.

A. Nerve root compression: Intermittent traction is suggested: 7 seconds hold and 7 seconds rest time for 20-30 minutes. In addition to cervical flexion, lateral or rotational components may be added. Maximal separation will occur within 7 seconds ^{1) 2)}. Additional time produces no further separation. A balanced cycle is usually perceived as more pleasant. Patients can tolerate greater poundage because of the rest periods.

B. Discogenic pain: Use either sustained or intermittent traction. Sustained traction should have "hold" periods no longer than 10 minutes. If the treatment is too long, intradiscal pressure may increase from imbibition of too much fluid, and symptoms may be aggravated following treatment. Patients tolerate less poundage than with intermittent. There is a greater degree of ligament deformation with a slow rate of loading compared to a more rapid rate. Intermittent traction would commonly have 60 second holds with a 10-20 second rest applied for 10-15 minutes. Longer or shorter times may be indicated by changes in signs and symptoms. If the treatment is too long, intradiscal pressure may increase from imbibition of too much fluid, and symptoms may be aggravated following treatment. Patients can tolerate greater poundage with intermittent traction as compared to sustained traction because the rest periods of intermittent reduce the load on the tissues.

1)

Colachis SC Jr, Strohm BR. A study of tractive forces and angle of pull on vertebral interspaces in the cervical spine. Arch Phys Med Rehabil. 1965 Dec;46(12):820-30. PubMed PMID: 5855044.

Colachis SC Jr, Strohm BR. Cervical traction: relationship of traction time to varied tractive force with constant angle of pull. Arch Phys Med Rehabil. 1965 Dec;46(12):815-9. PubMed PMID: 5855043.

From: https://neurosurgerywiki.com/wiki/ - Neurosurgery Wiki
Permanent link: https://neurosurgerywiki.com/wiki/doku.php?id=cervical_traction_for_cervical_disc_herniation
Last update: 2024/06/07 02:49