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Technical note—cervical traction

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This method of cervical traction was first used to improve the comfort and nursing of a patient placed in Crutchfield tongs. Development commenced at the Whangarei Orthotics Department in 1974 based on a report from the United States (Williamson, 1963).

The equipment consists of a weight carrier, an overhead pulley support with mirror attachment and a head position board. The weight carrier (Fig. 1, left) attaches to the bed-head connecting box. The extension arm is hinged to allow the bed to be raised or lowered and the foot piece is also adjustable. The weight carrier remains upright at all times, an adjustable locking stay preventing it from tipping over when weight is applied.

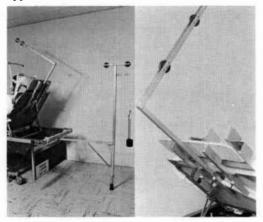


Fig. 1. Left, weight carrier with adjustable foot and hinged extension arm. Right, Overhead pulley support and head position board.

The L shaped overhead pulley support (Fig. 1, right) slides into a connecting channel and can be locked with a thumbscrew. A swivel mirror can be fixed at the end of the bar.

The head position board (Fig.1, right) slides into channels and is locked with thumbscrews. Adjustable temporal supports, padded with soft plastic foam, position the head and prevent it from moving out of cervical alignment. Mandible and occipital traction slings (head halters) are also used.

Patients with fractures of C6 and C7 can now sit up or lie down as desired soon after Crutchfield tongs are inserted. When in the sitting position an extra 1kg weight is applied to cervical traction.

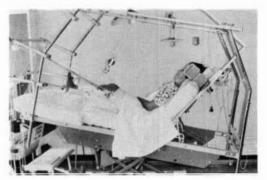


Fig. 2. Patient with cervical traction applied.

The ability to sit up to read or watch television has been much appreciated by patients who have been treated with this method of cervical traction (Fig. 2). Comment from nursing staff indicate that this is a most successful piece of equipment which has been well received and used.

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REFERENCE

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WILLIAMSON, H. G. (1963). An outline of traction for orthopaedic technicians and nursing personnel. Womak Army Hospital, Fort Bragg, North Carolina, U.S.A.