

HISTORICAL ORTHOPAEDIC ARTEFACTS FACT SHEET No 9

Anderson well-leg traction apparatus



This apparatus was devised in 1932 in Seattle, Washington by Dr. Roger Anderson MD, FACS and was used primarily to treat fractures of the femur (thigh bone).

A plaster cast incorporating the well-leg traction apparatus was applied to the sound limb from the toes to the groin; there would be strong upward pressure on the limb so thick pads of felt were placed on the sole of the foot, round the ankles and round the knee.

A pin was then driven through the lower end of the tibia (shin bone) on the affected side and incorporated in a plaster cast extending from the toes to the upper part of the calf. The traction apparatus was then attached to the pin with the normal limb pushed up and the injured limb pulled down so that although they lay almost side by side the normal hip was moved towards the midline of the body (adduction), and the injured hip moved away from it (abduction).

By the 1960s treatment of these fractures had become almost exclusively surgical. There were, however, a number of papers published in the 1970s and 80s which described occasions when either because of medical conditions or other surgical problems it was not possible to operate on these patients. They found that Anderson well-leg traction was an effective method of treating elderly patients under certain conditions. There is no modern equivalent to this apparatus.

Sources

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3. Pierce RO, Powell SG, The treatment of fractures of the hip by Roger Anderson well-leg traction, Clinical Orthopaedics and Related Research vol 151, 1980, p 165-168
4. Powell M, Orthopaedic nursing 6th ed, 1968, p 387-388