

HISTORICAL ORTHOPAEDIC ARTEFACTS FACTSHEET No 3

The Milwaukee Brace (Frame)



The Milwaukee brace was developed by a team of surgeons working in Milwaukee, USA. It was often ordered as a means of correction in itself for structural scoliosis, or to limit the deformity as far as possible until the patient was old enough for spinal fusion. This splint was made on a cast and maintained extension of the spine from fixed points on the pelvis, chin and back of the head; the longitudinal struts carrying the occipital and chin rests had to be lengthened as the child grew.

The patient's clothing was arranged around the splint since it was not to be removed on any account without express permission from the surgeon. In spite of its formidable appearance, this splint was well tolerated provided it was a perfect fit; in this connection the services of an expert splint-maker were invaluable. It was vital that the splint did not become outgrown; it was worn until growth had ceased or until it was thought that further deformity would not occur. The child had to be under the supervision of a dental surgeon throughout the treatment

so as to prevent deformity of the teeth and jaws.

The Milwaukee brace permitted the surgeon to apply traction and lateral-pressure corrective forces to the scoliosis with a minimum of effect upon respiration. It was comfortable and had several advantages over plaster treatment in certain types of scoliosis.

Whilst it was successful in a high percentage of cases where surgery was not deemed necessary initially, it was not been found to be an adequate replacement for fusion in the severely degenerating curve.

The Milwaukee brace had been very effective as a holding and correcting apparatus for thoracic curves following fusion.

This piece of apparatus is no longer used.

Sources

1. Irwin, CE & Wray, JB. Experiences with the use of the Milwaukee frame in the treatment of paralytic scoliosis. *Journal of Bone & Joint Surgery* vol 39A 1957, p 1020-1026
2. Powell, M. *Orthopaedic nursing*. 6th ed. Livingstone, 1968, p 296-298
3. Roaf, R & Hodgkinson, LJ. *The Oswestry textbook for nurses*. Pitman, 1963, p 289-290