

HISTORICAL ORTHOPAEDIC ARTEFACTS FACT SHEET No 6

The Littler-Jones abduction arm splint



The Littler-Jones abduction arm splint was used in a number of conditions: injuries to the shoulder joint, late treatment of tuberculosis of the shoulder, poliomyelitis affecting the deltoid muscle on the shoulder or palsy (paralysis) of the axillary nerve in the armpit.

It was a difficult splint to fit and an uncomfortable one to wear other than over clothing.

The splint is a framework of light metal which fitted half way around the trunk on the affected side and supported the arm in the degree of abduction (movement of the arm away from the body) of the shoulder joint required. The arm and forearm rested on slings of leather, and canvas straps passed from the body part of the metal framework at two levels, one over the shoulder on the sound side, and one round the pelvis and in both cases these were fastened securely by buckles.

Initially, the splint was worn under clothing, but later the patient might be allowed to wear the splint over their clothes until it could be discarded altogether. The arm was never allowed to drop to the side. Abduction (arm-raising) exercises were commenced in two or three weeks and the splint was discarded when the shoulder could be actively raised well above the right angle.

If this splint was required, the splint maker moulded a malleable wire to the shape of the arm and trunk while the nurse supported the arm in the position ordered by the surgeon. If this was not possible, the nurse held the arm while a second nurse took the measurements.

There is no modern equivalent to this apparatus.

Sources

1. Powell, M. Orthopaedic nursing. 6th ed. Livingstone, 1968, p 88, 364
2. Roaf, R & Hodgkinson, LJ. The Oswestry textbook for orthopaedic nurses. Pitman, 1963, p 292