


A useful technique of reduction for distal radius fractures

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Sir John Charnley described a method of three-point fixation when applying a moulded plaster.¹ The principles of fracture reduction are longitudinal traction, exaggeration of the fracture and then correction of the deformity. We present a novel technique which

enables a single person to reduce a severely displaced distal radius fracture whilst simultaneously applying counter traction, for formal manipulation under anaesthesia.

The patient is positioned supine with the shoulder abducted to 90°, elbow flexion to 90° and arm pronated. The surgeon uses the posterior aspect of their thigh with the aid of gravity to provide counter traction to enable reduction of the fracture (Figures 1 and 2). Fracture reduction is checked and the image intensifier is used as a platform for applying a cast.

This is a time-efficient technique that can be used without an assistant. It uses inexpensive materials and applies the basic orthopaedic surgical principles of three-point fixation to achieve good fracture reduction.¹



Figure 1. Demonstration of the technique in antero-posterior view.



Figure 2. Demonstration of the technique in lateral view.

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All authors have been involved in the conception and design of the study, acquisition of data, analysis and interpretation of data. The paper has been reviewed multiple times by all authors.

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Reference

1. Charnley J. *The closed treatment of common fractures*. Cambridge: Colt Books, 1999.