Moulded cast compared with K-wire fixation after manipulation of an acute dorsally displaced distal radius fracture: the DRAFFT 2 RCT

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Plain English summary

The DRAFFT 2 RCT

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Plain English summary

Many patients with a wrist fracture can be treated with a simple cast or splint. However, if the broken bones have moved out of position, patients are frequently offered a manipulation of the fracture to restore the position of the broken bones. The bones may then be held in place with metal implants while they heal. A moulded plaster cast, shaped to support the bones, is an alternative treatment that avoids metal implants, but there is little research to suggest which treatment is better.

The Distal Radius Acute Fracture Fixation Trial 2 (DRAFFT 2) study compared surgical fixation with metal wires with a moulded cast for patients with a broken wrist. Half of the patients underwent surgical fixation and half were given the moulded cast. The decision about which treatment patients were given was made by chance using a computer to ensure a fair comparison. The patients in both groups described their own wrist function and quality of life in the first year after their treatment and these descriptions were compared.

A total of 500 patients took part at 36 NHS hospitals in the UK. The patients treated with a moulded cast reported very similar wrist function and quality of life to that of the patients treated with surgical fixation. However, one in eight patients treated with the moulded cast later required surgery because their broken bones had fallen back out of position.

This study showed that a moulded cast is as good as, but costs less than, surgical fixation for patients with a broken wrist in terms of wrist function. However, a small proportion of the patients treated with a moulded cast may require later surgery if the broken bones cannot be held in position by the cast alone.

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This report

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