

# NATIONAL CLINICAL GUIDELINE ON THE TREATMENT OF DISTAL RADIAL FRACTURES

## Quick guide

### Assessing and evaluating a surgery indication

√	<p>It is good practice to offer surgical treatment of a distal radial fracture to patients of any age if a conventional wrist X-ray examination, following eventual reduction of the fracture, reveals one or more of the following radiological parameters:</p> <ul style="list-style-type: none"> <li>• More than 10 degrees of dorsal angulation of the articular surface of the radial in a side view as compared to perpendicular to the longitudinal axis of the radial</li> <li>• Ulnar variance of more than 2 mm</li> <li>• Articular step-off of more than 2 mm</li> <li>• Incongruity of the distal radioulnar joint</li> </ul>
√	In case of well-reduced distal radial fractures with loss of substance/comminuted fracture of the dorsal cortex, it is good practice to monitor the patient closely or to consider primary surgery.
√	It is good practice not to perform routine CT scan prior to distal radial fracture surgery.
√	In case the assessment of a conventional X-ray examination creates doubt as regards choice of treatment method, supplementary CT scan is good practice.
√	It is good practice to perform surgery at a time agreed with the patient and without undue fasting and waiting.

### Strategy for surgical treatment

√	When surgery is indicated, it is generally good practice to offer open reduction and internal fixation with a volar angular stable locking plate to patients of any age. If this method cannot be used, K-wire osteosynthesis may be considered as the primary choice rather than bridging external fixation.
√	<p>It is good practice to be cautious about the use of surgical intervention in patients of any age with a low level of function.</p> <p>This key message regarding strategy for surgical treatment is based on a comparison in pairs of the evidence for the most frequently used treatment methods: K-wires, bridging external fixation, volar angular stable locking plate and conservative treatment in the form of closed reduction and immobilisation bandage.</p>
↑	<p><b>K-wires vs. conservative treatment</b></p> <p>Consider use of K-wires rather than conservative treatment of distal radial fracture in patients of any age when surgery is indicated (⊕⊕○○).</p>

↑	<p><b>Bridging external fixation vs. conservative treatment</b></p> <p>Consider use of bridging external fixation rather than conservative treatment of distal radial fracture in patients of any age when surgery is indicated (⊕○○○).</p>
↑	<p><b>Volar angular stable locking plate vs. conservative treatment</b></p> <p>Consider use of a volar angular stable locking plate rather than conservative treatment of distal radial fracture in patients of any age when surgery is indicated (⊕○○○).</p>
↑	<p><b>Volar angular stable locking plate vs. bridging external fixation</b></p> <p>Consider use of a volar angular stable locking plate rather than bridging external fixation of distal radial fracture in patients of any age when surgery is indicated (⊕⊕○○).</p>
↑	<p><b>Volar angular stable locking plate vs. K-wires</b></p> <p>Consider use of a volar angular stable locking plate rather than K-wires during distal radial fracture surgery in patients of any age when surgery is indicated (⊕⊕○○).</p>

Rehabilitation	
↑	Consider use of short-term cast or similar immobilising cast or similar immobilising bandage (less than 2 weeks) following insertion of a volar angular stable locking plate rather than long-term cast or similar immobilising bandage (more than 5 weeks) (⊕⊕○○).
√	It is good practice not to prescribe rehabilitation supervised by an occupational therapist or a physiotherapist on a routine basis to patients with uncomplicated cases. This is due to finding no difference in the effect as compared to independent rehabilitation based on a written training plan following a single instruction (⊕○○○).
√	As a minimum, it is good practice to offer guidance and practical instruction concerning self-rehabilitation following distal radial fracture to all patients regardless of the treatment method.

## About the quick guide

This quick guide contains the key recommendations from the national clinical guideline on treatment of distal radial fractures. The guideline was prepared by the Danish Health Authority (DHA).

Thus, the guideline contains recommendations for selected parts of the field and therefore must be seen alongside other guidelines, process descriptions etc. within this field.

The recommendations are preceded by the following indications of their strength:

↑↑ = a strong recommendation for  
↓↓ = a strong recommendation against  
↑ = a weak/conditional recommendation for  
↓ = a weak/conditional recommendation against

The symbol (✓) stands for good practice. This symbol is used in case of lack of evidence, when the working group wants to emphasise particular aspects of the established clinical practice.

The recommendations are followed by the symbols mentioned below which indicate the strength of the underlying evidence – from high to very low:

(⊕⊕⊕⊕) = high  
(⊕⊕⊕○) = moderate  
(⊕⊕○○) = low  
(⊕○○○) = very low

In case of lack of evidence, a recommendation is not followed by a symbol. This applies to the good practice recommendations.

## Further information at [sundhedsstyrelsen.dk](http://sundhedsstyrelsen.dk)

At [sundhedsstyrelsen.dk](http://sundhedsstyrelsen.dk), a full-length version of the national clinical guideline is available, including a detailed review of the underlying evidence for the recommendations.

## About the national clinical guidelines

The national clinical guideline is one of the approximately 50 national clinical guidelines to be prepared by the DHA during the period 2013-2016.