



## Treatment of complex fractures of the distal radius: a prospective randomised comparison of external fixation 'versus' locked volar plating

Submitted by a.bergoend on Mon, 04/27/2015 - 14:47

Titre	Treatment of complex fractures of the distal radius: a prospective randomised comparison of external fixation 'versus' locked volar plating
Type de publication	Article de revue
Auteur	Jeudy, J [1], Steiger, Vincent [2], Boyer, P [3], Cronier, P. [4], Bizot, Pascal [5], Massin, Philippe [6]
Editeur	Elsevier
Type	Article scientifique dans une revue à comité de lecture
Année	2012
Langue	Anglais
Date	2012 Feb
Numéro	2
Pagination	174-179
Volume	43
Titre de la revue	Injury
ISSN	1879-0267
Mots-clés	Age Factors [7], Aged [8], External Fixators [9], Female [10], Follow-Up Studies [11], Fracture Fixation [12], Fracture Fixation, Internal [13], Hand Strength [14], Humans [15], Male [16], Middle Aged [17], Prospective Studies [18], Radius Fractures [19], Range of Motion, Articular [20], Treatment Outcome [21], Volar Plate [22]

Résumé en  
anglais

The traditional treatment of severely impacted fractures of the distal radius involves bridging external fixation and maintaining reduction by applying continuous traction. The recent technique using fixed-angle screws within volar plates is reported restore the radial length and the articular profile whilst avoiding joint distraction. It is also believed to produce better and quicker clinical results. To test these claims, we carried out a randomised controlled comparison of the efficiency of external fixation (EF) 'versus' open reduction and internal fixation (ORIF) in treating severely impacted fractures of the distal radius. A total of 39 patients were treated with EF, eventually associated with percutaneous pinning, whereas 36 underwent ORIF with a locked volar plate. There was no significant difference in the two groups with regard to changes in the ulnar variance. Articular reduction was poor in two patients in the EF group with residual step-offs exceeding 2mm; another patient of the EF group suffered a secondary loss of reduction, healing with a severe articular malunion (>2mm). By contrast, articular reduction was satisfactory in all the patients of the ORIF group. The clinical results on the Green and O'Brien rating were significantly better in the ORIF group than in the EF group ( $p < 0.01$  at 6 weeks,  $p < 0.05$  at 6 months). Nevertheless, open reduction and volar plating did not yield better subjective results than EF. However, although not statistically significant, patients treated by ORIF seemed to resume their usual activities quicker than those treated with EF, suggesting that this technique may be adapted to a greater extent in the case of active, young individuals.

URL de la notice <http://okina.univ-angers.fr/publications/ua10388> [23]

DOI [10.1016/j.injury.2011.05.021](https://doi.org/10.1016/j.injury.2011.05.021) [24]

Identifiant (ID) PubMed [21704995](https://pubmed.ncbi.nlm.nih.gov/21704995/) [25]

---

## Liens

- [1] [http://okina.univ-angers.fr/publications?f\[author\]=18193](http://okina.univ-angers.fr/publications?f[author]=18193)
- [2] [http://okina.univ-angers.fr/publications?f\[author\]=23951](http://okina.univ-angers.fr/publications?f[author]=23951)
- [3] [http://okina.univ-angers.fr/publications?f\[author\]=18283](http://okina.univ-angers.fr/publications?f[author]=18283)
- [4] [http://okina.univ-angers.fr/publications?f\[author\]=14658](http://okina.univ-angers.fr/publications?f[author]=14658)
- [5] <http://okina.univ-angers.fr/p.bizot/publications>
- [6] [http://okina.univ-angers.fr/publications?f\[author\]=4537](http://okina.univ-angers.fr/publications?f[author]=4537)
- [7] [http://okina.univ-angers.fr/publications?f\[keyword\]=10043](http://okina.univ-angers.fr/publications?f[keyword]=10043)
- [8] [http://okina.univ-angers.fr/publications?f\[keyword\]=1072](http://okina.univ-angers.fr/publications?f[keyword]=1072)
- [9] [http://okina.univ-angers.fr/publications?f\[keyword\]=16363](http://okina.univ-angers.fr/publications?f[keyword]=16363)
- [10] [http://okina.univ-angers.fr/publications?f\[keyword\]=1075](http://okina.univ-angers.fr/publications?f[keyword]=1075)
- [11] [http://okina.univ-angers.fr/publications?f\[keyword\]=6055](http://okina.univ-angers.fr/publications?f[keyword]=6055)
- [12] [http://okina.univ-angers.fr/publications?f\[keyword\]=16364](http://okina.univ-angers.fr/publications?f[keyword]=16364)
- [13] [http://okina.univ-angers.fr/publications?f\[keyword\]=16365](http://okina.univ-angers.fr/publications?f[keyword]=16365)
- [14] [http://okina.univ-angers.fr/publications?f\[keyword\]=15363](http://okina.univ-angers.fr/publications?f[keyword]=15363)
- [15] [http://okina.univ-angers.fr/publications?f\[keyword\]=991](http://okina.univ-angers.fr/publications?f[keyword]=991)
- [16] [http://okina.univ-angers.fr/publications?f\[keyword\]=968](http://okina.univ-angers.fr/publications?f[keyword]=968)
- [17] [http://okina.univ-angers.fr/publications?f\[keyword\]=5941](http://okina.univ-angers.fr/publications?f[keyword]=5941)
- [18] [http://okina.univ-angers.fr/publications?f\[keyword\]=6044](http://okina.univ-angers.fr/publications?f[keyword]=6044)
- [19] [http://okina.univ-angers.fr/publications?f\[keyword\]=16366](http://okina.univ-angers.fr/publications?f[keyword]=16366)
- [20] [http://okina.univ-angers.fr/publications?f\[keyword\]=16289](http://okina.univ-angers.fr/publications?f[keyword]=16289)
- [21] [http://okina.univ-angers.fr/publications?f\[keyword\]=6062](http://okina.univ-angers.fr/publications?f[keyword]=6062)
- [22] [http://okina.univ-angers.fr/publications?f\[keyword\]=16367](http://okina.univ-angers.fr/publications?f[keyword]=16367)
- [23] <http://okina.univ-angers.fr/publications/ua10388>

[24] <http://dx.doi.org/10.1016/j.injury.2011.05.021>

[25] <http://www.ncbi.nlm.nih.gov/pubmed/21704995?dopt=Abstract>

Publié sur *Okina* (<http://okina.univ-angers.fr>)