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*What is This?*
Commentary on Farshad et al. Corrective osteotomy of distal radial deformities: a new method of guided locking fixed screw positioning

Corrective osteotomy of the distal radius through a palmar approach (Prommersberger et al., 2000) where the plate is premounted to the distal radius with the proximal part standing-off according to the desired correction of radial inclination and volar tilt has become more popular with the use of locking plates.

The authors describe a clever tool to make this technique easier and more reliable. With the use of a special template the plate holes can be predrilled to provide the desired correction of radial inclination and volar tilt as planned preoperatively. After the osteotomy, the distally fixed plate is reduced parallel to the shaft of the radius, and proximal screws are inserted into the predrilled holes. This manoeuvre leads precisely to the correction of the malunion. Because this technique is based on mechanical properties, it is limited to extra-articular correction osteotomy and use of this special plate. We regard the use of locking plates as a significant advance, especially when designed with two rows of distal screws, which we believe give a high degree of stability helping to avoid secondary loss of reduction. Technologies based on CT scans, meanwhile, are available that allow virtual planning with dedicated software programmes. Drilling and cutting guides are created for the osteotomy and final positioning of the plate. This technology is easily available (www.materialise.com) and costs of about €1000 are acceptable. The advantage of this approach is that it is suitable for different plating systems and correction of extra- and intra-articular malunions.

The described technique makes extra-articular corrective osteotomy of the distal radius easier and reliable, although with limitations to special plate devices. For more accurate intra-articular corrective osteotomy and correction of rotational deformities, computer-based technologies are probably the future.

Reference

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