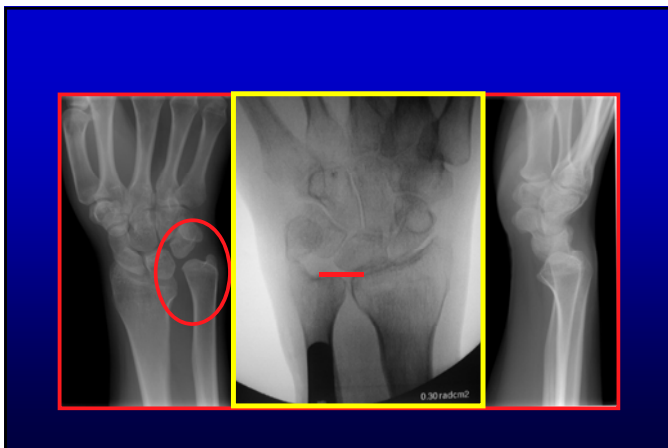


New Innovations for Radius Collapse and Shortening

Thomas Trumble, M.D.

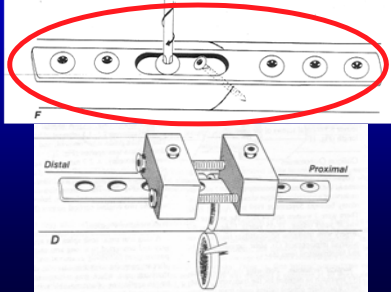




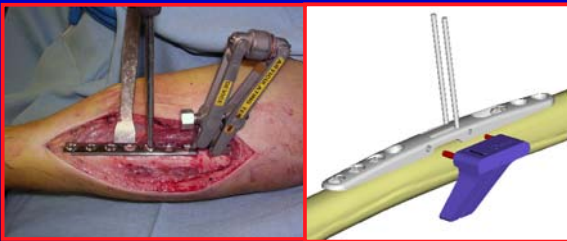


Transverse versus Oblique?

- Rayhack et al. *JHS* 1993
 - Time to Union Oblique (11 weeks) < Transverse (21 weeks)



Ulna Shortening Techniques



TriMed Plate Technique: Step 1

- The osteotomy plate is fixed to the ulna
- Screws inserted on the same side as the lag screw (non-gliding side).

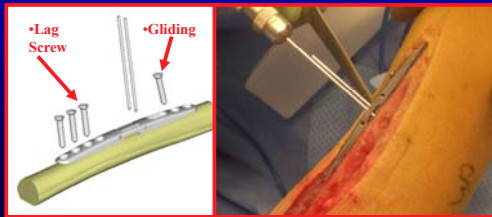


Techniques

- **Pre-bending the plate** to over compensate for the normal curvature of the ulna helps to prevent gapping of the osteotomy site away from the plate when the compression is provided.

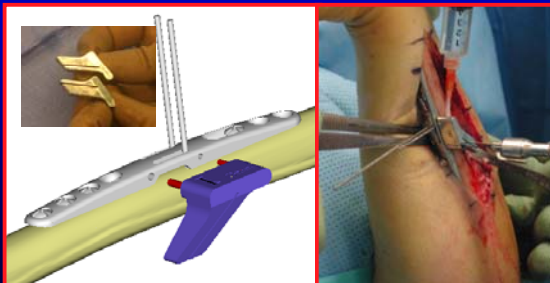
TriMed Plate Technique: Step 2

- The gliding screw placed into the end away from the lag screw hole
- The derotational pins (0.062 inch) are placed in the end of the slots



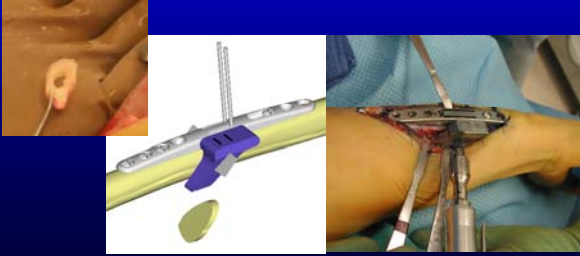
TriMed Plate Technique: Step 3

- Select the cutting guide for shortening needed (over estimate)



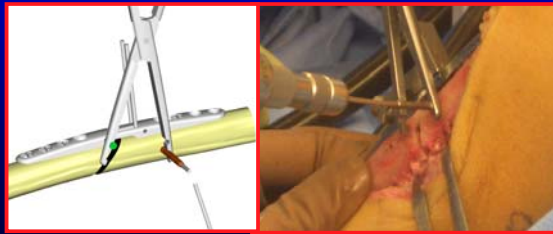
TriMed Plate Technique: Step 4

- 1st osteotomy with the guide "A"
(determines # mm resected. 2nd Osteotomy with guide "B"



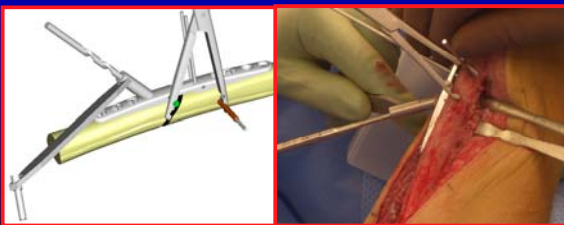
TriMed Plate Technique: Step 5

- Perpendicular (compression) pin (0.062 inch) is placed perpendicular to the plate after removing the cutting guide.



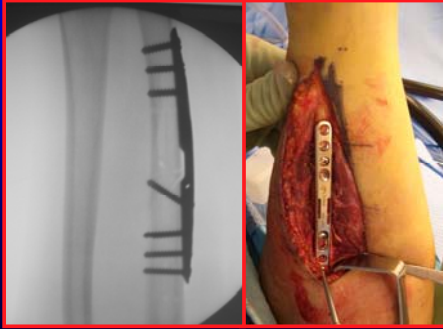
TriMed Plate Technique: Step 6

- Loosening screw in the slotted hole
- compress the osteotomy
- Insert lag screw



TriMed Plate Technique: Step 7

- Fill remaining holes



Results

- Average Correction
 - 3.95-mm (AO)
 - 4.12-mm (TriMed)
- Time to Union
 - 7.4 wks (AO)
 - 7.2 wks (TriMed)
- OR Time
 - 1.67 hr (AO)
 - 0.96 hr (TriMed)

SCIENTIFIC ARTICLE
Comparison of Ulnar-Shortening Osteotomy With a New Trimed Dynamic Compression System Versus the Synthes Dynamic Compression System: Clinical Study
Shi Lina, MD, Anthony J. Leader, MD, Thomas E. Trumble, MD

• Final Ulnar Variance

- + 1 mm (AO)
- 0 mm (TriMed)