

LITERATURE REVIEW

Carpometacarpal Joint Sparing Wrist Arthrodesis

CLINICAL ISSUE:

- Osteoarthritis of carpals subsequent to injury or malalignment of the wrist causes significant pain.
- Successful wrist arthrodesis can relieve this pain, but the procedure has its own complications: nonunion, extensor tendon synovitis, peripheral neuropathy of third CMC joint, and hardware failure.

MEDARTIS SOLUTION:

- Fusion of radiocarpal and midcarpal joint without arthrodesis of the carpometacarpal joint.
- Physiological motion in the carpometacarpal joint is maintained.
- Numerous screw holes for angular stable fixation of various carpal bones.
- Two pre-angled screw holes for cortical screws allow for additional fixation of scaphoid and lunate or bone graft.



TriLock Wrist Fusion Plate 2.5

LITERATURE REVIEW:

Briotti, et al. retrospectively studied the outcomes of CMCJ-sparing wrist arthrodesis in 23 wrists with 18 patients and 19 wrists available for follow-up at 17 months (range: 3-60 months).¹

1. All 23 wrists progressed to union without postsurgical complications.¹
2. No cases of tenosynovitis; 2 elective hardware removals were performed in patients covered under worker's compensation.¹
3. At final follow-up, the mean grip strength was 87% of the contralateral side (range: 43%-134%), and mean QuickDASH score was 23.9±19.5.¹
4. The average VAS pain was 1.3, all patients were satisfied with their procedure, and 17 of 18 patients would recommend the procedure to others.¹

KEY TAKEAWAY:

The authors conclude, "The results of this study demonstrate that the use of a CMCJ-sparing plating system for wrist arthrodesis is effective in preserving hand strength, minimizing complications, and is correlated with a low post-operative pain score."¹

Scan the QR Code to read this study and learn more about the specific methods and results from this study.



REFERENCES:

1. Briotti, J., et al. (2022). Wrist Arthrodesis Using the Medartis Carpometacarpal Joint Sparing Plate. HAND. 0(0). doi:10.1177/15589447221141474.