

LITERATURE REVIEW

Scaphoid Nonunion with Avascular Necrosis

CLINICAL ISSUE:

Opinions on the optimal treatment for scaphoid nonunion with avascular necrosis (AVN) are varied with no general consensus¹.

MEDARTIS SOLUTION:

The Medartis APTUS Hand System includes the anatomically contoured Scaphoid Plate designed to address nonunions and multifragmentary fractures of the scaphoid. With its grid structure, up to 3 TriLock screws can be placed on each side of the nonunion.



Scaphoid Plate 1.2/1.5

LITERATURE REVIEW:

A study by Putnam, J., et al.¹ reviewed the clinical performance of the Scaphoid Plate for scaphoid nonunions with avascular necrosis. In their study, Plate Fixation With Cancellous Graft for Scaphoid Nonunion With Avascular Necrosis¹, they highlight the following key points:

1. All 13 nonunions healed in their challenging patient population¹
2. The mean DASH, MAYO wrist, and VAS scores improved postoperatively¹
3. Grip strength improved from 75.4% to 92.7% versus the non-operative side¹
4. All 11 employed patients returned to work, 3 at a reduced capacity¹
5. One patient encountered pain associated with hardware prominence and impingement. This resolved with plate removal 24 weeks after surgery¹

KEY TAKEAWAY:

They concluded their study by saying, “Scaphoid plate fixation and pure nonvascularized cancellous bone grafting for scaphoid nonunion with AVN yields excellent union rates and good patient-reported and functional outcomes.”¹

Scan the QR Code to read this study and learn more about the specific methods and results from this study or visit [https://www.jhandsurg.org/article/S0363-5023\(17\)31630-1/fulltext](https://www.jhandsurg.org/article/S0363-5023(17)31630-1/fulltext)



REFERENCES:

1. Putnam, J., et al. (2019). Plate Fixation With Cancellous Graft for Scaphoid Nonunion With Avascular Necrosis. The Journal of hand surgery. 44(4): 339.e1-339.e7. doi:10.1016/j.jhssa.2018.06.024