

Complications of intramedullary fixation for distal radius fractures, retrospective analysis using McKay's complication checklist

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Background

-Intramedullary fixation for distal radius-
Comparable **outcomes** with volar locking plate fixation.

How about **complications**?

• Free from hardware irritation

• Radial nerve sensory neuritis could occur

• Less invasive surgery could avoid common complications?
(CaTs, Tenosynovitis)

Objectives

✓ We investigated complications of intramedullary fixation for distal radius fractures

✓ We introduced **our methods** to avoid complications of intramedullary fixation

Patients and Methods

71 patients treated with intramedullary implant
Followed up > 6months
48 AO A type fractures / 23 AO C type fractures.
Average age : 70.7 years old(50-88)

Results

Neurological complication

✓ 7 patients SBRN disorder

5 minor disorder (Asymptomatic sensory hypoesthesia)
2 SBRN neuritis (Sensory neuritis / resolved spontaneously)

✓ 2 patients carpal tunnel syndrome
(Diagnosed clinically / resolved spontaneously)

9 patients (12.7%) had neurological complication rates

Tendinous complications

✓ 3 patients trigger finger at the A1 pulley
(Needed injection of triamcinolone)

No synovitis or tendon rupture around the fracture site
No hardware removal.

3 patients (4.2%) had tendinous complications

Skeletal and joint complications

One patient had malunion with postoperative volar displacement.
(Good functional recovery / No need corrective osteotomy)



To avoid complication



Previous report
SBRN was dissected and retracted



Our new method
(SBRN left in adipose tissue)

Radial nerve should be left in adipofascial tissue and not be dissected.



Fractures of wide medullary canal

Fixed with large sized implant.

Conclusions

- ✓ Total complication rate of intramedullary fixation is 18%
- ✓ There were no major complication requiring secondary surgical intervention.
- ✓ Intramedullary fixation was free from hardware irritation, but common complication such as CaTs could be encountered.