Arthroscopic Treatment of Intraosseous Lunate Ganglion

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No conflict of interest to disclose
Lunate Bone Ganglion : Diagnosis

• Chronic painful wrist
• No trauma
• Good ROM
• Decreased strength

• X-rays
• CT scan
• MRI
• Scintigraphy
Arthroscopic bone grafting (ABG) For Intraosseous Lunate Bone Ganglion (ILBG)

• Loco-regional anesthesia
• Tourniquet
• Outpatient basis
• No stitches
• Graft harvested from distal radius

Approach through the distal portion of the SLIOL
Identification of location with needle
Ganglion curetage
Introduction of trocar
Grafting of the lunate
Material and methods

• 13 patients: 6 female, 7 male
• 7 right – 6 left: 8 dominant hands
• 5 manual workers; 8 sedentaries

• Mean age 33 (17 – 52)
• Average follow-up: 36 months (12–72)
Results

• Time to union: 6.2 weeks (5 – 8)
• No nonunion

• Increased ROM
  • Extension 69.6 (60 – 90) → 83.8 (75 – 90) p=0.004
  • Flexion 66.5 (60 – 85) → 84.6 (65 – 90) p=0.002

• Grip strength (% of contralateral side)
  • 66 (33 – 117) → 101 (67 – 125) p=0.002

Pain VAS:
  6.3 → 0.2 (p=0.002)

DASH score:
  36.4 → 2.3 (p=0.002)
Clinical case

• 29y old male, right handed, Hi-Tec operator
• Ache and pains in right wrist localized centrally and volarly
• Getting worse after exercise lasting 1 year already
• There are days without pains at all
Clinical case

• Follow-up 4 years
• Full ROM
• Full use of the hand in ADL
• Some minor soreness in the wrist
Clinical case

- 25 y-old female, nurse
- Severe pains in left wrist localized centrally and dorsally,
- Normal ROM.
- Decreased strength
Clinical case

• Follow-up 2 years
• Full ROM
• No pain
• Normal strength
CONCLUSION

• Arthroscopic bone grafting for intraosseus lunate bone ganglion, is a reliable and safe procedure.

• The technique is simple, easiest and more accurate than open procedure

• Long-term follow-up shows very satisfactory results
Merci