

Dorsal Wrist Ganglion: Aspiration vs PRP

Dorsal Wrist Ganglion: Pilot for Randomised Control Trial comparing aspiration alone or combined with injection of Platelet Rich Plasma.

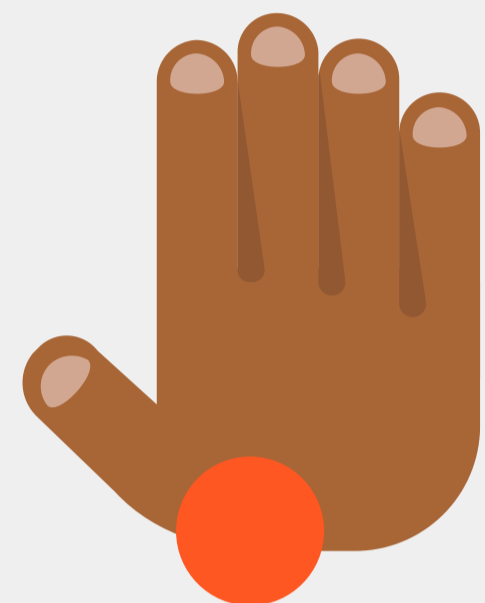
K Hamlin, Y Khan, A Haddon, C Miller, D Lawrie. Woodend Hospital - Aberdeen

Background

51%

of population

have ganglia on MRI



60-70%

of ganglia are located
on dorsum of the wrist

25%

complication rate

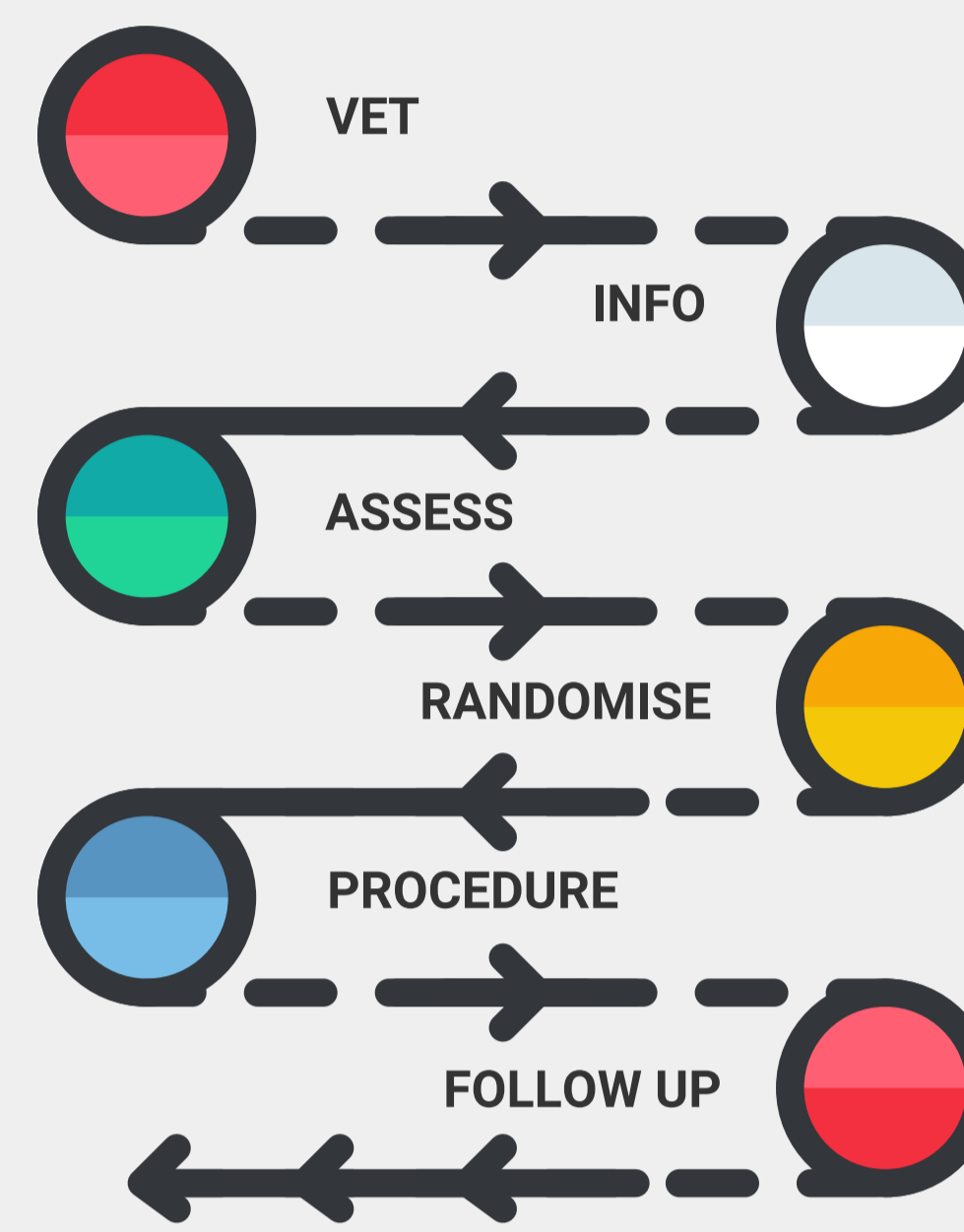
with surgical excision

30-50%

recurrence rate

for most treatments

Methods



Patient Cohort

- Identified at vetting
- Inclusion
 - Adults with solitary ganglion
- Exclusion
 - Ipsilateral upper limb pathology
 - Incapacity
- Sent study information
- Invited to one stop clinic

Outcomes

- 1 - Recurrence
- 2 - PEM Score

Follow up

- 6 Weeks
- 1 Year

Procedure



Randomisation

- After informed consent
- Sealed envelopes

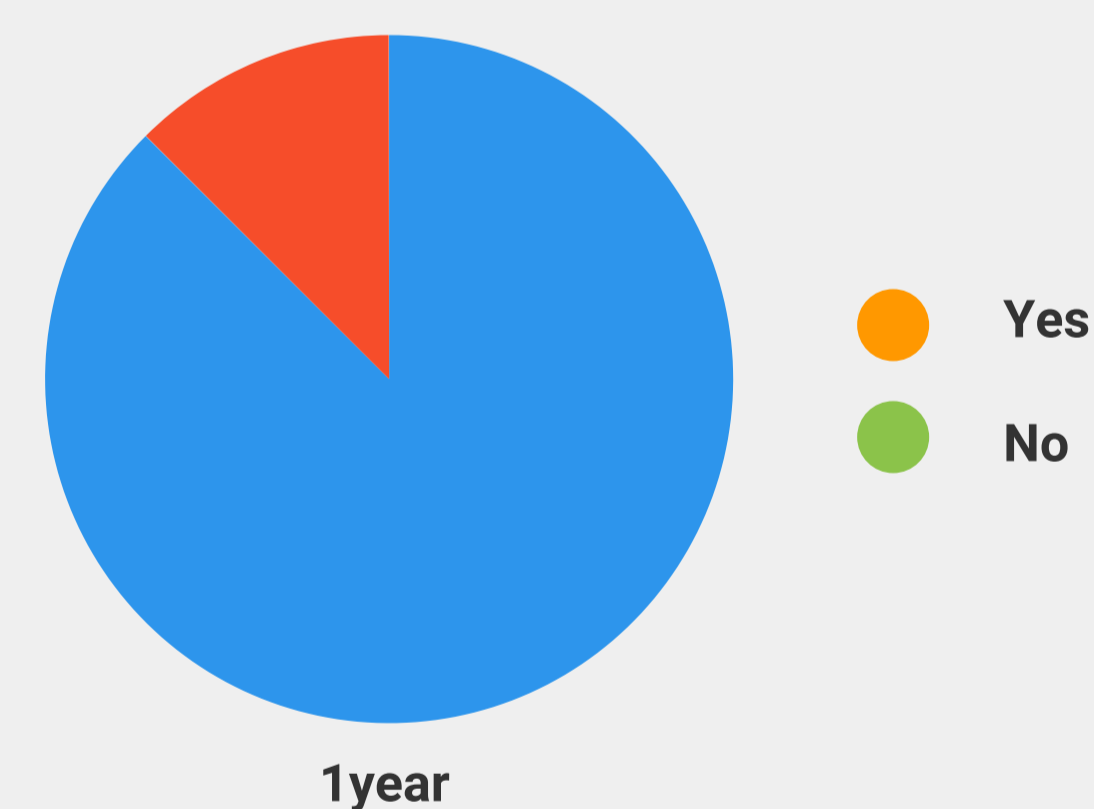
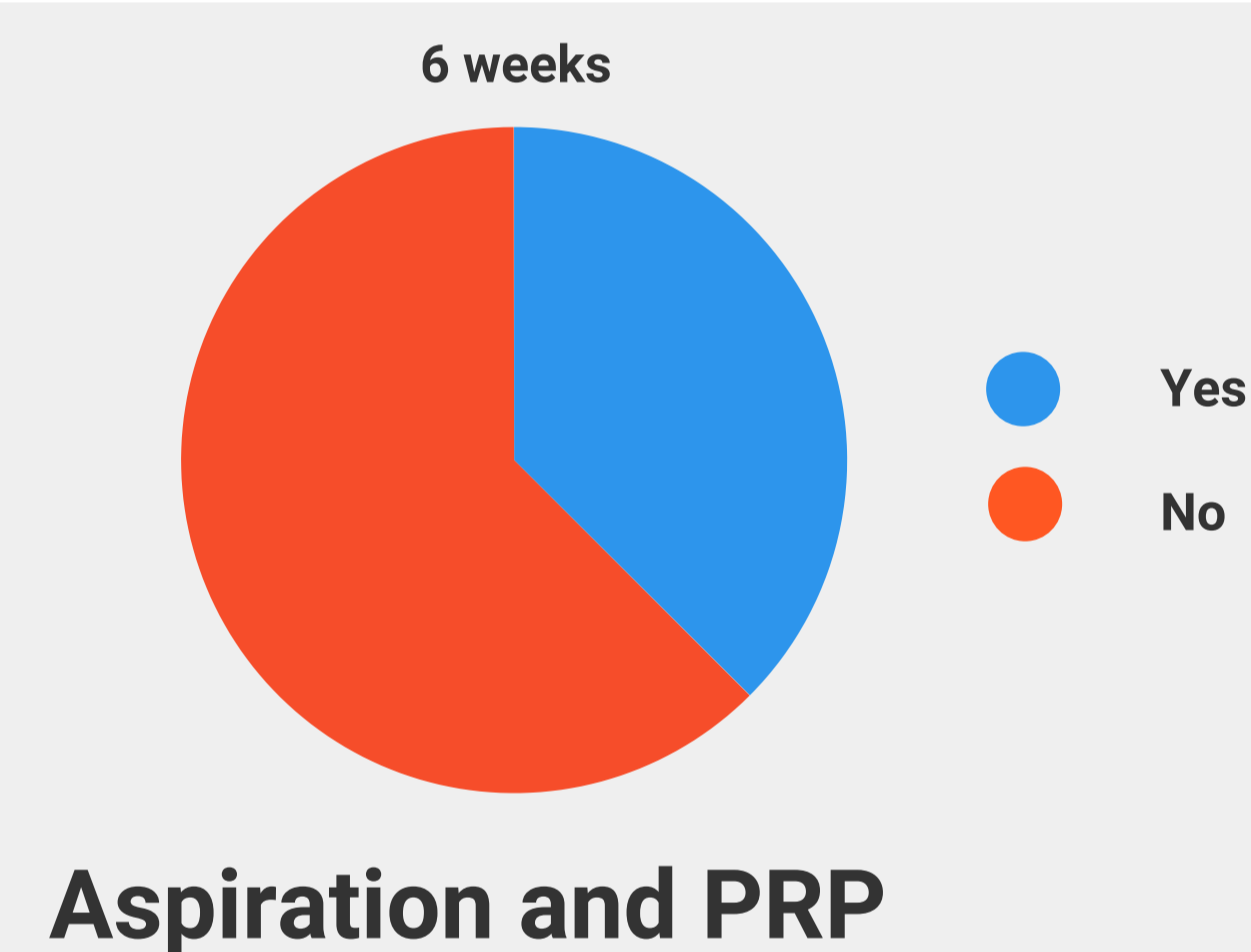
Aspiration Alone n = 8

- 19 g needle
- Single pass
- Compression for 24 hours

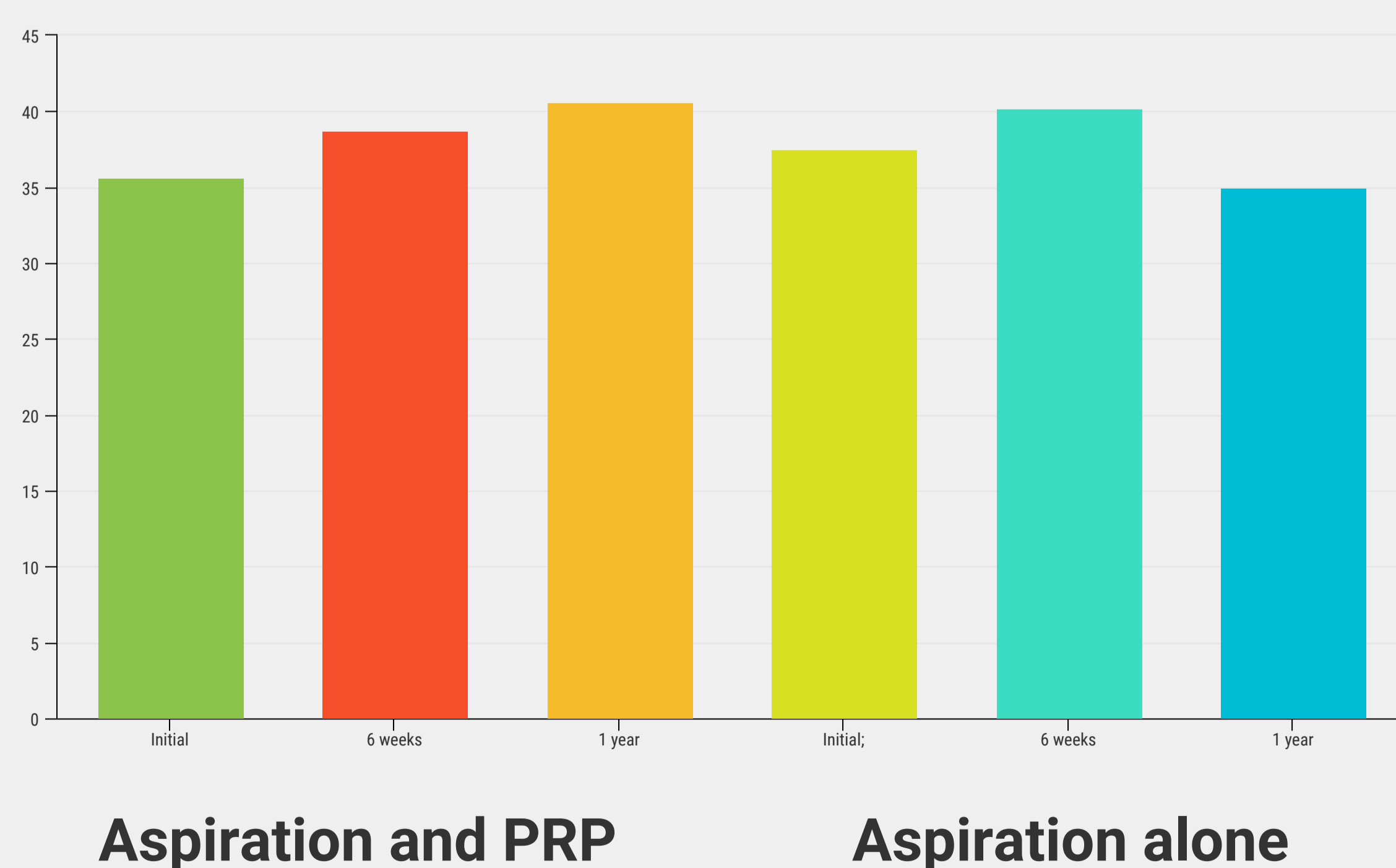
Aspiration with PRP n = 9 (1 no follow up)

- 19 g needle
- Single pass
- 15ml blood collected
- Centrifuged to produce PRP sample
- Inject same volume as aspirated
- Compression for 24 hours

Results: Recurrence



Results : PEM Score



Conclusion

- The addition of PRP to aspiration did not improve recurrence rates.
- A full RCT would require a group size of 46 to detect a difference of 35% and 91 for 25%.
- 33% recruitment from written invitation to one stop clinic and a 10% drop out rate.
- PRP is more expensive and requires secondary care input.

References

- Angelides AC, Wallace PF. The dorsal ganglion of the wrist its pathogenesis, gross and microscopic anatomy, and surgical treatment. J Hand Surg. 1976;1(3): 228-235.
- Gude W, Morelli V. Ganglion cysts of the wrist: pathophysiology, clinical picture, and management. Curr Rev Musculoskelet. 2008. Med 1. 205-211.
- Lowden CM, Attiah M, Garvin G, Macdermid JC, Osman S, Faber KJ. The prevalence of wrist ganglia in an asymptomatic population: magnetic resonance evaluation. J Hand Surg Br. 2005 vol.30(3)pp. 302-6.