

Ultrasound-Guided Hydrodissection Provides Complete Symptom Resolution in Radial Tunnel Syndrome

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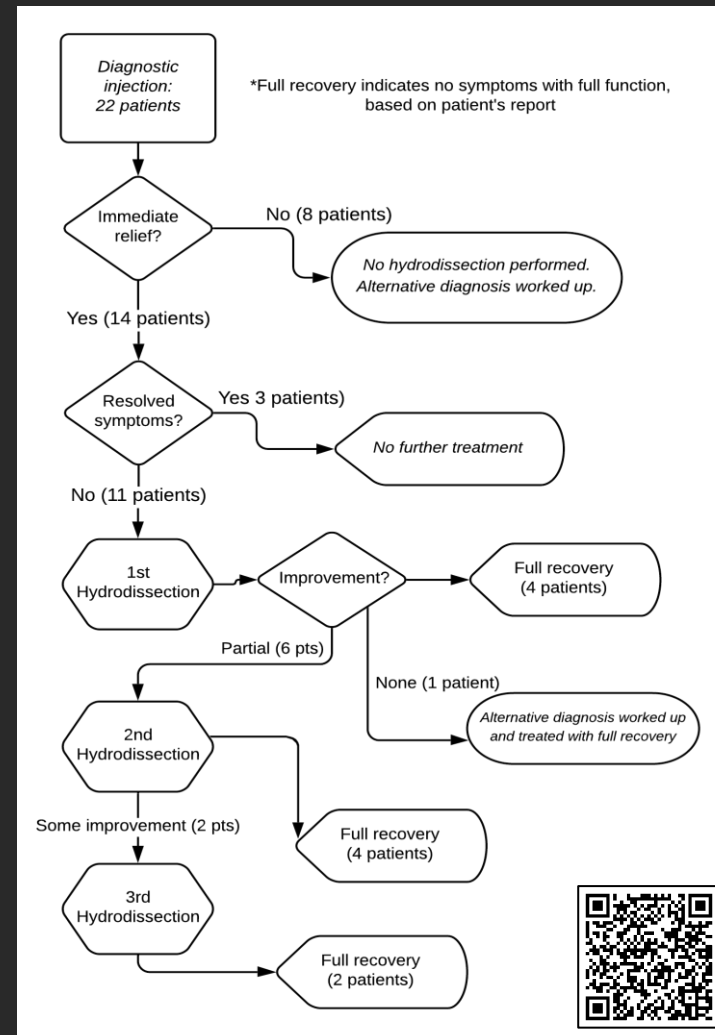
Objective

To determine if ultrasound-guided hydrodissection (HD) can resolve symptoms and reduce the need for surgery in radial tunnel syndrome (RTS).

Methods

- Retrospective chart review in a private PM&R sports medicine practice for “radial tunnel syndrome.”
- Included cases used ultrasound-guided diagnostic injection into radial tunnel:
2cc 1% lidocaine and 40mg methylprednisolone
- Surgical candidates, defined as cases with over 80% but temporary relief after the diagnostic injection, were treated with HD:
40mg methylprednisolone, 2ml 1% lidocaine,
NS for 10-15ml total injectate
- If sustained but temporary relief was achieved, additional HD sessions were offered.

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|--|---|
| Age | Average: 40.5 years Minimum: 18 years Maximum: 69 years |
| Sex | Female: 13 Male: 9 |
| BMI | Average: 30.0 kg/m ² Median: 29.5 kg/m ² |
| Duration of symptoms prior to injection(s) | Average: 24.3 months Median: 13.0 months Min: 3.5 months Max: 144 months |

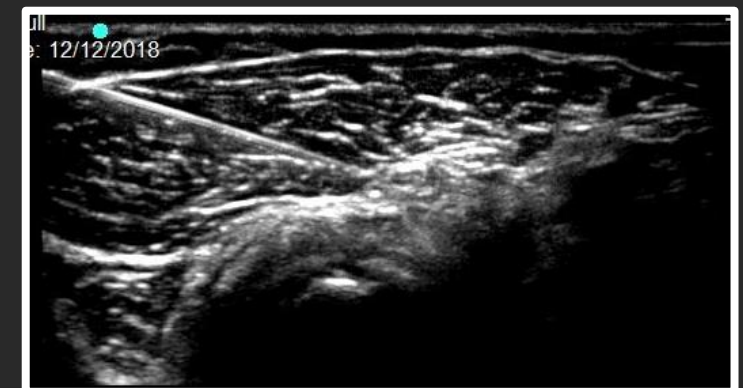


Results

- 22 patients received diagnostic injection in the radial tunnel.
- 8 patients denied immediate improvement in symptoms.
 - An alternative diagnosis was considered
- 14 individuals had significant immediate relief.
 - 3 with complete and lasting symptom resolution
- 11 patients subsequently received HD of the radial tunnel. Complete symptom resolution was achieved after:
 - 1 session for 4 patients
 - 2 sessions for 4 patients
 - 3 sessions for 2 patients
- No adverse effects were noted. All HD patients experienced complete and lasting symptom resolution and none required surgery.

Conclusion

- Ultrasound-guided HD of the radial tunnel is a surgery-sparing treatment that provides lasting symptom resolution in RTS.



22g needle placed in “short-access” adjacent to the posterior interosseus nerve at the level of the proximal supinator