

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

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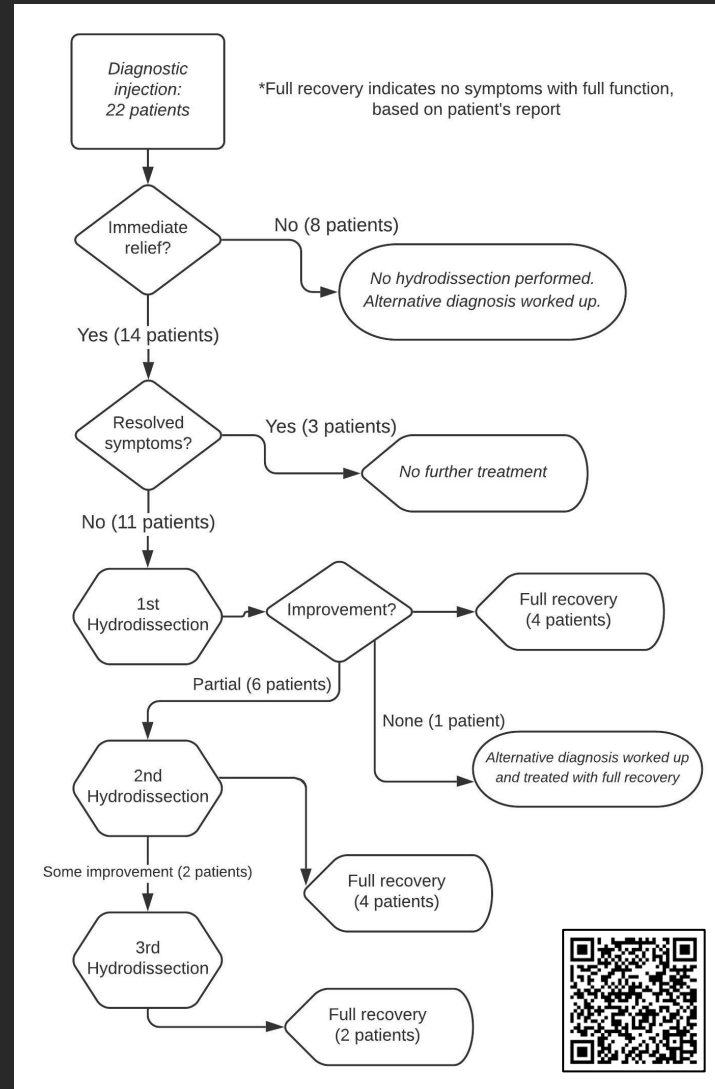
## Objective

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.

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

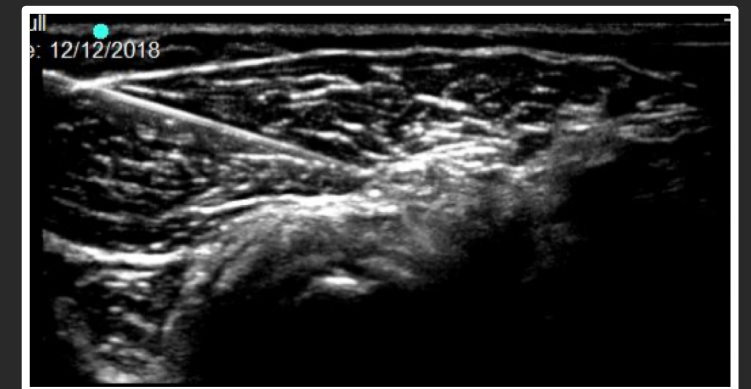


## Results

- 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