

Peripheral nerve injections for the treatment of upper extremity complex regional pain syndrome (CRPS) – feasibility study

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Background

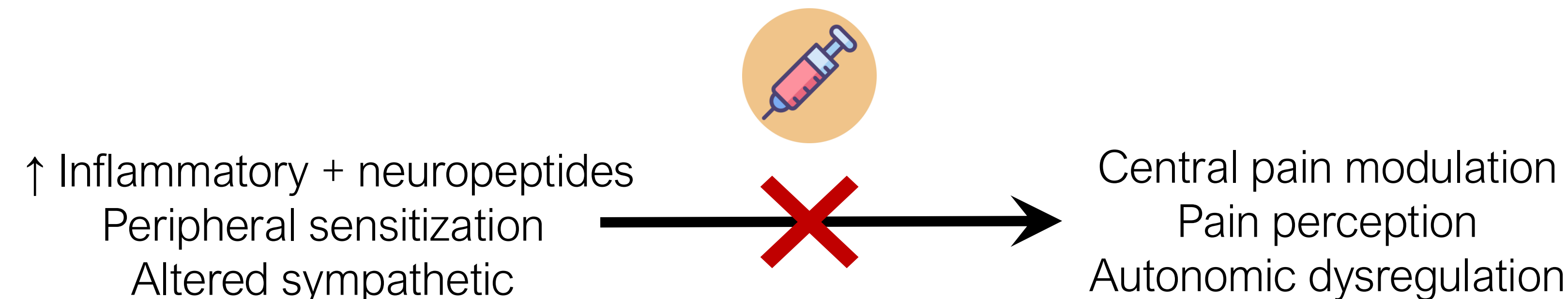
- CRPS is a challenging diagnosis underscored by our limited understanding of its underlying pathophysiology¹⁻³
- Given the multi-factorial processes likely at play, multiple treatments have been explored with either ineffective or non-robust levels of evidence

A need remains to identify an evidence-based treatment approach

Hypothesis

It is feasible to run an RCT to evaluate the effectiveness of peripheral nerve injections for the treatment of upper extremity CRPS

Rationale

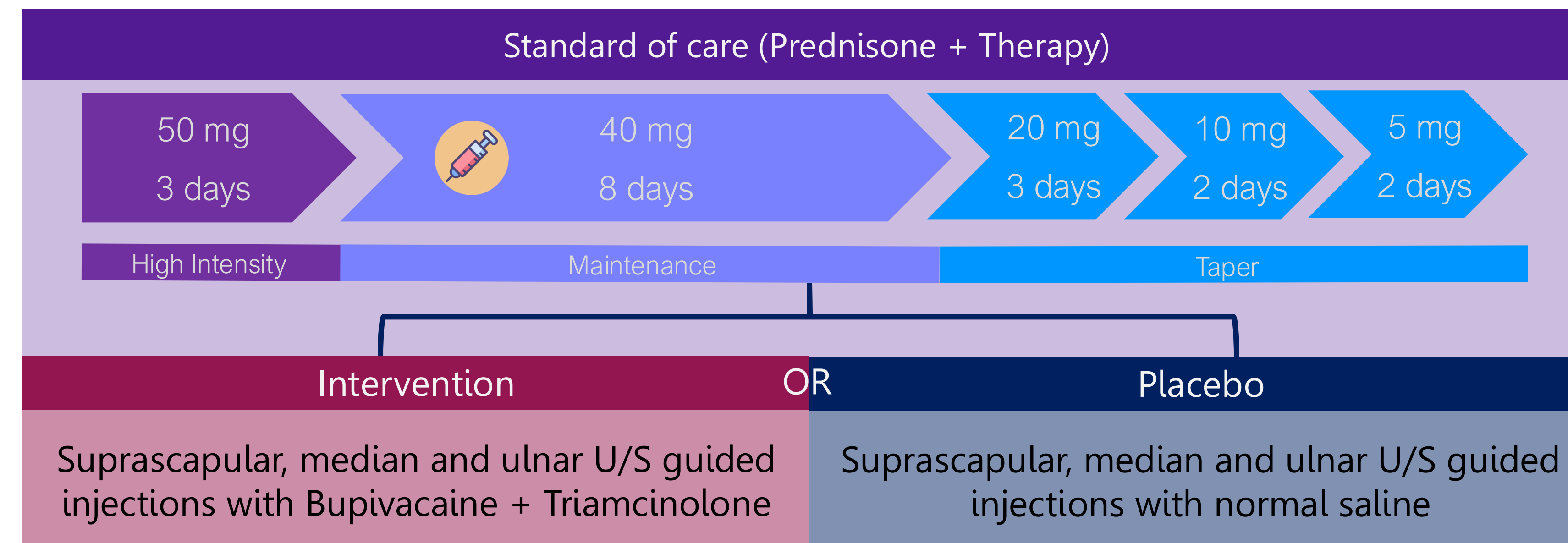


Effective in other MSK and neurological conditions⁴⁻⁵
Early evidence in SHS that suggests potential benefit⁶



Confirmed tolerability of ultrasound guided injections within the CRPS population⁷

Methods



PRIMARY OUTCOMES

- Recruitment
- Randomization
- Blinding
- Retention
- Rate of data completion
- Adverse events

SECONDARY OUTCOMES

- Pain Reduction [Visual analogue]
- Disease Severity [CRPS Severity Score]
- Function [PROMIS 29 + DASH]
- Emotion/Psychological [PROMIS 29 + EQ]
- QoL [EQ-5D-5L]

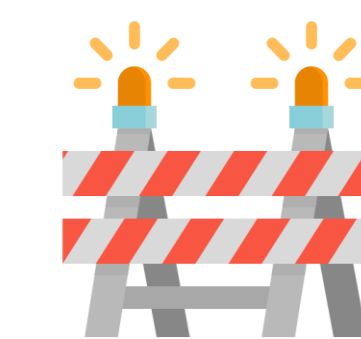


ENDPOINTS

Baseline → before injection → 1hr post injection → 2, 6, 12 weeks post-injection

Barriers & Lessons Learned

- Small sample size
- Rapid improvement with oral prednisone
- Patients not in favor of intervention
- Patients hesitant with the chance of placebo intervention
- Patients already referred for intervention



Alternative study designs (e.g. observational retrospective cohort) **may be a more feasible approach to build an initial evidence base** for interventional management in CRPS

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