# Botulinum toxin for subacute/chronic neck pain (2011)

Pierre Langevin, Paul Michael J Peloso, Janet Lowcock, May Nolan, Jeff Weber, Anita Gross, John Roberts, Charles H Goldsmith, Nadine Graham, Stephen J Burnie, Ted Haines





Research Excellence Advancing Employee Health

## Overview of the study

#### **Objectives**

• To systematically evaluate the literature on the treatment effectiveness of botulinum toxin (BoNT) for neck pain

#### Methods

- Evidence current up to 20 September 2010
- Participants: Adults with subacute or chronic neck pain\*
- Intervention: BoNT intra-muscular injections
- Outcomes measured
- Primary outcomes: pain relief, disability and function
- Secondary outcomes: patient satisfaction, global perceived effect, quality of life



<sup>\*</sup>neck pain without radicular findings, including non-specific neck pain of unknown etiology; mechanical neck pain, neck pain associated with myofascial pain syndrome, neck pain with degenerative change, and cervicogenic headache

#### Botulinum toxin for subacute/chronic neck pain

Langevin et al. (2011)

### **Results & Conclusion**

• 9 trials (530 participants) included:

Treatment	Evidence	Quality of evidence
BoNT type A	Little or no difference in pain between the treatment and saline injections at four weeks and six months for chronic neck pain	High
	Little or no difference between the treatment and placebo at four weeks and six months for chronic cervicogenic headache	Very low
BoNT-A combined with physiotherapeutic exercise and analgesics	Little or no difference in pain between the treatment and saline injection with physiotherapeutic exercise and analgesics for patients with chronic neck pain	Very low

⇒ No evidence confirms either a clinically important or a strategically significant benefit of BoNT-A injection for chronic back pain associated with or without cervicogenic headache