

ASSESSING THE ROLE OF MASSETER BOTULINUM TOXIN INJECTIONS IN THE MANAGEMENT OF CHRONIC MIGRAINE: A RETROSPECTIVE SINGLE CLINIC OBSERVATIONAL STUDY

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Introduction

- Patients with chronic migraines have a high prevalence of myofascial pain which may contribute to migraine attacks
- Of these patients, many specify the masseter muscles as sources of myofascial pain.
- Masseter BoTN/A has been studied in myofascial pain in temporomandibular disorders, but not in chronic migraine.
- **This study assesses masseter BoTN/A in chronic migraine with masseter pain.**

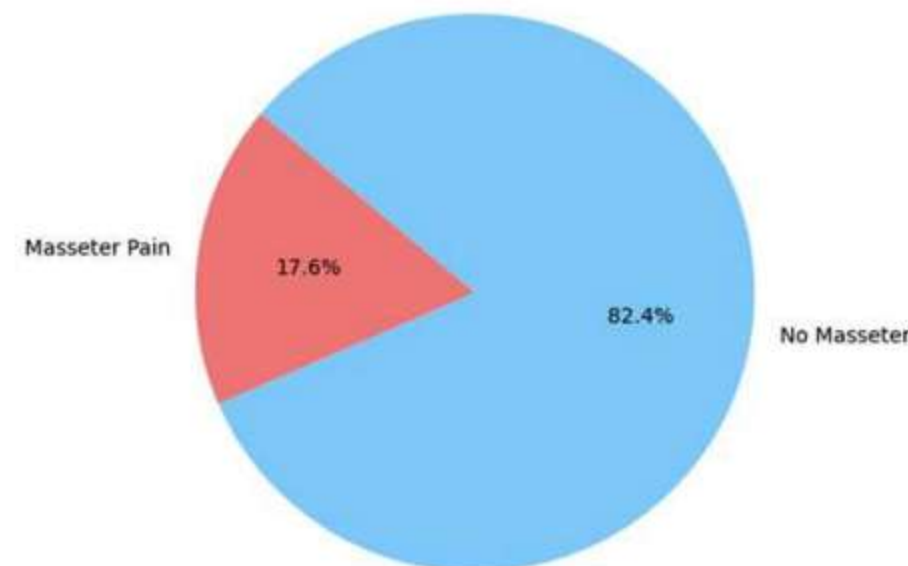
Methods

- Retrospective case series at a tertiary headache and pain clinic.
- Patients receiving BoTN/A for migraines who described myofascial pain of the masseters contributing to their headaches received BoTN/A in the bilateral masseters over one year were included.
- Response to therapy was obtained from review of clinic notes, including numeric rating scale, percentage improvement, as well as decrease in headache and migraine days.

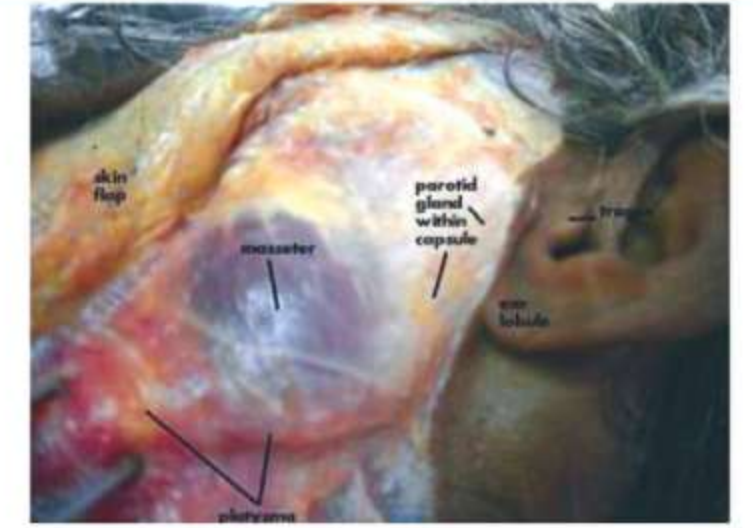
Results

- 170 chronic migraine charts reviewed;
- 30 (17.6%) patients reported myofascial pain in the masseters as an active contributor to migraine attacks and agreed to bilateral masseter BoTN/A injections
- Patients an average of 12U per side, range 5-20U.
- 28/30 patients had received BoTN/A in the masseters multiple times prior to the study period.
- 30/30 reported reduced headache frequency and/or intensity and requested repeat masseter injections.
- No adverse effects reported.

Proportion Reporting Masseter Pain Contributing to Migraines



Injection Technique



- The muscle was palpated with the patient biting down.
- 5U were injected per target site. Those who got 20U had 4 injections within the muscle about 0.5cm to 1cm apart
- The posterior border of the masseter was avoided to remain anterior of the parotid gland.
- The inferior portion was avoided due to remain superior to the marginal mandibular nerve.

Discussion

- **Masseter BoTN/A injections may be beneficial in reducing the frequency and severity of migraine attacks in chronic migraine patients reporting myofascial pain in the masseters.**
- Findings support further research into masseter-targeted BoTN/A in those with myofascial TMD and chronic management.