

# AB036. SOH22ABS109. TOxin for treating Raynaud's conditions in hands (the TORCH study)

# Ellen Geary<sup>1</sup>, Kealan Blake<sup>1</sup>, Colin Morrison<sup>1</sup>, Roisin Dolan<sup>1</sup>, Sean Carroll<sup>1</sup>, Catriona Lawlor<sup>1</sup>, Carol Orr<sup>2</sup>

<sup>1</sup>Plastic and Reconstructive Surgery Department, St. Vincent's University Hospital, Dublin, Ireland; <sup>2</sup>Rheumatology Department, St. Vincent's University Hospital, Dublin, Ireland

**Background:** Raynaud's condition of the hands is a complex disorder resulting in inappropriate constriction or insufficient dilation in microcirculation which can have a debilitating impact on a patient's quality of life. A potential breakthrough in treatment for this condition could be found in botulinum toxin type-A (BXT-A). We aim to assess the efficacy of BXT-A to treat patients living with Raynaud's conditions. Secondarily we aim for this data to provide guidance for clinicians using of botulinum toxin type A in the treatment of Raynaud's condition of the hands.

**Methods:** This is a multicentre trial and so patients with symptomatic Raynaud's condition resistant after one treatment are selected from Rheumatological Sclerosis Clinics. Participants will receive BXT-A in one randomly selected hand and sterile saline in the opposite hand. In person follow up will be conducted at week 6 and week 12 post injection. In person visits will include non-invasive laser Doppler Imagining, digital pulse pressure and thermal camera imaging. Patient reported outcomes will be collated specially for each hand, using (The disability of the arms, shoulders and hands (DASH) score, visual analogue scale (VAS), Raynaud's Condition Score).

**Results:** A pilot study was undertaken at St. Vincent's University Hospital (SVUH) demonstrated that patients

reported significant improvements in daily function due to a reduction in oedema, an increased range of motion and significant healing of digital ulcers. Our recent systematic review results also agreed with these findings.

**Conclusions:** In conclusion this study aims to demonstrate the potential benefits of botulinum toxin type A as treatment for Raynaud's condition of the hands.

**Keywords:** TOxin for treating Raynaud's conditions in hands (TORCH); Raynaud's disease; botulinum toxin type-A (BXT-A); botulinum toxin; Raynaud's

## **Acknowledgments**

Funding: None.

### Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

*Open Access Statement:* This is an Open Access article distributed in accordance with the Creative Commons Attribution-NonCommercial-NoDerivs 4.0 International License (CC BY-NC-ND 4.0), which permits the non-commercial replication and distribution of the article with the strict proviso that no changes or edits are made and the original work is properly cited (including links to both the formal publication through the relevant DOI and the license). See: https://creativecommons.org/licenses/by-nc-nd/4.0/.

### doi: 10.21037/map-22-ab036

**Cite this abstract as:** Geary E, Blake K, Morrison C, Dolan R, Carroll S, Lawlor C, Orr C. AB036. SOH22ABS109. TOxin for treating Raynaud's conditions in hands (the TORCH study). Mesentery Peritoneum 2022;6:AB036.