



AB067. SOH23ABS_182. Sodium tetradecyl sulphate vs. polidocanol: identifying the ideal sclerosant agent

Ahmmad Alfatih Ahmmad, Nathalie Doolan,
Daniel Westby, Stewart Walsh, Munzir Akasha

Department of Vascular Surgery, University Hospital Galway, Galway,
Ireland

Background: Sclerosant agents are used as an effective therapeutic modality for varicose veins both as foam and in mechanochemical ablation (MOCA). With no published randomized trials comparing sclerosant agents the aim of this study was to compare varicose vein recurrence rates and complications between two sclerosants: polidocanol (POL) and sodium tetradecyl sulphate (STS).

Methods: We performed a retrospective review of all patients who underwent varicose vein treatment between September 2015 and September 2016. Operative logs and patient records were searched to gather baseline patient characteristics. The primary outcome was recurrence at any time. Secondary outcomes included recurrence, representation to clinic, phlebitis, hard lumps, brown staining, deep veins thrombosis (DVT), pulmonary embolism (PE), and overall patient satisfaction.

Results: In the study period 425 patients were treated with sclerosant: 210 with POL and 215 with STS. Recurrence rate was 43% in POL and 25% in STS ($P=0.001$). Further breakdown by sex showed recurrence of 41% in females *vs.* 53% in males with POL, and 27% female *vs.* 32% males with STS. Complications of hard lumps (4.2% POL, 2.3% STS, $P=0.257$), phlebitis (1.9% POL, 2.7% STS, $P=0.547$), brown staining (1.9% POL, 1.8% STS, $P=0.973$), and DVT/PE (0% POL, 0.9% STS) were not significantly different between groups. The overall satisfaction rates

were 51% with POL and 69% with STS ($P=0.0001$).

Conclusions: The use of STS is associated with a significantly lower rate of recurrence and higher satisfaction rates than POL. There was no significant difference in complication rates between groups. We recommend the use of STS when using foam to treat varicose veins.

Keywords: Sclerosant; sodium tetradecyl sulphate (STS); polidocanol (POL); varicose veins; mechanochemical ablation (MOCA)

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-23-ab067

Cite this abstract as: Ahmmad AA, Doolan N, Westby D, Walsh S, Akasha M. AB067. SOH23ABS_182. Sodium tetradecyl sulphate *vs.* polidocanol: identifying the ideal sclerosant agent. *Mesentery Peritoneum* 2023;7:AB067.