

AB045. SOH21AS211. Systematic review on the incidence and management of endovenous heat induced thrombosis (EHIT) following endovenous thermal ablation of the great saphenous vein

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Background: Thrombotic complications are thought to occur infrequently following endovenous thermal ablation (EVTA), however large numbers of procedures are performed worldwide necessitating a need for further research on their incidence and management. A systematic review and meta-analysis were carried out to determine the incidence of endovenous heat induced thrombosis (EHIT) and to evaluate its management following EVTA of the great saphenous vein (GSV).

Methods: MEDLINE and Embase were searched for studies with at least 100 patients who underwent GSV EVTA and had duplex ultrasound (DUS) follow up within 30 days. Data was gathered on the incidence of thrombotic complications and on the management of cases of EHIT. The primary outcome for the meta-analysis was EHIT types 2–4 and secondary outcomes were deep venous thrombotic events, which was defined as types 2–4 EHIT, plus deep vein thrombosis (DVT), DVT and pulmonary embolism (PE).

Results: Seventy-five studies were included (23,265 patients). EHIT types 2–4 occurred in 1.27% of cases (95% CI: 0.74–1.93%). Deep venous thrombotic events occurred in 1.59% (95% CI: 0.95–2.4%). DVT occurred in

0.28% (95% CI: 0.18–0.4%). PE occurred in 0.11% (95% CI: 0.06–0.18%). 24/75 studies gave a description of the management strategy and outcomes for EHIT and there was no consensus regarding its management.

Conclusions: Recently published guidelines on EHIT from the Society for Vascular Surgery/American Venous Forum provide a framework to direct clinical decision-making. High quality evidence on the optimal treatment of EHIT is lacking and the true incidence may be underestimated by published data.

Keywords: Deep vein thrombosis (DVT); endovenous heat induced thrombosis (EHIT); endovenous thermal ablation (EVTA); great saphenous vein (GSV); incidence; management; meta-analysis; pulmonary embolus; systematic review

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.

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doi: 10.21037/map-21-ab045

Cite this abstract as: Twyford MA, Healy D, Moloney MA, Kavanagh EG. Systematic review on the incidence and management of endovenous heat induced thrombosis (EHIT) following endovenous thermal ablation of the great saphenous vein. *Mesentery Peritoneum* 2021;5:AB045.