



AB183. SOH22ABS239. 3-dimensional (3D) mapping-quantification of mesenteric and non-mesenteric domains

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Background: The mesentery has been demonstrated as a contiguous organ in prior studies allowing for 3-dimensional (3D) depictions to be created. This paper aims to demonstrate that the entire mesenteric domain and its attached organs can be 3D rendered allowing for quantification of the mesenteric and non-mesenteric domains.

Methods: Following informed consent and ethical approval, computed tomography (CT) scans (n=30) of the thorax, abdomen and pelvis were imported into Horos™. Using the pencil tool of the software, the mesenteric domain was traced around followed by each of the it's attached organs, leaving behind the non-mesenteric domain. Using the volume generation tool of the software, each of these parameters were then quantified to generate its corresponding volume in units of cubic centimetres (cm³).

Results: The mesenteric domain, it's attached mesenteric organs and the non-mesenteric domain of (n=30) CT scans of the thorax, abdomen and pelvis were quantified to generate their volume.

Conclusions: It is possible to generate volume of the

mesenteric domain, it's attached organs and the non-mesenteric domain from 2-dimensional CT scans. Such data can then be used to investigate the correlation between mesenteric and non-mesenteric volume with the prevalence of Ischemic heart disease.

Keywords: mesenteric domain; mesenteric organs; non-mesenteric domain; volume; quantification

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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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