

AB176. SOH21AS187. A systematic review of the role of hyperthermic intraperitoneal chemotherapy in the management of intraabdominal sarcomas

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Background: Peritoneal sarcomatosis is associated with morbidity and high mortality. The emergence of cytoreductive surgery (CRS) and hyperthermic intraperitoneal chemotherapy (HIPEC) in the successful management of other intraabdominal malignancies has provided a possible alternative for intraperitoneal sarcoma management. This potential role is difficult to establish and its efficacy remains poorly understood.

Methods: A systematic review of the literature following PRISMA guidelines for papers published between 1990–2020 focusing HIPEC for the treatment of intraperitoneal sarcoma yielding 44 articles suitable for inclusion. Data regarding overall survival (OS), disease free survival (DFS) and demographics were extracted and analysed with literature comparators.

Results: Forty-four studies were suitable for inclusion, 498 patients. Individual data was available for 381 patients; summative data was available for the remainder. Median age of patients was 46 [14–80]; 56% female. Pathologic diagnosis: myxoid liposarcoma (20.1%), GIST (20.1%), uterine leiomyosarcoma (19.1%), DSRCT (10%). Cisplatin + Doxorubicin was the most frequently used chemotherapeutic regimen (35%). The median DFS was 12 [1–77] months; median OS was 22 [1–172] months. OS and DFS varied according to underlying histological

diagnosis, the only randomised control trial to date did not highlight a survival benefit for HIPEC.

Conclusions: The available data does not support the use of HIPEC in management of sarcomatosis; Improved DFS was correlated to improved CRS. The heterogeneity of chemotherapeutic regimens and variability of sarcoma histology, makes the role of HIPEC in sarcomatosis difficult to truly establish. An organized multicentre approach targeting specific sarcoma histologies would be of benefit to definitively answer this question.

Keywords: Cytoreductive surgery (CRS); hyperthermic intraperitoneal chemotherapy (HIPEC); intraperitoneal chemotherapy; sarcoma

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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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