

**EP.TH.299****Is peritoneal lavage with water the optimal washout as a preventative method for peritoneal disease following colorectal cancer resection? A systematic review**

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**Aim:** To study available data on the advantages of peritoneal lavage with distilled water following colorectal cancer resection in improving overall patient outcomes

**Methods:** PubMed, Google Scholar, and Cochrane databases were searched until October 2020. References from relevant articles were reviewed to widen the search.

**Results:** Overall, 3 experimental studies were identified. Water was found to be superior to other peritoneal lavage solutions in inducing tumorigenic cell lysis in vitro. Mice who underwent peritoneal lavage with water survived longer and had a significantly reduced peritoneal tumour burden compared to mice who did not undergo lavage or those treated with saline lavage solution. Peritoneal secretions were found to contaminate water lavage and reduce its cell-lytic effect. Nonetheless, complete cell lysis was achieved, in vivo, by prolonging the time of cell exposure to contaminated lavage solution by 20 min.

**Conclusion:** Single peritoneal lavage with water is probably safe and may have a positive influence on patient outcomes. Further evidence is required to regard sequential peritoneal lavages with water as beneficial and safe in humans.