A Prospective Randomized Crossover Trial of Systemic Chemotherapy in Patients with Low-Grade Mucinous Appendiceal Adenocarcinoma

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Background

- Appendiceal adenocarcinoma (AA) is both a rare and heterogeneous tumor. The rarity of appendiceal adenocarcinoma has made it difficult to study with traditional prospective, randomized controlled trials as a result, current national guidelines still suggest that appendiceal cancer be treated similarly to colorectal cancer (CRC)
- While low-grade AA is primarily treated with surgical resection sometimes followed by hyperthermic intraperitoneal chemotherapy (HIPEC), many inoperable candidates are treated with systemic chemotherapy although there is no prospective data supporting this practice. The purpose of our study was to objectively evaluate the effectiveness of systemic chemotherapy in low-grade mucinous AA

Patients and Methods

- A randomized crossover trial of surgically unresectable low-grade mucinous AA was performed with patients randomized to either 6-months observation followed by 6 months of chemotherapy, or initial chemotherapy followed by observation
- Enrollment of up to 30 patients was planned to have complete follow-up of 12 months

Results

- A total of 24 patients were enrolled. The majority of patients were treated with either 5FU or capecitabine as single agent (n = 15, 63%); 3 (13%) received doublet chemotherapy (FOLFIRI or FOLFOX), bevacizumab was added to cytotoxic chemotherapy for 5 (21%) patients. Fifteen patients were available to evaluate primary endpoint of difference in tumor growth between treatment and observations

Conclusions

- There was no significant difference between observation and treatment periods for the percent change in CA19-9 levels, tumor size, and tumor markers between the two groups (B). Swimmer plots showing treatment history overtime for observation-first arm (C) and Treatment first arm (D). The pie chart shows the chemotherapy distribution patients received during the trial period

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