

AB068. SOH24AB_083. Retrospective analysis of pathological complete response following neo-adjuvant chemoradiotherapy or neo-adjuvant radiotherapy in locally advanced rectal cancer at a single Irish centre

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Background: Neo-adjuvant chemoradiotherapy followed by total mesorectal excision is the standard management of locally advanced rectal cancer (LARC). This can be associated with significant morbidity with bowel, urinary, and sexual dysfunction. Studies show a pathological complete response (pCR) rate of between 10–25% in patients receiving neo-adjuvant chemoradiotherapy. A retrospective analysis was conducted of all patients treated with neo-adjuvant chemoradiotherapy ± surgery at the Mid-Western Radiation Oncology Centre from 2018 to October 2023 to determine rates of pCR.

Methods: Patients who received neo-adjuvant radiotherapy for LARC between 2018 and October 2023 were selected for this study. The pCR of these patients was assessed. Patients who received neo-adjuvant chemoradiotherapy followed by additional neo-adjuvant chemotherapy were excluded from this study.

Results: A total of 76 patients were identified who met the above criteria. Seventy (92%) patients received neo-adjuvant chemoradiotherapy (50.4 Gy/28# plus oral capecitabine). Five (7%) patients received neo-adjuvant radiotherapy (50.4 Gy/28#) alone. One (1%) patient received neo-adjuvant chemoradiotherapy (50.4 Gy/28#) but could not tolerate capecitabine due to side effects. pCR was observed in 20 patients (26%). Seven patients were assessed using post neo-adjuvant treatment magnetic resonance imaging

(MRI) and biopsy to determine rates of complete response. The other 13 patients were assessed using post-operative specimens. Three patients showed complete response from neo-adjuvant radiotherapy alone. Sixteen patients who completed neo-adjuvant chemoradiotherapy showed complete response and 1 patient who commenced on chemoradiotherapy but stopped due to side effects from chemotherapy showed complete response.

Conclusions: This Irish based single centre study shows a high-normal rate of pCR in patients treated with neo-adjuvant radiotherapy ± chemotherapy with LARC (26% *vs.* 10–25%). These high response rates favour the introduction of watch-and-wait protocols such as those outlined in the Organ Preservation in Rectal Adenocarcinoma (OPRA) study.
Keywords: Pelvic radiotherapy; rectal cancer; Organ Preservation in Rectal Adenocarcinoma trial (OPRA trial); pelvic chemoradiotherapy; management of rectal cancer

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-24-ab068

Cite this abstract as: Madigan D, Walsh L, Korpanty G, Osman N, Coffey C, Condon E, Peirce C, El Bassiouni M. AB068. SOH24AB_083. Retrospective analysis of pathological complete response following neo-adjuvant chemoradiotherapy or neo-adjuvant radiotherapy in locally advanced rectal cancer at a single Irish centre. *Mesentery Peritoneum* 2024;8:AB068.