

TOTAL PELVIC EXENTERATION FOR LOCALLY ADVANCED AND RECURRENT RECTAL CANCER: UROLOGICAL OUTCOMES AND ADVERSE EVENTS

Hypothesis / aims of study

Currently there is very little literature on urological outcomes and morbidity rates following total pelvic exenteration (TPE) surgery. Furthermore complications following urinary diversion are poorly understood in those who underwent TPE. This study assesses the outcomes of urinary tract reconstruction following total pelvic exenteration for advanced or recurrent rectal cancer, and those who received prior chemoradiation, focussing on adverse events and urological complications.

Study design, materials and methods

A total of 106 patients who underwent TPE for primary advanced or recurrent rectal cancer at our centre from 2004 to 2016 were included in this single centre retrospective study. Our database was analysed to identify those who experienced urological complications following surgery. Electronic patient records and paper notes were also evaluated for data extraction. Finally community practitioners were contacted to assess any further complications that occurred when patients were discharged. Outcomes between patient groups were compared using unpaired t-tests with a threshold of significance of $p < 0.05$.

Results

75 males (median age 61, range 38-84) and 31 females (median age 63, range 41-74) were identified in the study. 63% received chemoradiation prior to TPE. 101 patients (95%) received an incontinent diversion, including ninety-six ileal conduits and five colonic conduits. Three (2.8%) patients received a continent diversion (Penn pouch with Mitrofanoff). The mean follow up in our series was 36.5 months (3-60 months).

The urological complication rate in our series was 54%. The majority of complications had a Clavien-Dindo score of 2 (38%), whilst five patients (6%) sustained Clavien-Dindo 4 complications. The most common complications were urinary tract infection (31%) and pelvic collections (19%). Ureteric strictures were seen in 7%, fistulas in 11% and re-operation rates at 16% for the cohort. No significant differences were seen in urological outcomes in patients with primary or recurrent rectal cancer ($p=0.25$), or chemo-radiation status ($p=0.99$).

Interpretation of results

Surprisingly our data has shown that urological outcomes are similar in those with primary and recurrent rectal cancer, as well as those who did and did not receive chemoradiation. This may be attributable to high dissection of ureters and choice of bowel segments outside the radiation field.

Concluding message

Our TPE cohort had acceptable urological outcomes and complication rates with no significant difference between primary and recurrent rectal cancer, and those receiving chemoradiation. The majority of complications were related to infection requiring pharmacological intervention. Nevertheless, patients should be well informed of the high rates of complication (54%) following TPE surgery.

Disclosures

Funding: None **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** retrospective analysis looking at risk factors in patients who had already been treated as standard of care **Helsinki:** Yes **Informed Consent:** No