Technique Of Excision Of Urachal Carcinoma During Partial Cystectomy

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Citation

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Abstract

Urachal carcinoma is a rare form of bladder cancer that is associated with a poorer prognosis than transitional carcinoma of the bladder. Partial cystectomy for urachal carcinoma has been shown to be oncologically equivalent to radical cystectomy provided there are negative surgical margins. We present a case using a technique to achieve macroscopic negative margins and preserve bladder capacity.

INTRODUCTION

Urachal carcinoma represents less than 1% of bladder tumours. These tumours present later and have a poorer prognosis than transitional cell carcinoma. Despite this partial cystectomy has been shown to have oncological outcomes that are comparable to radical cystectomy provided the surgical margins are free of tumour and concurrent umbilectomy is performed. 1 Described below is a technique to achieve negative surgical margins and preserve bladder capacity during partial cystectomy for urachal carcinoma.

CASE

48yo man who presented to his local emergency department with suspected renal colic. He underwent a non-contrast CT that demonstrated a lesion at the dome of the bladder. Cystoscopy confirmed a solitary tumour at the dome of the bladder. The remainder of the bladder was normal. The tumour was resected and the histopathology confirmed a muscle invasive moderately differentiated adenocarcinoma. Staging CT scans confirmed nil metastatic spread.

Figure 1

Axial CT image

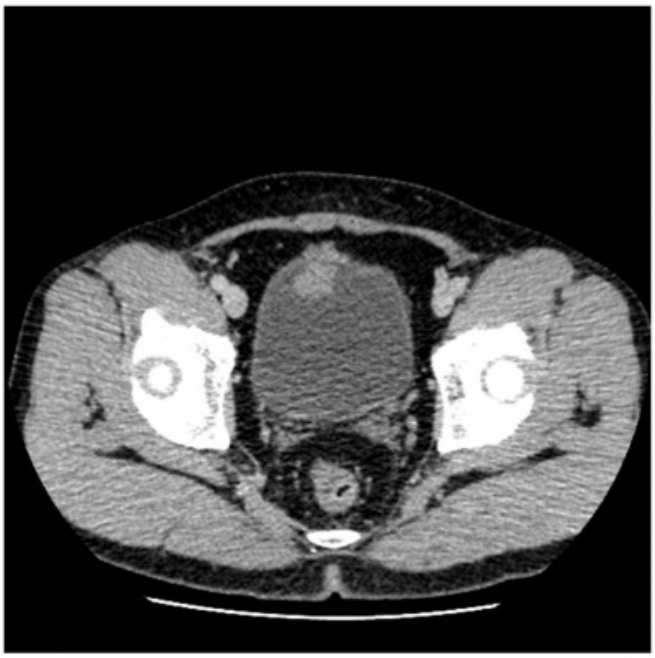
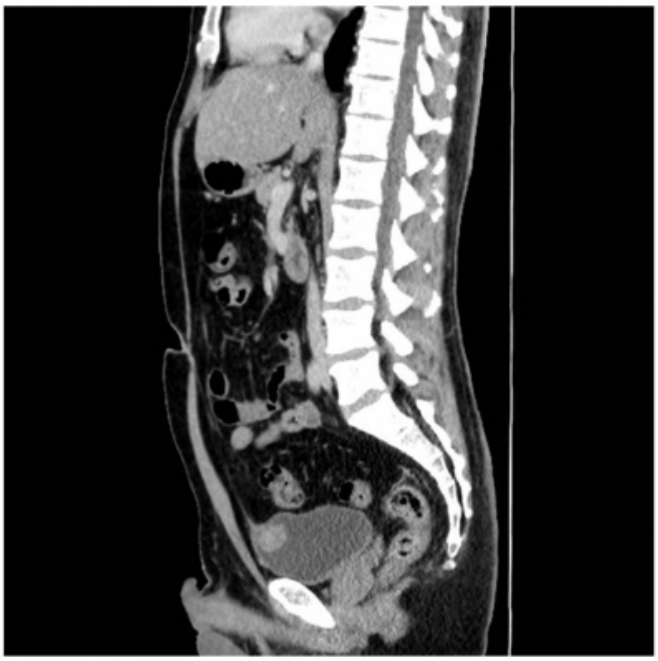


Figure 2

Sagittal CT image



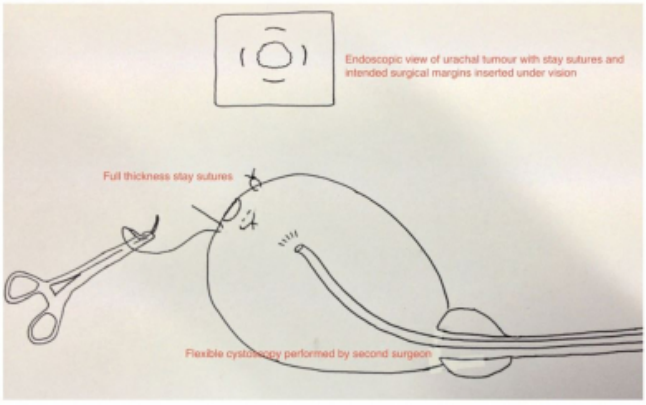
PROCEDURE

The patient was placed in the supine position with a central break in the table to optimize pelvic access. Lower midline incision was made including the umbilicus as an ellipse. The entire urachal remnant and its peritoneal attachments were identified and isolated. At this point the secondary surgeon performed a flexible cystoscopy and the tumour was identified endoscopically. With the bladder distended and under endoscopic vision 4 Vicryl stay sutures were placed full thickness through bladder wall including the mucosa by the primary surgeon leaving an estimated 1-2 cm margin around the tumour (shown below). These sutures were left as stay sutures and then used as a guide to determine how much bladder needed to be removed. The primary surgeon then incised down onto the stay sutures with diathermy circumscribing the urachal tumour. The entire specimen including the partial cystectomy, entire urachal tract and umbilicus were removed en bloc.

The postoperative course was uncomplicated and final histopathology confirmed adenocarcinoma of the distal urachus completely excised with negative surgical margins.

Figure 3

Schematic of proposed technique



CONCLUSION

The aforementioned technique of introducing full thickness stay sutures under endoscopic vision to ensure adequate margins and maximize bladder capacity has proved effective in the management of urachal carcinoma with partial cystectomy in this case.

References

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