Pulmonary Recurrence of Urachal Carcinoma

Sir,

We read with great interest the well-written and interesting case report by Sullivan et al describing the rare bladder neoplasm, urachal adenocarcinoma, in a young female[1]. In the case outlined by the authors, local recurrence occurred at 20 months following initial treatment with partial cystectomy, urachectomy and 9 cycles of adjuvant chemotherapy. We would like to share with the readers a similar case of this rare malignancy encountered at our institution where a resected urachal adenocarcinoma re-presented with metastasis to the lung.

A 34-year-old woman was investigated for subfertility. She had a 6-month history of intermittent dysuria and dyspareunia and was a non-smoker. Abdominal exam noted mild abdominal distension and blood tests were within normal limits. A hysterosalpingogram was unremarkable and she was admitted as a day-case for laparoscopy. A large midline pelvic mass superior to the bladder dome was identified during surgery with biopsies showing moderately differentiated mucinous adenocarcinoma. Contrast-enhanced CT demonstrated a large, enhancing solid-cystic mass containing calcification at the bladder dome without evidence of metastatic disease. Cystoscopy confirmed the presence of an urachal cyst containing a villous adenoma with high grade dysplasia. The case was classified as carcinoma of the urachus (pT3b N0 M0 / IIIa Sheldon classification) on the basis of location, radiologic appearance and histology results. She underwent a successful en-bloc resection followed by adjuvant chemotherapy.

At 22 months post-treatment, a CT TAP revealed a 4 mm right lower lobe nodule that increased to 4 cms on subsequent imaging. No evidence of local recurrence was identified on CT. Biopsy demonstrated low nuclear grade adenocarcinoma containing mucin pools. When compared with the original pelvic resection specimen, the histopathology was consistent with urachal cancer recurrence and a right lower lobectomy was undertaken followed by 12 cycles of adjuvant FOLFOX. There was no radiological evidence of local or distant metastatic disease at 6 months post-operatively. Urachal cancer accounts for 1% of bladder cancers and has an annual incidence of 1 per 5 million[3,4].

Although the majority of patients with urachal carcinoma present with haematuria, up to 30% are asymptomatic or have nonspecific urinary symptoms[4] as was the case in our report. As a result, up to 30% have metastases at presentation[3,4]. Imaging plays a prominent role investigating urachal cancer as cystoscopy can be less reliable in diagnosing urachal compared with urothelial malignancy[2,4]. The presence of an enhancing mass arising from the bladder apex containing calcification and extending cranially, in the context of a biopsy demonstrating a mucin-producing adenocarcinoma, is highly suggestive of urachal cancer [2]

Urachal adenocarcinoma is an aggressive malignancy with an overall 5 year survival rate of 20%. Delayed diagnosis, a positive resection margin status and tumour recurrence are all predictors of shorter overall survival[3,4]. Increased awareness of urachal cancer is important, particularly in younger patients with prolonged or non-specific lower urinary tract symptoms, as early detection and surgical treatment with en-bloc resection have been shown to benefit survival[4]

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