Metastatic Merkel Cell Tumour to the Bladder

H. H. WOO,* J. D. KENCIAN**

Departments of *Urology and **Anatomical Pathology, Royal North Shore Hospital, St. Leonards, N.S.W., Australia

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Merkel cell tumour is becoming increasingly recognized. A case of Merkel cell tumour metastatic to the urinary bladder is presented. The primary site was a cutaneous lesion of the left hand which later metastasized to the axillary and supraclavicular lymph nodes before metastasizing to the bladder. This is believed to be the first reported case of metastatic Merkel cell tumour to the bladder.

Introduction

Merkel cell tumour is an aggressive cutaneous neoplasm. It most commonly occurs on the face and extremities of elderly adults as a single reddish and usually non-ulcerated lesion. Nodal metastasis is the most encountered form of spread and is reported to occur in as many as 67% of cases [1]. Distant metastases occur in 42% of cases [1] and have been reported to occur in the liver, lung, bone and brain [2, 3].

We report a case of metastatic Merkel cell tumour with the primary site being the skin of a finger and secondary disease presenting in the urinary bladder. From our review of the literature, we believe this to be the first reported case of a Merkel cell tumour metastatic to the urinary bladder.

Case report

A 71-year-old woman was transferred to our hospital with a four-day history of increasing macroscopic haematuria and was in clot retention which was unable to be relieved by irrigation catheters. There was no previous history of urological disorders. Merkel cell tumour of the fifth digit of the left hand had been diagnosed two years earlier. Subsequent to this she developed biopsy proven secondary deposits in her left axillary glands and cervical lymph glands. These were at this time being treated with external beam radiotherapy.

On examination, her vital signs were normal. She appeared pale, debilitated and was in obvious pain from clot retention. The abdomen was distended and a tender bladder was palpated, extending to the level of the umbilicus.
Vaginal examination confirmed a hard fixed mass anteriorly associated with the bladder. Hard fixed left axillary and cervical lymph node deposits were readily palpable. The remainder of the physical examination was unremarkable.

Investigations included: haemoglobin 7.7 g/dl (reference range 12.0 to 16.0 g/dl); clotting profiles normal; urea 4.7 mmol/l (reference range 2.0 to 7.0 mmol/l); creatinine 0.10 mmol/l (reference range 0.05 to 0.08 mmol/l); the remaining biochemical profile was unremarkable. An intravenous urogram revealed hydroureteronephrosis down to the level of obstruction at the bladder base (Fig. 1). Multiple irregular filling defects filled a distended bladder consistent with blood clot or tumour.

Cystoscopy was performed under general anaesthesia. Following the evacuation of large quantities of blood clots, a pale irregular and elevated tumour was seen to involve the left half of the trigone obscuring the left ureteric orifice. The right ureteric orifice appeared normal. Resectoscope biopsies were taken from the lesion and haemostasis was readily achieved with diathermy. Continuous bladder irrigation was commenced.

The resected specimen consisted of pale, relatively firm tumour fragments which on microscopic examination of haematoxylin and eosin stained