Keywords: urachus, urachal adenocarcinoma, urinary bladder neoplasms

INTRODUCTION

Urachal adenocarcinoma is a very rare type of all the bladder neoplasms, typically arises in the remnant of the allantoic stalk. Its annual incidence is estimated to be 1 in 5 million individuals and the majority of patients are in the 5th and 6th decades of life with presenting symptoms of mucusuria, hematuria, irritative voiding symptoms, and palpable suprapubic mass. Urachal adenocarcinomas typically involves the wall of the bladder and may exhibit ulceration of the overlying urothelium. We here report a case with a huge dimensions of urachal adenocarcinoma without involvement of the bladder wall.

CASE REPORT

A 52-year-old man presented to our clinic with vague suprapubic pain. Physical examination revealed a midline infra-umbilical mass. Ultrasonographic evaluations showed that it was not consistent with an obstructed bladder. Computed tomography and magnetic resonance imaging demonstrated lower abdominal wall mass extending from the dome of the bladder to the umbilicus (Figure 1). Contrast enhancement and calcification were the typical characteristics of the mass to evaluate it as a malignancy. There was only an irregularity at the dome of the bladder without a sign of involvement.

The patient underwent partial cystectomy with resection of the urachus, posterior rectus fascia, and overlying peritoneum. The tumor measured $9 \times 6.5 \times 5$ cm with a weight of 77 g. A bilateral pelvic lymph node dissection was performed. Frozen section of the bladder margin was negative.
The duration of catheterization and hospital stay were 5 days. There were no intra- or postoperative complications. Final histopathology confirmed enteric type urachal adenocarcinoma with abundant mucin formation (Figure 2). Further staging with computed tomography and bone scan was negative for distant metastases. After evaluation in our department of oncology, we did not need any chemotherapy or radiation. The patient remains free from the disease after a 12-month follow-up period.

**DISCUSSION**

The natural disease course of urachal adenocarcinoma is hampered by the paucity of reported cases. Urachal adenocarcinomas typically involve the bladder wall and exhibit any kind of deformation of the mucosal layer. Their size ranges from a small mass to a bulky tumor. The clinicopathologic criteria for diagnosing urachal adenocarcinoma are tumor location in the bladder wall, demarcation line between tumor and surface epithelium, and exclusion of a primary adenocarcinoma in another location with secondary bladder involvement.\(^{(3,4)}\)

In one recent report of 130 patients with urachal masses, two predictors for malignancy were found; age over 55 years and presence of hematuria. No survival difference was identified between partial cystectomy and radical cystectomy. The 5-year cancer-specific survival rate was 49%. Surgical margins and tumor grade were independent predictors of mortality.\(^{(5)}\)

Urachal adenocarcinomas’ response to radiotherapy and chemotherapy is modest and the only effective therapeutic approach is surgical eradication.\(^{(6)}\) Its poor prognosis is due to late presentation of symptoms leading to advanced stage at diagnosis, a propensity of early local invasion, and distal metastasis.

Our case is a rare one of a big, enteric type urachal adenocarcinoma, with abundant mucin formation, but without the bladder wall involvement. We could not see enough data about the dimensions of urachal adenocarcinomas and their behaviors. Tumor size and its influence on the tumor behavior is another subject to examine for large serial ones.

**CONFLICT OF INTEREST**

None declared.
REFERENCES


