



Urachal Mass Lesion a Case Report

Authors

Dr Sachin¹, Dr Kirti Rana², Dr R.N. Gehlot³

¹PG MD Resident, ²MD Radiologist (Professor) , ³Prof. &Hod
Radiodiagnosis Department, Dr SNMC Jodhpur (Raj)

ABSTRACT

Diseases of urachal remnants are uncommon and located on the junction of the urachal remnant with the bladder dome. In most cases such diseases correspond to mucinous adenocarcinomas and present haematuria as their most common clinical finding. The authors report the case of a 28-year-old female patient present with complain of mucinous and blood mixed discharge from umbilicus since one and half year. Ultrasonography and computed tomography findings are described.

INTRODUCTION

The urachus or median umbilical ligament, is a midline tubular structure extending from the apex of the bladder to the umbilicus. It is a vestigial remnant from at least two embryonic structures. The cloaca that is the cephalic extension of the urogenital sinus and the allantois, a derivative of the yolk sac. Urachal remnant diseases are uncommon and usually present either with nonspecific abdominal signs or urinary symptoms. The most common clinical finding in such diseases is hematuria. Other signs and symptoms include dysuria, mictional frequency and urgency (40-50%) and suprapubic pain (70%).

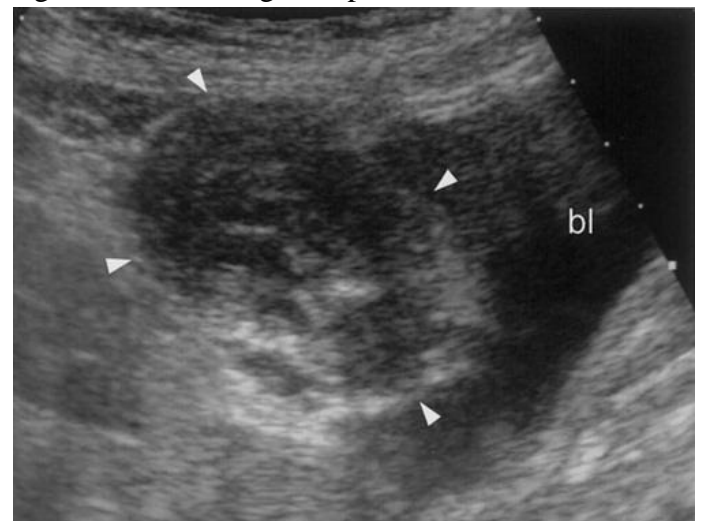
Complications resulting from the presence of urachal remnants include infection and malignancy.

CASE REPORT

A female patient of 28-year age presented with complain of lower abdominal pain, occasionally mucoid and bloody discharge from umbilicus and intermittent fever since one and half year.

On USG examination USG examination was performed at our institute by 3.5 MHz convex and 7.5 MHz sector probe.

USG findings-Mixed echoic area seen near urinary bladder apex, extending in infra umbilical region and involving extraperitoneal fat.



On CECT examination-Soft tissue density lesion, centred at urachus and infiltrating in to antero-superior wall the bladder with intravesical extension, predominantly on juxtavesical portion

of the urachus and extending in to anterior abdominal wall at the level of umbilicus.

Our d/d is

1. Malignant urachal mass lesion
2. Patent urachus with superimposed infection
3. Organized abscess in urachal remnant



There is heterogeneous enhancement of the lesion. In the lesion few low attenuating area (HU -35) and a calcific focus are seen.

Adjacent to mass lesion fat stranding is also seen.

DISCUSSION

Urachal carcinoma is extremely uncommon. Although the urachus is normally formed of transitional epithelium, most tumors (90%) are represented by adenocarcinomas. Most urachal adenocarcinomas are of the mucinous type, but even less common histological types are found, namely, transitional cell carcinomas, squamous cell carcinomas, small cell carcinomas and sarcomas.

In USG, the lesion is seen as a thickening of the anterior bladder wall, in many cases in contact with the anterior abdominal wall.

On CECT, urachal carcinoma appears as an anterosuperior mass extending from the midline to the apex of the bladder, with components of low attenuation which may represent areas of mucinous accumulation at pathological analysis. Peripheral calcifications occur in 50-70% of cases and are considered as pathognomonic for urachal adenocarcinoma.

On magnetic resonance imaging (MRI), high signal intensity is observed on T2-weighted sequences due to the presence of mucin within the tumor. Additionally, MRI is an excellent tool in the staging of the disease.

Radiological D/D-non-urachal adenocarcinomas, transitional cell carcinomas, infected urachal remnants, and metastasis from primary lesions of the colon, prostate or female genital tract.

The main treatment for urachal adenocarcinoma is surgical resection. Chemotherapy has been reserved for cases of metastatic disease or local recidivation, and no evidence of clinical benefit from radiotherapy in the management of urachal adenocarcinoma.

ETHICAL APPROVAL- This study is not animal experiments or experimental study. This is a case report. Informed consent form was obtained from the patient.

CONFLICT OF INTEREST- No conflict of interest was declared by the authors.

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