



## URACHAL MUCINOUS CYSTADENOMA OF UNDETERMINED MALIGNANT POTENTIAL A RARE CASE REPORT

### Surgery

**Dr. Taral Chaudhari\***

\*Corresponding Author

**Dr. Jigar Ratnottar**

**Dr. Archana Nema**

### ABSTRACT

The urachus is an embryological remnant of the allantois extending from the umbilicus to the urinary bladder apex and it uncommonly persists in adults.[1] Urachal malignancy is a rare and represents less than one percent of bladder neoplasm.[2] Here we present a case report of 64 year old male presented to surgery opd with complain of lower abdominal pain since 1 year. Patient had no irritative urinary symptoms and no history of loss of weight and appetite. On examination there was single mass located in infraumbilical region of size 6 x 5 cm<sup>2</sup>. CT scan suggested 4.8 x 8 x 6.4 cms sized multiloculated, predominantly hypodense with lobulated margin extending from dome of the bladder to umbilicus superiorly. Lesion shows high density fluid and linear calcifications within it possibility of mucinous cystadenoma of remnant of urachus. Histology revealed mucinous cystadenoma of undetermined malignant potential, rarest histological variety and difficult to diagnose on basis of mucin histochemistry and immunohistology. Six months follow-up did not show any local tumour recurrence.

### KEYWORDS

### INTRODUCTION

The urachus, an embryological structure extending from the umbilicus to the urinary bladder apex persists uncommonly in adults. Between the fourth and fifth months of development, the urachus narrows to become a fibromuscular strand, extending from the apex of the bladder to the umbilicus. The urachus lies in the extraperitoneal space of Retzius between the transversalis fascia anteriorly and the peritoneum posteriorly. Urachal mucinous neoplasms are still rare and include adenoma, adenocarcinoma. It has insidious course and variable clinical presentation. Urachal adenocarcinomas account for 20–39% of primary urinary bladder adenocarcinomas, which in turn account for 0.17–0.34% of all bladder malignancies. Despite being benign, urachal mucinous tumors have the potential to behave in an aggressive clinical manner that includes the development of pseudomyxoma peritonei. adults. Urachal malignancy is a rare and represents less than one percent of bladder neoplasms. Here we present a case report of 64 year old male who presented with complain of lower abdominal pain and histology revealed mucinous cystadenoma of undetermined malignant potential.

### CASE REPORT

A 64 year old male patient presented with lower abdominal pain which dull aching since one year. The patient had no irritative urinary symptoms and no hematuria. Patient no history of significant loss of weight and appetite with no other clinical co-morbidity. On examination there was a single, vertically oval shaped, firm, smooth surface, mobile, non-tender mass of size 6 x 5 cm<sup>2</sup> located in infraumbilical region. No other abdominal organs were palpable and no free fluid on clinical examination. All routine blood and urine study were within normal limit. USG abdomen revealed 6.5x7x4 cms sized, thin walled multicystic lesion, with internal thick echoes and wall calcification and seemed to be arising from dome of the bladder and extending up to umbilicus superiorly. CT scan suggested 4.8 x 8 x 6.4 cms sized multiloculated, predominantly hypodense with lobulated margin extending from dome of the bladder to umbilicus superiorly. Lesion shows high density fluid and linear calcifications. On post contrast study lesion showed mild peripheral enhancement with mildly enhancing internal septation. Lesion abuts inferior surface of both rectus abdominis muscles with loss of fat planes, no evidence of the enhancing solid nodule within it possibility of mucinous cystadenoma of remnant of urachus. No pelvic lymphadenopathy and no liver metastasis were present.

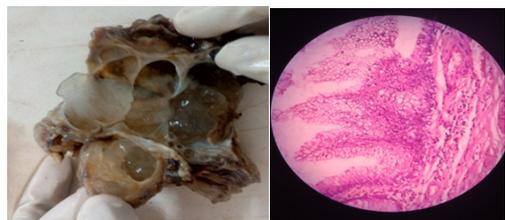


USG abdomen revealed thin walled multicystic lesion, with internal thick echoes and wall calcification.



CT scan suggested a multiloculated, predominantly hypodense with lobulated margin extending from dome of the bladder to umbilicus superiorly.

Patient underwent laprotomy with lower midline incision and the mass was removed including entire urachus with partial cystectomy. Mass was totally free from the surrounding structures but inferiorly it was communicated with bladder, umbilicus was free. There is no evidence of pseudomyxoma peritonei, no pelvic lymph nodes, and liver was found normal. Postoperative period was uneventful. Histopathology mucinous cystadenoma of urachus.



Six months later there was no evidence of any local recurrence and

distant metastasis.

## DISCUSSION

The urachus is an embryological remnant of the allantois extending from the umbilicus to the urinary bladder apex and it uncommonly persists in adults.<sup>[4]</sup> Between the fourth and fifth months of development, the urachus narrows to become a fibromuscular strand, extending from the apex of the bladder to the umbilicus. The pathogenesis of urachal tumors is not fully understood. The term mucinous tumor of uncertain malignant potential has been suggested for urachal mucinous tumor without frank invasion. They have a potential for local recurrence and development of pseudomyxoma peritonei. It is believed that urachal carcinomas arise from malignant transformation of columnar or glandular metaplastic epithelium. The differential diagnosis of an urachal mass is extensive and includes both neoplastic and non-neoplastic conditions. Rarely, persistence of a patent urachus will account for a supravescical mass. An urachal mass can be an extensive lesion and includes both neoplastic and non-neoplastic conditions. Benign neoplasms of urachus includes adenoma, fibroma, fibroadenoma, fibromyomas and villous adenoma although the later may be associated with foci of dysplasia, adenocarcinoma insitu, or frankly invasive adenocarcinoma.<sup>[5]</sup> Malignant neoplasms are urachal mucinous adenocarcinoma, urothelial malignancy with components of adenocarcinoma, and metastatic mucinous tumor from a variety of body sites including breast, pancreas, ovary, prostate gland, and gastrointestinal tract.

## CONCLUSION

Urachal cystadenoma is a rarely reported pathologic condition that can cause a palpable mass and abdominal pain. The term mucinous tumor of uncertain malignant potential has been suggested for urachal mucinous tumor without frank invasion, as they have a potential for local recurrence and development of pseudomyxoma peritonei.

The mucinous neoplasms of urachus must be extensively sampled histologically to exclude any foci of dysplasia or invasive malignancy and the patients should be followed clinically post-excision for evidence of local disease recurrence.

## REFERENCES

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