

Presentation, diagnosis and management of extremely rare metastatic urachal adenocarcinoma in pregnancy

Dr Charu Jain, Dr S. Mukherjee, Dr R. Mukherjee

Background1

Urachal carcinoma an exceedingly rare (<1% of bladder cancers) and aggressive non-urothelial, highly aggressive tumour arising from urachus or its remnants, predominantly affects men. Its occurrence during pregnancy is even rarer, estimated to be 25-27/100 000 pregnancies. We present a remarkable case of metastatic urachal adenocarcinoma diagnosed during pregnancy in District hospital.

Discussion4

The rarity and aggressiveness of urachal carcinoma, especially during pregnancy, present significant clinical challenges. Therefore, early recognition and definitive treatment is paramount in obtaining good outcomes. Urachal cancer should be suspected in pregnant patients presenting with gross haematuria, abdominal pain or recurrent urinary tract infections which shows concordance with presentations in non-pregnant patients. A comprehensive physical examination is important followed by appropriate investigations and the necessity of a multidisciplinary approach in such complex cases.

Conclusion5

In summary, urachal cancer is a rare occurrence in pregnancy but can pose a management conundrum even for the most experienced clinicians. This case emphasizes the vital role of MDT meetings in diagnosing and managing such rare conditions. Future research should aim to develop standardized guidelines for such cases. Additionally, this case highlights the importance of psychological support and strategic planning in managing rare cancers during pregnancy to ensure the best possible outcomes for both mother and child.

Case3

A 28 year old female in her second pregnancy presented around 29 weeks of gestation with recurrent episodes of hematuria. A differential diagnosis of bladder cancer, endometriosis was considered as she had previous history of endometriosis. Thus, investigated when Ultrasound abdomen depicted 2.8cm bladder mass with bilateral endometrioma. She was immediately discussed in Multidisciplinary team who decided to perform MRI abdomen (findings suggestive of Stage IIIa/IIIb) and to defer flexible Cystoscopy until delivery. Apart from regular monitoring of mother and fetus, transfusion of blood units, the woman was well supported both physically and emotionally in all respects. MDT plan was made to deliver her around 34 weeks with elective Caesarean section along with biopsy of pelvic lesion and cystoscopy to avoid delay in starting treatment of this highly aggressive tumour. A diagnosis of metastatic urachal adenocarcinoma Stage IV with lung metastasis with a decision to treat with Chemotherapy followed by aggressive surgical approach was made. The case is being discussed with permission of the patient.

References

1. Current management of Urachal Carcinoma: An evidence-based Guide for Clinical Practice Eur Urol Open Sci. 2022 Mar 14;39:1–6. doi: 10.1016/j.euros.2022.02.009

2. A case of metastatic urachal adenocarcinoma treated with several different chemotherapeutic regimens Can Urol Assoc J. 2012 Feb;6(1):E27–E31. doi: 10.5489/cuaj.11109

3. Management of urachal cancer in pregnancy: A systematic review BJUI Compass . 2022 May 29;3(6):410–414. doi: 10.1002/bco2.170

4. Polypoid endometriosis of the bladder during pregnancy mimicking urachal carcinoma Ultrasound Obstetrics 2011 Oct;38(4):475-8.

Presentation2

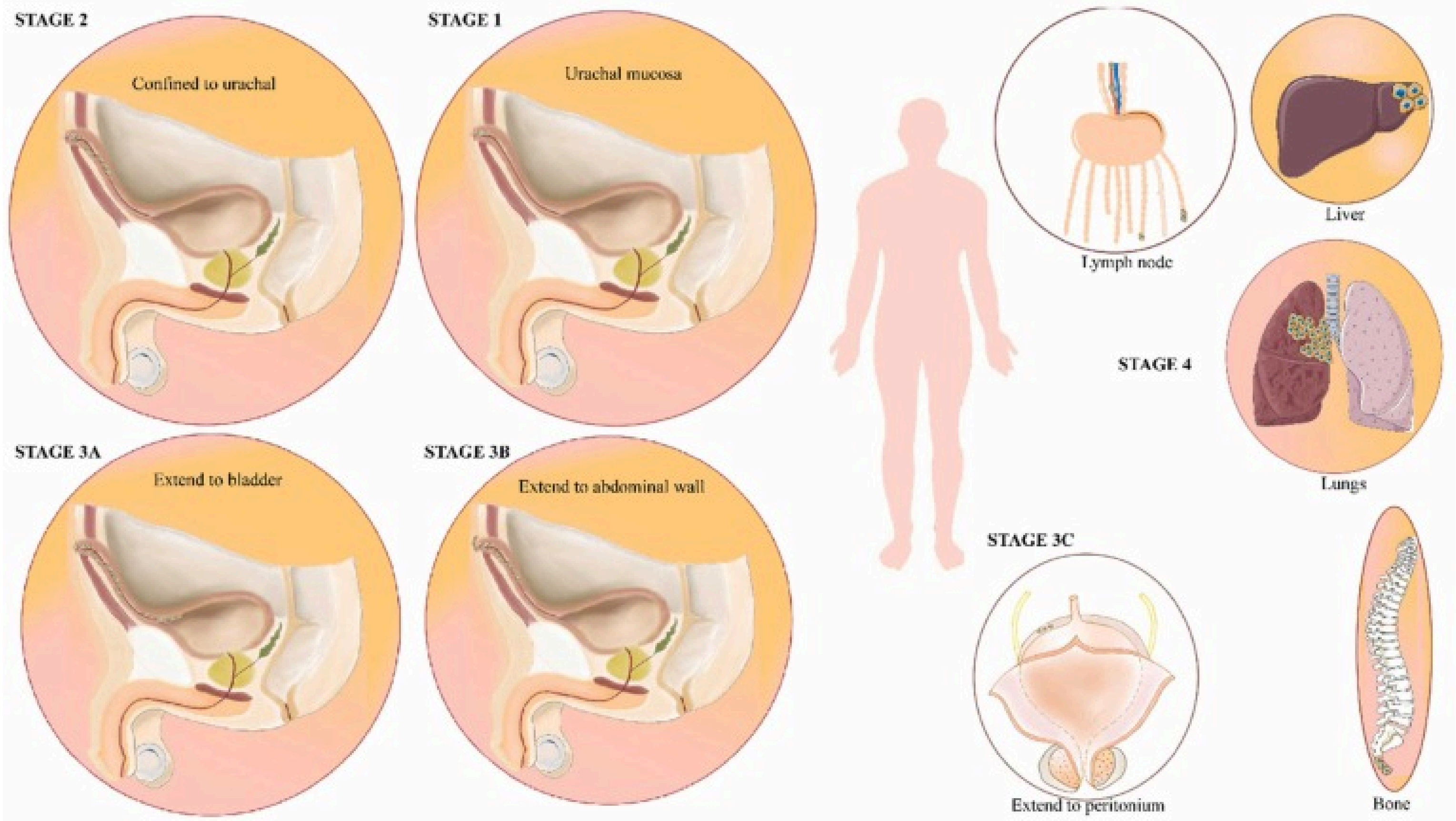
- Painless Recurrent Hematuria

Differential Diagnosis

- Endometriosis
- Bladder cancer
- Urachal Cancer
- Bladder mass

Urachal Carcinoma Staging			
Stages	TNM staging	Mayo staging	Sheldon staging
Stage I	Tumor invasion to subepithelial connective tissue	Tumor is confined to urachus or bladder	Tumor is limited to urachal mucosa
Stage II	Tumor invasion to urachal or bladder muscularis propria	Extension beyond muscular layer of urachus or bladder	Invasion confined to urachal muscular layer
Stage III	Invasion to perivesical soft tissue, prostate, uterus, or vagina	Metastasize to regional lymph nodes	III A: Local extension to the bladder
			III B: Local extension to the abdominal wall
			III C: Local extension to the peritoneum
			III D: Local extension to viscera other than bladder
Stage IV	Invasion into abdominal wall and metastasize to lymph nodes or distant sites	Metastasize to non-regional lymph nodes or distant sites	IV A: Metastasis to regional lymph nodes
			IV B: Metastasis to distant sites

(a). Illustration of various staging of Urachal carcinoma



(b). Pictorial representation of various stages of Urachal carcinoma