

Testicular mass: a unusual way to discover UTUC

- Case Report -

ADANS-DESTER Gilles, de VISSCHER Luc, LEFEBVRE Yves, LEFEBVRE Gregory

CLINIQUE SAINT LUC BOUGE - UCL

Introduction

The Transitional Cell Carcinoma (TCC) is the 4th most common tumor in Belgium within the male population (1). Upper urinary Tract Urothelial Carcinoma (UTUC) are not frequent and only account for less than 10 % of TCC. Among the UTUC, 60% are invasive and 7% are metastatic at diagnosis. (2)

Synchronous testicular or scrotal metastasis of urothelial carcinoma is even more uncommon. With only few cases reported in the literature and most of them being from Bladder Tumor or metachronous metastasis. To our knowledge, only two other case report showing scrotal metastasis of UTUC have been described (3) (4) (5).

Case Report

A 72 years old man reported to our outpatient consultation for a hard testicular mass.

He already had a testicular ultrasonography which showed an hypovascularized lesion of 12 by 15mm next to the testis on the spermatic cord.

In the anamnesis, the patient explained a rapidly growing mass. He didn't reported pain, temperature or urological complain at that time. He just reported a painless, full, gross hematuria a few months prior to the visit.

The patient used to work as a building painter and has a smoking history (stopped 45years ago).

The patient also suffered from a renal function impairment.

His surgical history is irrelevant.

We performed an inguinal radical orchiectomy in February 2018.

The tumor was very adhesive to the surrounding tissues.

This resection showed a UTUC with epidermoid inflexion with vascular permeation. This lesion was developed as part of the vaginal testis and neither the testis nor the epididymis was involved.

The staging CT revealed retroperitoneal adenopathy as well as the primitive tumor in the right ureter. Evaluation of the thoracic level showed right sus-hilar and retro cardiac mediastinal adenopathy.

The bone scan was negative.

The TNM Staging is cT3 cN2 M1

The patient was prescribed with immunotherapy with Pembrolizumab (Keytruda) as he was ineligible for Cis-Platin chemotherapy (4) (Creat: 2mg/dL) with a scheme of 4 cycles once every 3 weeks.

In September 2018, after 9 cures of Pembrolizumab, the control staging CT showed a downsizing of the hilar and retro-peritoneal lymph nodes. The patient tolerated well the therapy.

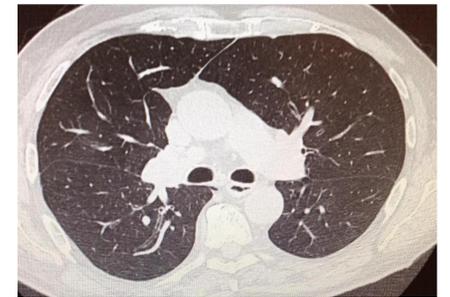


1. Fresh orchiectomy piece -2. Fixed and sliced piece -3. UTUC with epidermoid inflexion



First CT (09/03/18)

1. Primary tumor.
2. Hilar adenopathy.
3. Retroperitoneal adenopathy.



Discussions

Synchronous testicular and paratesticular metastasis of UTUC are unusual, we were able to retrieve only two cases in the literature. (3)

Additionally, even for a Bladder Tumor testis is an unusual site of metastasis with only a dozen of cases reported and rarely as the diagnostic symptom. (4)

However, facing uncommon clinical or paraclinical tumor presentation and characteristics, no path must be overlooked and the physician should be attentive to any detail that could provide valuable information (e.g.: hematuria)

In our case, the diagnosis delayed due to the patient neglecting his symptoms.

It is interesting to note that the patient has only experienced a single episode of macroscopic hematuria and that he just consulted for scrotal swelling with pathological ultrasonography.

The primary tumor was found in staging for what we first thought being an unusual scrotal tumor.

This case also shows the favorable action of Pembrolizumab on TCC for Cis-Platin ineligible patients with a great response on the last control CT (September 2018) that showed a stunning downsizing of thoracic and abdominal of tumor spreading.

Bibliography

1. WHO - Cancer Country Profiles, 2014. Organization, World Health. 2014.
2. M. Rouprêt, M. Babjuk, M. Burger et Al. EAU GUIDELINES on Upper Urinary Tract Urothelial Cell Carcinoma. [En ligne] 2018. [Citation : 10 November 2018.] <http://uroweb.org/guideline/upper-urinary-tract-urothelial-cell-carcinoma/>.
3. Alper Nesip Manav et Al. A rare cause of Testicular Metastasis: Upper Tract Urothelial Carcinoma. *Case Report in Urology*. 2014.
4. Rafal Turo et Al. A rare case of testicular metastasis of bladder transitional cell carcinoma. *CUAJ*. 2014, Vol. 8, 3-4.
5. Kubiak M et Al. Testicular Metastasis of a Upper Urinary Tract High-grade Papillary Urothelial Carcinoma, 2 Years After Nephroureterectomy. *Urology Case Report*. 2016, Vol. 4 25-26.
6. Balar AV et Al. First-line pembrolizumab in cisplatin-ineligible patients with locally advanced and unresectable or metastatic urothelial cancer (KEYNOTE-052): a multicentre, single-arm, phase 2 study. 2017 Nov, *Lancet Oncology*, pp. 18(11):1483-1492.