

Case report

Nested Variant Urothelialcarcinoma the Fake kind tumor: Case Report and Review of the Literature

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Amongst the unanswered questions regarding bladder cancer (BC), the optimal management of Nested Variant Urothelial Carcinoma remains one of the concerns of the scientific community. The real existence of this category is still subject to controversy. The diagnosis could be misleading with other benign bladder lesions. Despite its deceptively being appearance, it is currently considered to have the same prognosis as high-grade urothelial lesions. We report the clinical case of a 77-year-old patient hospitalized for the management of a bladder tumor discovered by ultrasound. Bladder resection found urothelial carcinoma with nests. The extension assessment shows an intravesical tumor process of the right lateral wall with right pyelocaliceal dilatation without any secondary localization. Anteriorpelvectomy with extensive lymphnode dissection was performed. The follow-up at one year proved favorable, without locoregional recurrence, nor at distance.

Through this clinical case and a literature review, we analyze the epidemiological, diagnostic and therapeutic aspects of this rare pathology.

Introduction

Amongst the unanswered questions regarding bladder cancer (BC), the optimal management of “nested” type (NT) remains one of the concerns of the scientific community. It is a rare variant of urothelial carcinoma. Because of its resemblance to benign bladder lesions, its diagnosis is often difficult [1]. The recognition of its histological spectrum is based on the discovery of von Brunn's islets. Many questions about the therapeutic management of NT remain because most studies have focused only on its histological characteristics. Through this clinical case and a literature review, we summarize the current available data on the most appropriate management of NT.

Observation

We report the clinical case of a 77-year-old patient with no significant pathological history. She consulted for hypogastric pain with pollakiuria without hematuria, all evolving in a context of a pyrexia and preservation of the general state. The clinical examination finds a slight sensitivity to the palpation of the hypogastric region. The rectal and vaginal touch shows no noticeable abnormality. Computed tomography revealed a tissue process of the right bladder wall measuring 8 cm, with grade 2 uroterohydronephrosis and without suspicious extra-bladder involvement (Figure 1,2).

The patient has Charlson Comorbidity Index of 6 points.

She underwent transurethral resection of right lateral thickening of the bladder wall, with a non visible right meatus. Histopathological examination favors urothelial carcinoma in nests (pT1b) (Figure 3). Thoraco-abdominopelvic CT did not show secondary localization.

After a multidisciplinary consultation, it was decided to perform anteriorpelvectomy with Bricker urinary diversion and extensive lymphadenectomy (pT2N1M0).

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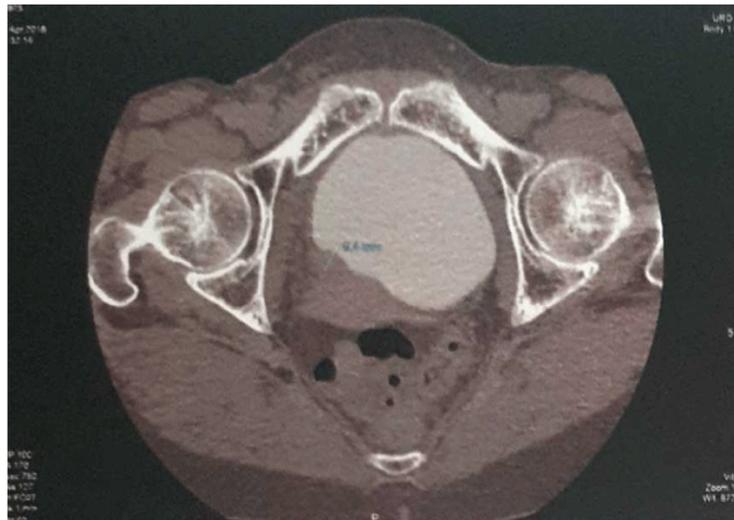


Figure 1. CT urographyrevealed a tissue process of the right vesicalwall



Figure 2. CT urographyrevealed a moderate right ureterohydronephrosis

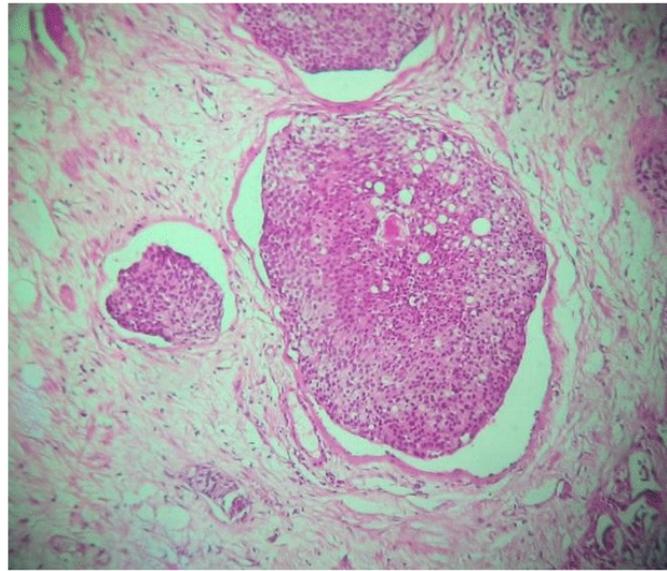


Figure 3. High magnification micrograph of nested variant of urothelialcarcinoma. H&E stain

The evolution at one year proved favorable, without locoregional recurrence, nor at distance.

Discussion

As a rare tumor, NT affects the men more than the women, with a sex ratio of 2.3 [1]. It is seen in 0.3–0.8% of invasive urothelial cancers [2]. As with other bladder tumors, tobacco is an important risk factor [1].

Hematuria is the main symptom, but some patients have reported lower urinary tract symptoms

The diagnosis of this entity remains histological: characterised by the presence of small nests and irregular and confluent tubules composed of urothelial cells infiltrating the lamina propria, but without affecting the surface [3]. The differential diagnosis is glandular cystitis [4]. Immunohistochemical confirmation is often necessary. Positive markers are: CK7, CK20, p63, Ki-67, CK903 and P53 [5]. While the negative markers are: Bc12, EGFR and PSA [5].

Very little data on this tumor is available to date. In the literature only 200 cases were reported.

The aggressiveness of NT bladder cancer and the choice of conservative or immediate radical treatment are controversial [6].

Described for the first time in 1979, it was not until 1992 that Murphy and Deana gave it the name of “nest” [7,8]. Despite innocent cytologic features, NT is associated with aggressive tumor behavior, differentiating this type of tumor from a more common benign

entity represented by von Brunn's nests [9]. Thus, Comperat et al. [4] emphasized the potentially malignant character, with metastatic spread and tumor-related deaths.

Often referred to as pure high-grade urothelial carcinoma, one study reported that NT is more often associated with muscle invasion (31 vs 70%), extra-vesical pathology during cystectomy (33 vs. 83%), and to metastatic disease (19 vs. 67%) [1]. With a poor prognosis irrespective of the therapeutic approach, the mortality rate for NT 40 months after diagnosis is 70% [10].

According to Dhall et al. [4] NT must be considered as an aggressive, high-grade disease treated immediately by cystectomy. Nevertheless, Linder and associates reported no significant differences between de NT and the pure urothelial carcinoma in 10-year local recurrence-free survival (83% versus 80%, $P = 0.46$) or 10-year cancer specific survival (41% versus 46%, $P = 0.75$) [11].

Some authors advocate multimodal therapy, while others have shown that this type of cancer is resistant to chemo-radio [12,13]. In order to improve the survival rate, the only way found in the literature is early diagnosis. Aggressive treatment despite mild cytologic features would seem adequate. Nevertheless, to date there is no consensus on treatment.

Discussion

Recent breakthrough on nested variant urothelial carcinoma characteristics are increasing the diagnostic. Aggressive treatment despite mild cytologic features would seem adequate. Nevertheless, to date there is no consensus on treatment.

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