

# EC CLINICAL AND MEDICAL CASE REPORTS

**Case Report** 

# Bladder Cancer and Spina Bifida: A Case Report

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#### **Abstract**

**Background:** Spina bifida is the term used to describe spinal dysraphism. It can be the cause of neurogenic bladders that can progress into malignant affections in rare cases. These malignant affections are often atypical and easily diagnosed in their advanced forms. Rare cases of bladder cancer resulting from spina Bifida have been reported. The objective of this case report is to enrich the literature on the case of bladder cancer and spina bifida.

**Case Presentation:** Our patient is a man who is 60 years old, had a history of surgical intervention for spina bifida during his childhood. Mr O.P was recently diagnosed of urinary tract infection and high-grade urothelial carcinoma with a predominant epidermoid metaplasia containing calcified necrotic changes and peritoneal carcinomatosis. No surgical option was possible in this case. The patient poorly evolved leading to his death.

**Conclusion:** The development of bladder cancer in a patient with spina bifida is atypical with respect to the mode of onset, the clinical presentation, the pathological aspects, the prognosis as well as the therapeutic management. Thus, an increased vigilance in patients suffering from this affection is justified.

Keywords: Spina Bifida; Bladder Cancer; Poor Prognosis

## Abbreviation

CT: Computerized Tomography

#### **Background**

Spina bifida is the term used to describe spinal dysraphism that can lead to neurogenic bladders. In rare cases, these neurogenic bladders may progress into atypical malignant transformations that can easily occur in young patients. We present a case of bladder cancer in a patient who had suffered from spina bifida. This affection was revealed by urosepsis.

#### Case Presentation

Our patient is a man who is 60 years old, had been operated in his childhood for spina bifida. The patient presented with urosepsis without hematuria. The physical examination was unremarkable. The blood tests showed elevated white blood cells and C-reactive proteins suggestive of an inflammatory process. The CT scan showed a calcified intra-vesical mass (Figure 1).



Figure 1: CT scan showing a calcified intra-vesical mass.

Antibiotic treatment was administered before the patient underwent endoscopic exploration of the intravesical mass. Bladder endoscopic revealed a large calcified bladder tumor, with many intra vesical stones (Figure 2). The stones were treated with laser lithotripsy followed by resection of the mass.



Figure 2: Bladder endoscopic reveling a large calcified bladder tumor, with many intra vesical stones.

Histopathological findings of the resected specimen showed a high-grade urothelial carcinoma with major epidermoid metaplasia and calcified necrotic changes with no muscle infiltration.

Locoregional assessment showed pelvic lymphadenopathy and peritoneal carcinomatosis. The patient was then referred to the department of oncology for chemotherapy. The patient presented with enterovesical fistula after 1 month of treatment. CT scan (Figure 3) revealed a dramatic evolution resulting in the death of the patient.



Figure 3: CT scan showing a bad evolution of the intra-vesical mass with entero-vesical fistula.

#### **Discussion and Conclusion**

It is accepted that cancerous lesions can develop in neurogenic bladders [1]. These usually occur 20 years earlier than bladder tumors in non-neurological populations. They are also more aggressive [2,3]. The squamous cell proliferation is often present [4]. In 98% of cases, these are spinal cord injured patients with a neurological disease that can evolve over 25 years requiring follow ups in the long term. The rapid mode of installation, the extremely fast evolution as well as the poverty of the cases in the literature gives the importance to our case in order to enrich the literature in this particular disease. The treatment of this type of cancer should remain surgical although the prognosis is often bad as shown by the different published cases.

Bladder cancer in spina bifida patients is atypical in its presentation and often presents itself in an advanced form. Treatment should remain surgical whenever possible. The prognosis is often poor. The authors recommend rigorous follow-up by using cystoscopy whenever these patients present pelvic pain, recurrent or refractory infection and hematuria [5].

## **Ethics Approval and Consent to Participate**

Not applicable.

# **Consent for Publication**

Written informed consent was obtained from the next of kin of patient for publication of this case report and any accompanying images.

# **Availability of Data and Materials**

All data generated or analysed during this study are included in this published article.

#### **Competing Interests**

The authors declare that they have no competing interests.

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#### **Authors' Contributions**

AS wrote the article, made substantial contributions to conception and design of the article; ST, MHF, and NS made critical assessment of the article. They read and approved the final manuscript.

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