



Oncology

A rare case of follicular lymphoma of the bladder

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ABSTRACT

This case details a 69-year-old female with a 3cm bladder mass on imaging who underwent transurethral resection of the bladder with pathology revealing non-Hodgkin follicular lymphoma to the bladder. The rarity and complexity of this presentation generated a challenging treatment dilemma regarding surveillance and active treatment.

1. Introduction

Lymphoma refers to a heterogeneous group of malignancies originating from lymphoid tissue and is categorized primarily into Hodgkin lymphoma (HL) and non-Hodgkin lymphoma (NHL) variants. Each has distinct clinical and histological subtypes defined by unique cellular origins and genetic features. Follicular lymphoma (FL) is a subtype of NHL, which accounts for approximately 20–25% of all newly diagnosed NHLs.¹ Characterized by its centrocyte-like morphology and a generally indolent course, it is the second most common form of NHL and typically presents in middle-aged to older adults, with a female predominance (1 female:1.7 males).² FL primarily disseminates through the lymphatic system, while extra-nodal involvement reportedly occurs in 10%–20% of patients. The most frequent site of extra-nodal spread is to the bone marrow, while other sites less commonly seen include the gastrointestinal tract, skin, lungs, and CNS.^{3,4} Yet, there are less frequent reports of follicular lymphoma to other locations in the body as well.

This case report presents a very rare occurrence of follicular lymphoma extension to the bladder. This diagnosis of FL is exceptionally uncommon, accounting for only 0.2% of all extra-nodal NHLs and is scarcely reported in existing literature.⁵ The findings from this case provide novel insights into the clinical presentation, diagnosis, and management strategies for this unusual presentation of lymphoma.

2. Case report

This case details a 69-year-old female patient who was referred to the urology clinic for further evaluation after a computed tomography (CT) scan of the abdomen and pelvis revealed an incidental finding of a roughly 3 cm bladder mass with asymmetric wall thickening noted on

the right superolateral aspect of the bladder (Fig. 1). She recently had been hospitalized for several months due to esophageal leak and later respiratory failure following a hiatal hernia repair. The patient denied experiencing any gross hematuria or lower urinary tract symptoms, including dysuria, frequency, and urgency. She did not report history of tobacco use, personal or familial genitourinary malignancy, or significant occupational chemical exposure. Cystoscopy revealed a 3.5 cm superolateral bladder lesion that was thick, solid, and nonpapillary in appearance. Subsequent transurethral resection of the bladder tumor (TURBT) was performed with resulting pathology noting Grade 1–2 follicular lymphoma. A positron emission tomography scan demonstrated hypermetabolic activity in bilateral axillary nodes, a dominant mesenteric lymph node, and a small left paraspinal node without apparent extravesical bladder lesions. Given these clinical findings and complete resection during TURBT with fulguration, the decision was made jointly within a multidisciplinary team and the patient to proceed with surveillance as opposed to radiation or systemic therapy. The patient is to be scheduled for follow-up cystoscopy in part of her surveillance. Continued follow up is to be arranged with her medical oncology team for surveillance with consideration for radiation therapy in the setting of relapse.

3. Discussion

This patient's clinical scenario is challenging as there is scant literature pertaining to treatment of follicular lymphoma of the bladder. The patient was relatively asymptomatic, and FL has a slow growing but progressive course, with a high rate of relapse. FL often presents asymptotically with painless lymphadenopathy, but it can also exhibit more aggressive behavior with systemic symptoms.^{3,6} The

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Fig. 1. Coronal view of a CT abdomen pelvis demonstrating a 2.8 cm hyperdense, sessile lesion located at the right superolateral bladder wall.

Lugano staging system, an update to the Ann Arbor system, commonly utilizes PET/CT scans to determine the extent of disease spread.⁷ Stage III or IV disease indicates advanced spread, and approximately 53% of FL patients present with such stages at diagnosis.⁸

Decision was made with the patient to proceed with surveillance, as opposed to other invasive treatments such as radiation or systemic therapy given her comorbidities. Evidence suggests that delaying intervention for FL until symptom onset does not compromise prognosis.⁹ There was consideration within her multidisciplinary tumor board for radiation therapy. Literature does suggest radioimmunotherapy has been proven safe and effective for treating both initial and recurrent FL.¹⁰ Historical case reports involving primary malignant lymphomas of the bladder have indicated that surgical excision and post-operative radiotherapy can offer excellent prognostic outcomes.^{11,12} A more recent case involving resection followed by adjunct local radiotherapy (45 Gy/25 fr) for a primary cervical diffuse large B-cell lymphoma provides an insight into potential standard treatments as well.¹³ This treatment strategy was considered for this case, but ultimately the decision was made for surveillance without radiation therapy given the patient's desires and presence of complete resection on TURBT.

While research is limited on this specific scenario, it seems that close surveillance or adjunctive radiation therapy would be acceptable treatment options after initial resection. Continued reporting of comparable cases will be essential in compiling literature to guide future

decision-making.

4. Conclusion

This case highlights an extraordinarily rare manifestation of follicular lymphoma involving the bladder. The report also illuminates the importance of multidisciplinary team involvement and underscores potential therapeutic interventions such as surgical resection and radioimmunotherapy for initial disease and recurrence. Continued research into disease pathophysiology, as well as the continued reporting of cases of follicular lymphoma to the bladder will be paramount to aid in directing efficacious therapeutic strategies and future decision-making for others.

Declaration of competing interest

None.

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