



Treatment of a Bladder Eosinophilic Pseudotumor Associated with Autoimmune Disease: A Case Report

Trigui M*, Mejdoub B, Mayouf S, Mseddi A, Rebai N and Slimen MH

Department of Urology, Hospital Habib Bourguiba De Sfax, Tunisia

Abstract

Eosinophilic cystitis is an uncommon benign condition that can be associated with an auto-immune disease and revealed by hematuria. Diagnosis is made with biopsy.

We report a case about 36 year old man presents with an episode of hematuria and psoriasis. He underwent investigations including cystoscopy and bladder biopsies that confirmed the diagnosis of eosinophilic cystitis. He was treated with steroids and surgery and completely recovered.

To the best of knowledge, this case is a rare case of inflammatory eosinophilic pseudotumor of the bladder treated with steroids associated with surgery with a full recovery.

Keywords: Eosinophilic pseudotumor; Steroids; Bladder transurethral resection; Psoriasis

Introduction

Eosinophilic Cystitis (EC) is a rare condition, generally benign and curable but can be serious especially in its pseudotumoral form, causing hematuria and hydronephrosis. The diagnosis is usually made using cystoscopy with biopsy. Here we report a case about a tumor-like eosinophilic cystitis in a 36 year old man.

Case Presentation

A 36 year old smoking man, with history of psoriasis since the age of 20, was admitted December 2018 in our department with hematuria, suprapubic pain and frequency evolving for 2 months. The patient had no known an atopic disease nor drug allergies.

On physical examination he was afebrile and hemodynamically stable with hypogastric tenderness. He was passing hematuria with clots. Skin examination revealed erythema-squamous lesions on the elbows and knees. Blood Cell Count (BCT) showed neither eosinophilia nor anemia. Renal function was normal. Urinalysis showed no infection.

Computer Tomography (CT) scan (Figure 1) revealed a large budding lesion with a large implantation base without secondary lesion.

He underwent cystoscopy which found a large solid tumor on the right side of the bladder dome that was partially resected. Pathology (Figure 2) reports on the tissue biopsy indicated dense and polymorphic inflammatory reorganization with eosinophilic predominance of the mucosa without signs of malignancy.

The diagnosis of EC was retained. Postoperative recovery was unremarkable, urine was cleared, and corticosteroids 20 mg/day were administrated for 4 weeks associated with topical corticosteroids. We performed a second cystoscopy for complete resection. A follow up 20 months later revealed an asymptomatic patient on the urological and skin level, and ultrasound examination and cystoscopy showed no evidence of disease recurrence.

Literature Review

Eosinophilic cystitis is an inflammatory condition defined as the infiltration of the bladder by eosinophilic cells.

The etiology of EC is still unknown, but some conditions were blamed, such as transitional-cell carcinoma, intravesical immunotherapy [1], allergic diseases (asthma, rhinitis), autoimmune diseases (psoriasis as in our case, coeliac disease), certain medications (sulfonamide, cyclophosphamide) parasitic disorders, eosinophilic enteritis [2] and allergy to chromic catgut suture. Ninety five percent

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*Correspondence:

Mohamed Trigui, Department of Urology, Hospital Habib Bourguiba De Sfax, Tunisia, E-mail: mohamedtrigui047@gmail.com

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Figure 1: CT scan revealed a large budding lesion with a large implantation base extending over 5 cm.

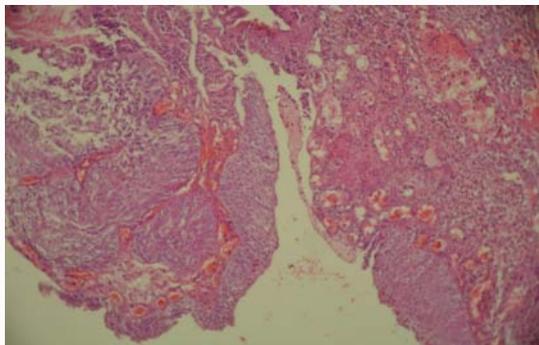


Figure 2: Pathology shows a bladder mucosa with urothelial coating in places slightly hyperplastic without cytonuclear atypia. The chorion contains a polymorphic infiltrate with innumerable eosinophils.

of the cases are revealed by symptoms such as frequency, dysuria (62%), gross hematuria (57%), urgency (4%) and suprapubic pain (49%), rarely urinary retention (10%) [3]. Other rare presentations are reported in the literature including fever, skin rash, nocturnal enuresis, gastrointestinal symptoms.

While examining patients we can notice suprapubic tenderness or a lower abdominal if the pseudo tumor is voluminous. Blood tests can reveal eosinophilia, especially found when EC is associated with an allergic disease.

Urinalysis is often normal, but may show a urinary tract infection which should be treated. Renal failure may exist due to hydronephrosis or bleeding.

Ultrasound, as well as CT scan and MRI may show variable aspects: Thickening of the bladder wall, a mass formation, hydronephrosis and blood clot or can be normal. Cystoscopic abnormalities include inflammatory lesions (edema, erythema and velvety red lesions), ulcerations and tumors. None is pathognomonic. Therefore, biopsy is needed to confirm the diagnostic. Basically, transmural inflammation predominantly with eosinophils is found, suggesting EC.

Cystoscopy is not only the gold standard in diagnostic, it has a major role in therapy, it allows transurethral resection of the lesions, preferably in the same time of taking biopsies [3].

Studies proved that the allergen eviction is a safe strategy to cure patients; therefore, we suggest that it's legitimate to try to find the allergen in cause by skin tests and specific immunoglobulin search.

Antibiotics are only recommended in case of a urinary tract infection or distension. Patients have been successfully treated with corticosteroids along with antihistaminic [4]. Corticosteroids seem to accelerate the disappearance of symptoms and inflammation [3]. In case of failure, it is possible to use cyclosporine-A [5].

In patients whose medical treatment was not successful, surgery such as partial or total cystectomy can be performed, but with heavy consequences.

Conclusion

Eosinophilic cystitis is a rare disease which etiology is still not clearly known. In this case report we insist on the value of the cystoscopy with pathological evidence, as well as the efficiency of corticosteroids in association with surgical treatment.

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