EOSINOPHILIC CYSTOPATHY IN ASSOCIATION WITH INFILTRATIVE TRANSITIONAL CELL CARCINOMA

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Summary.- OBJECTIVES: To report a case of eosinophilic cystopathy associated to infiltrative transitional-cell carcinoma of the bladder in an adult.

METHODS: We describe the case of a 79-year-old woman who complains of meso- and hipogastric pain since several months before, and to whom a parietal thickening of the bladder was detected by means of abdominal CT scan during the diagnostic work up for a digestive disease indicated by the Internal Medicine Service. Cystoscopy confirmed that finding, together with areas of greater endoluminal protrusion. Cold biopsy showed an inflammatory infiltrate with eosinophilic component. Transurethral resection was indicated.

RESULTS: The pathological assessment was compatible with high-grade infiltrative transitional carcinoma of the bladder. The patient developed multiple lung metastases and died five months after surgery.

CONCLUSIONS: Reports describing the coincidence of both entities are infrequent. We emphasize the importance of a correct filiation of apparently “pseudotumoral” endoluminal lesions.

Keywords: Eosinophilic cystopathy. Transitional-cell carcinoma. Surgery.

Resumen.- OBJETIVOS: Presentación de un caso de cistopatía eosinofílica asociada a carcinoma vesical infiltrante de células transicionales en adulto.

MÉTODO: Describimos el caso de una paciente mujer de 79 años que refiere dolor meso e hipogástrico de varios meses de evolución, y a la que se detecta en escáner abdominal un engrosamiento parietal vesical durante el estudio de descarte de patología digestiva por parte del Servicio de Medicina Interna. La cistoscopia permitió confirmar dicho hallazgo, junto a zonas de mayor protrusión endoluminal. La biopsia fría mostró la existencia de infiltrado inflamatorio con componente eosinofílico. Se indicó resección transuretral.

RESULTADOS: El estudio anatomopatológico resultó compatible con carcinoma transicional vesical infiltrante de alto grado. Desarrollo de metástasis pulmonares múltiples y fallecimiento de la paciente cinco meses después de la cirugía.

CONCLUSIONES: Infrecuencia de las descripciones de aparición coincidente de ambas entidades referidas. Destacamos la importancia de una correcta filiación de lesiones endoluminares aparentemente “pseudotumorales”.

Palabras clave: Cistopatía eosinofílica. Carcinoma de células transicionales. Cirugía.

INTRODUCTION

Eosinophilic cystopathy is an entity with quantitatively limited reports at urological literature. We present a case of this type, with the special feature of its association to vesical infiltrative transitional carcinoma.
CASE REPORT

Female 79-year-old patient with end stage renal disease secondary to diabetic nephropathy, being hemodyalized since four years ago, and with clinical record of allergy to peniciline, who complains of unspecific abdominal slight pain with an evolution of several months, predominantly meso- and hipogastric, to whom a parietal thickening of the bladder was detected - during the assessment of that symptom by the Department of Internal Medicine - at abdominal CT scan (Figure 1).

Physical exploration only let appreciate bother during abdominovaginal bimanual palpation, as well as some decrease of vesical mobilization. Outcomes of basic analytical parameters were normal, except for a glycemia of 146 mg/ dL, serum creatinine of 9,5 mg/ dL and slight leucocytosis and neutrophilia - 11.600 leucocytes/ mL with 74 % of neutrophils -. Cystoscopy was indicated, confirming the presence of diffuse parietal thickening, mainly affecting the base and both lateral walls of the bladder, with some areas protruding. A cold biopsy was taken, the assessment of which let see a significant inflammatory infiltrate, with eosinophilic component (Figure 2).

In view of these findings mentioned, and considering the persistence of patient’s clinical manifestations, a transurethral resection of affected areas was chosen. The pathological assessment showed the presence of high-grade transitional carcinoma deeply infiltrating the bladder wall (Figure 3). Given patient’s determining factors, as well as an unsatisfactory basal status, her family agreed not to carry out aggressive exeretic surgery, and pelvic radiotherapy was administered.

Two months after surgery, presence of multiple bilateral lung metastases was detected at control thoracoabdomi-lopelvic CT scan. Patient’s worsening afterwards was progressive, with exitus three months after this test.

DISCUSSION

Eosinophilic cystopathy represents an unfrequent entity, so that until the beginning of the present decade the reported casuistry only consisted of few more than one hundred of cases (1). Its scarce incidence difficults the definition of its epidemiological profile, although the age rank of reported cases is remarkably wide, embracing from the neonatal period until the ninth decade of life. There does not seem to be greater gender predisposition, except for pediatric age, during which it presents more frequently in males (1).

The etiology of eosinophilic cystopathy remains unknown. Hypotheses have been expressed based on immediate hypersensibility reactions, or as response against specific bacterial antigen complexes. In this sense it has been tried to establish differentiation between those cases - specially women, with diffuse bladder affection - to whom an atopic component is verified - chronic asthma, pollinosis -, and a group of patients to whom the mentioned cystopathy is linked to a variety of etiological possibilities - drugs, endovesical instilations of cytostatic or immunotherapeutic agents, parasitoses, foreign bodies, radiations and transurethral resections, among others - (2). Estrogen deprivation in association with an allergy record have been proposed as adjuvant factors in patients with nervous anorexia (3). Coexistence of eosinophilic cystopathy and bladder transitional carcinoma has been reported, although bibliographic references are scarce (4).

Main clinical manifestations are those ones typical of irritative micturitional symptoms, predominantly pola-
quiuria, dysuria and suprapubic pain (1). Macro- or microscopical hematuria can be present, especially in those cases with neoplasm association, although in this one we report, the intensity of signs and symptoms turned out to be particularly limited. Eosinophilia - associated or not with eosinophiluria - is verified in up to 25-50 % of adult patients, above all in those ones with allergic component. Its presentation is even more frequent during infancy, although at this stage its association with allergies is rare (2).

Imaging techniques - mainly ultrasonography and computerized axial tomography - do not contribute to specificity in order to diagnosis of eosinophilic cystopathy (5), but they do keep their value to detect pseudotumoral forms, so that they are indicative of need for complementary tests given the possibility of having got a true neoplasm. In this sense, cystoscopy let identify yellowish plaques with the possibility of surface ulceration (6), focal or diffuse - the latter as most frequent affecting pattern in females -, although irregular morphologies, with different protrusion degrees have also been reported (7) (8), these ones being the cases in which a correct histological definition of biopsy samples become of paramount relevance. From a microscopical point of view, the main feature is the inflammatory infiltrate which is localized at lamina propia and muscular layer, with significant eosinophilic component (8), which could adopt a granulomatous pattern.

Therapeutical options used for eosinophilic cystopathy vary, with a more or less conservative nature - suppression of potential antigens; association of corticoids and antihistaminics, with antibiotics or not -, or interventionist - endoscopic resections -, with the possibility of combining both (1). Patients’ follow-up control is clearly advisable, given its trend to relapse (9), even leading to severe vesical fibrosis (10). In the latter case, as well as in those patients with recidivant hematuria as main sign, more aggressive therapies would have their indication - partial or radical cystectomy -; and also in those individuals with associated infiltrative neoplasm, except for some of them like the one here reported, to whom the only applicable options are merely palliative, given the fast tumoral progression and consequent infaust prognosis.

**CONCLUSION**

Although coincidental presentation of eosinophilic cystopathy and transitional carcinoma of the bladder is unfrequent, it represents an example of the importance of a correct definition of endoluminal “pseudotumoral” lesions which could harbor a truly malignant neoplastic process.

**REFERENCES AND RECOMMENDED READINGS**

(*of special interest, **of outstanding interest)

**1.** Van Den Ouden D. Diagnosis and management of eosinophilic cystitis: a pooled analysis of 135 cases. Eur Urol, 2000; 37: 386.


