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Urology

Pyelocalicial Hematoma Simulating a Tumor of the Upper Excretory Tract

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Abstract

Case Report

Haematoma of the upper excretory tract (UET) may be due to trauma to the bladder, ves tves, or may be favored by anticoagulant treatment. The main sign is hematuria. On CT scan, the hematoma presents as an irregular, spontaneously hyperdense lesion, and may mimic a Upper Excretory Tract Tumour (UETT), so a sound diagnostic strategy is essential. We report here a case of pyelocal hematoma in a 68-year-old patient, treated by simple drainage through a double-j catheter with adaptation of the anticoagulant dose.

Keywords: Haematoma, Upper Excretory Tract, Anticoagulant Treatement, Double-J Catheter.

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INTRODUCTION

Haematoma of the upper excretory tract (UET) is a complication that can be seen in UET trauma, can form during Upper Excretory Tract Tumour (UETT), but also during anticoagulant therapy; the suggestive clinical sign is haematuria. On imaging, the hematoma appears as an irregular, spontaneously hyperdense lesion, and may mimic an UETT.

OBSERVATION

This is a 68-year-old patient, followed for nondilated ischemic heart disease with moderate systolic function, with ejection fraction at 43% and complete atrioventricular block, fitted with a pacemaker for 7 years, on Eliquis, cosyrel, aldactone and lasilix. Admitted for treatment of nonclotting hematuria + left lower back pain 2 months old. Clinically, patient well, hemodynamically and respiratory stable, apyretic, slight left lumbar tenderness without lumbar contact, pinkish urine without clots.

Biology Report

HB: 12.8; WBC: 4720; Creat: 16; Urea: 0.5; NA: 138; K4.6; CRP:1.7; PLQ: 188000; PT 100%; INR: 1; Cytobacteriological examination of the urine (CBEU) was steril.

Ct Urography

Left kidney of normal size and situation, measuring 6.1*11.8cm, with regular contours, site of a

spontaneously dense lower pyelocalcic endoluminal image, enhanced after injection of contrast medium, extended over 4 cm in height, responsible for moderate dilatation of the upstream excretory cavities, with delayed secretion of one hour and delayed excretion of 20 hours.

Chest Ct Scan: No abnormalities.

Urinary cytology: Negative for urothelial carcinoma HG.

Cystoscopy: 2 meatus well visible, no suspicious lesions.

Ureteroscopy

Presence of a pyelocal blood clot, presence of a small inflammatory pyelic lesion, no suspicious lesions visible. The patient underwent biopsy of this lesion +Double j catheter placement.

Pathology

Inflammatory changes.

The patient was referred to a cardiologist for anticoagulant dose reduction. The patient was rehospitalized after 1 month, no longer reporting any notion of hematuria, the control ureteroscopy performed during hospitalization showed the disappearance of the hematoma, no visible lesions. The patient had benefited from removal of the double J catheter.

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CT section showing a spontaneously dense left lower pyelocalic endoluminal image, enhanced after contrast injection, with dilatation of the upstream excretory cavities.

DISCUSSION

Direct oral anticoagulants are very closely monitored, particularly with regard to the risk of bleeding. The Pharmacovigilance and Risk Assessment Committee evaluates the safety data available in the periodic pharmacovigilance update reports every six months. At European level, the safety profile of these compounds is also monitored, and a report is presented to the Pharmacovigilance Technical Committee every 6 months [1].

Haematoma of the upper excretory tract may be caused either by trauma to the UET, or by a bleeding UETT, and may also be seen during anticoagulant therapy. The clinically suggestive sign is hematuria; other signs may be associated, notably lumbar pain. The evolution may be favorable after rapid correction of hemostasis disorders in cases of hematoma favored by anticoagulant therapy [3].

A sound diagnostic strategy is needed to rule out other causes of UET hematoma, and to confirm the drug-induced origin. Detailed history-taking in search of history of UETT, bladder tumour, anticoagulant treatment, abdominal trauma, notion of haematuria, low back pain, onset and evolution of symptoms.

Clinical Examination

Assessment of hemodynamic status: state of consciousness, skin and mucous membrane discoloration, blood pressure and heart rate. Look for hematuria, which is the main symptom, accounting for 20 to 40% of hemorrhagic events. It should be the subject of a full etiological work-up in search of organic pathology [6]. Also look for lumbar pain; anuria is rare, and more frequently associated with shock.

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Parietal pyelic or ureteral hematomas are submucosal. They represent a rare and poorly described complication (fewer than ten cases reported), but are probably underestimated [7]. In most cases, these hematomas are symptomatic: lumbar or abdominal pain associated with macroscopic hematuria. They may also occur in the absence of biological overdose [8]. Parietal thickening, whether or not associated with clotting of the excretory tract, may be responsible for acute obstructive renal failure [7].

Computed tomography (CT) with injection of contrast medium, with delayed time, is the reference examination [4], enabling the diagnosis to be made. Ureteroscopy enables the diagnosis to be confirmed and biopsies of suspicious lesions to be taken, thus enabling other causes of UET hematoma to be ruled out, notably UETT, for which the reference surgical treatment is total nephroureterectomy, but conservative treatment is also possible for so-called low-risk lesions: unifocal tumor, potential complete resection, low grade and absence of infiltration on imaging, then requiring close endoscopic surveillance (flexible ureteroscopy) in a compliant patient [5].

In cases reported in the literature, the clinical and radiological evolution of UET hematomas is always rapidly favorable, even in cases of acute obstructive renal failure, after correction of coagulation disorders and immediate discontinuation of anticoagulant therapy. [9]

CONCLUSION

Pyelocalcal and ureteral haematomas should be considered in patients on anticoagulant therapy presenting with haematuria and back pain. This complication is much rarer than digestive or muscular hematomas [2]. A well-adapted diagnostic strategy helps to confirm the diagnosis and rule out other causes of hematoma, notably UETT.

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