Ecografia Point-of-Care como Processo Dinâmico no Diagnóstico de Oligoanúria

Point-of-Care Ultrasound as a Dynamic Process in the Diagnosis of Oligoanuria

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We present a 76-year-old woman with hypertension, diabetes, and obesity, admitted to the emergency department with a one-week course of metrorrhagia and oligoanuria. She presented with tenderness at the hypogastrium where there was an irregular mass, with ill-defined contours, reaching the umbilicus. Blood tests showed anemia (7.7 g/dL) and acute kidney injury (AKI) (urea 108 mg/dL, creatinine 2.7 mg/dL).

Point-of-care ultrasound (POCUS) was performed. Mild right hydronephrosis was noted raising the possibility of obstructive uropathy (Fig. 1). Bladder examination ensued showing a mass with 12x20 cm and no noticeable bladder contour (Fig. 2A).

The use of POCUS allowed a timely referral to the Gynecologist. An abdominal-pelvic computed axial tomography was performed, and a biopsy ensued, revealing undifferentiated carcinoma of endometrial origin.

This case report demonstrates the usefulness of POCUS as a real-time diagnostic exam which can assist therapeutic interventions.¹,² POCUS allowed a dynamic approach: an obstructive mass was identified, a urinary catheter was placed, and visualization of the catheter allowed determination of the bladder and mass location.

A unilateral ureteral obstruction doesn’t often result in a relevant AKI.⁶ Since bilateral hydronephrosis would be expected if there was bladder obstruction, one of the possible explanations for such injury is the activation of the renin-angiotensin system causing vascular constriction and ureteral spasm in the contralateral kidney, leading to renal hypoperfusion.⁶ Moreover, the basal kidney function in this diabetic, hypertensive patient was not known, leading to a possible overestimation of the AKI.

POCUS use during physical examination is a dynamic process that increases diagnostic accuracy and speed,¹,²,³ and helps monitoring the results and complications of performed procedures.¹,²,³

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JM – Revisão de imagem e do caso
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