

omitted in the bibliography a reference to their work published in the November 2011 issue of *Histol Histopathol*. We believe that "omitting" is not the word that best reflects what occurred.

We have been working since 2008 in the study of the C4d in glomerular diseases, and in particular in membranous nephropathy. The results were presented for the first time in the XXXVII Congress of the Andalusian Society of Nephrology, held April 16 through 18 2009, and in the congress of the Spanish Society of Nephrology held in Pamplona that same year. The Public Health System of Andalusia recognized them in 2010 in the Bank of Innovative Practices, whose web site may be accessed.

We wrote our work to initiate the process of publication in the summer of

2011 and sent it to the nephrology magazine [*Nefrologia*] on November 23, 2012. The article by Dr. Val-Bernal et al., was published in the November issue of 2011. It is obvious the reason why we were not able to detect it in our bibliographic reviews; in addition, we did not know of its existence as we had not seen it on any of our meetings.

We are very glad that Spanish colleagues have reproduced our results, which adds value to both works. We deeply regret not having detected the work of Dr. Val-Bernal et al. in those few days and, as a result, not being able to add it to the bibliography.

The work of Dr. Fernando Val-Bernal is really respectable and fact that it has not been included in the bibliography does not detract merit from it.

The merit and respect of works is earned by their virtues - and the work of Dr. Val-Bernal has many-, and that of people, by their acts.

**Conflicts of interest**

The authors affirm that they have no conflicts of interest related to the contents of this article.

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**B) BRIEF PAPERS ON RESEARCH AND CLINICAL EXPERIMENTS**

**Gross haematuria in patients with nutcracker syndrome**

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**To the Editor,**

Among the different diagnostic algorithms that are commonly used in outpatient nephrology consultations, nutcracker syndrome/phenomenon is a very rare cause of haematuria. This type of haematuria originating from the left collecting system and is secondary to compression of the left renal vein between the superior mesenteric artery and the aorta.

We herein report the case of a 22-year-old male with no personal or family history of relevance, who was referred to a nephrological department for haematuria. Laboratory analyses confirmed the presence of haematuria that ranged between gross (macroscopic) haema-

turia and microhaematuria, depending on the measurement. This condition arose both with and without physical exercise. During periods in which urine samples came up clear, microhaematuria was always present. Also, haematuria was not correlated with respiratory tract infections at any level. The patient did not have oedema, abdominal pain, or any other symptoms.

A physical examination revealed the following: weight: 65kg; height: 1.80m; body mass index: 20kg/m<sup>2</sup>; blood pressure: 110/60mm Hg; all other measurements were normal. A laboratory analysis revealed the following values: C-reactive protein: 0.9mg/dl; proteinuria: 1g/24 hours; urinary sediment >30 000 red blood cells per field, with no casts or dysmorphic blood cells. The patient also had normal renal ultrasound images. An axial computed tomography angiography (CTA) (Figure 1 and Figure 2) was used to evaluate renal vascularisation, and led us to the diagnosis.

**DISCUSSION**

Nutcracker syndrome consists of haematuria originating from the left collecting system secondary to compression of the left renal vein, between the superior mesenteric artery and the aorta and is due to a reduced angle between these two arteries. This compression translates into increased pressure on the left renal vein system, which causes varicosities in the renal pelvis and ureter, which can in turn communicate with the urinary tract and cause haematuria. The predisposing factors include: nephroptosis, lumbar hyperlordosis, and reduced peri-renal fat (which was present in our patient). Clinically, this condition can be silent or involve episodes of macroscopic or microscopic haematuria, which can be accompanied by pain in the left renal fossa and/or abdominal pain. The haematuria is usually more intense during orthostasis and exercise, which occurred in our patient. It can also be accompanied by mild proteinuria and can even be asso-



**Figure 1.** Computed tomography angiography of the abdomen.

Axial maximum intensity projection image showing compression of the renal vein at the level of the superior mesenteric artery.



**Figure 2.** Computed tomography angiography of the abdomen.

3D volume rendering image showing that the left renal vein is pinched between the two arteries.

ciated with other entities such as IgA glomerulonephritis, although there is no evidence that associates these two conditions.<sup>1,3</sup>

This disease is difficult to diagnose using routine methods. Initially, a haematuria analysis must be carried out in order to rule out other, more common causes. Cystoscopy will reveal unilateral emission of haema-

uric urine from the left ureter, in the case of macroscopic haematuria. A retrograde venography and angiography with renocaval pressure gradient (difference in pressure between the distal portion of the renal vein and the inferior vena cava) is accepted as the gold standard for establishing a definitive diagnosis of nutcracker syndrome; however, since these are invasive testing methods, there are other diagnostic alternatives, such as CTA scans and 3D reconstructions that also facilitate diagnosis. Depending on the severity of the bleeding, treatment varies between observation and monitoring and surgical techniques for correcting the anatomical anomaly, such as autologous transplantation and left renal vein transposition.<sup>4,5</sup>

In conclusion, given a young patient with haematuria, and negative diagnostic tests suggesting haematuria of a renal origin, we must keep in mind the possibility of this urological pathology.

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## Role of transthoracic echocardiography in the screening of thrombi in patients with tunnelled haemodialysis catheters

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#### To the Editor,

Haemodialysis catheter dysfunction is a complex issue that results in high morbidity rates. Classic studies evaluated the presence of thrombus in catheters using transoesophageal echocardiography.<sup>1</sup> However, never has the role of transthoracic echocardiography been studied as a useful tool in the evaluation of haemodialysis catheters. Poorly functioning tunnelled haemodialysis catheters are usually caused by system thrombosis, probably associated with endothelial damage caused by the continuous rubbing of the catheter tip against the vessel wall or right atrium.<sup>2</sup> The clinical manifestations of this condition are catheter dysfunction due to lumen obstruction, pulmonary embolism, paradoxical systemic embolism, and system superinfection.<sup>3</sup> The majority