

A) COMMENTS ON PUBLISHED ARTICLES

**What happens to the specialty of nephrology?**

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**To the Editor,**

What has happened to the specialty of nephrology?

In recent years, the Spanish Society of Nephrology and the National Nephrological Commission have voiced enormous concern regarding our specialty and the possible loss of attractiveness for young doctors.<sup>1,3</sup>

An analysis of the score of MIR (internal medicine residency) placements between 1985-1986 and 2008-2009<sup>3</sup> shows a decreasing tendency for the mean position in the test score results for doctors who choose nephrology: this number has gone from position 253 to 3457 during this time period. Although the placement programme and the number and percentage distribution of placements for each specialty have varied over the years, the results from the last two years confirm this tendency, since the mean score of doctors who chose nephrology in the 2009-2010 year was 3679, and 3461 in the 2010-

2011 year (Figure). Furthermore, the mean annual score for the exam decreased from 435 points to 377 points over this time period, with the mean score in the last two years being 311 and 332 points, respectively. However, in recent years, the placement of the first student to choose nephrology has improved (numbers 149, 228, and 387, versus 1429 in 2007-2008). There is also a growing trend for female professionals in this specialty, with a male:female ratio of 0.54 and 0.57. The MIR placement for the last student to choose nephrology has gone from 937 in 1985 to 2485 in the 2008-2009 session, and was 5175 and 5255 in the last two years. However, the specialty of nephrology has a low drop-out rate once doctors have started training,<sup>4</sup> and has one of the highest rates of foreign applicants.<sup>5</sup>

According to a study performed during the 2010-2011 year by the research centre of the medical association of Granada, only six specialties have more than 50% of foreign applicants: immunology (71.4%), thoracic surgery (70.6%), cardiovascular surgery (57.7%), physical education medicine (53%), nephrology (52.7%), and otorhinolaryngology (50.6%). In seven specialties, this rate does not even reach 15%: paediatrics

(10%), preventative medicine (12.3%), clinical chemistry (12.9%), psychiatry (13%), neurology (13.6%), obstetrics and gynaecology (15%), and legal medicine (15%).<sup>5</sup> This also holds true in medical training in the USA, where foreign doctors account for 41% of nephrology applicants.<sup>6</sup>

The proper approach to the issues facing nephrology in Spain is complex and multifactorial,<sup>1-4,7,8</sup> and the methodology for making nephrology more attractive to young doctors does not exclusively depend on us. However, assessing the most current data regarding this situation may aid in improving this situation.

**Conflicts of interest**

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

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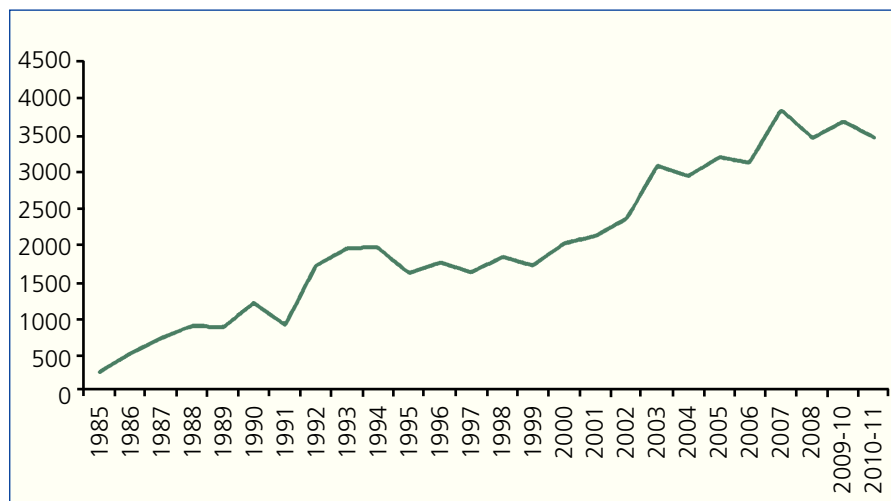


Figure 1. Mean score of MIR placements for nephrology in Spain, 1985-2011.

[http://www.actasanitaria.com/actasanitaria/frontend/desarrollo\\_noticia.jsp?idCanal=1&idContenido=27048](http://www.actasanitaria.com/actasanitaria/frontend/desarrollo_noticia.jsp?idCanal=1&idContenido=27048)

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## C4d as a diagnostic tool in membranous nephropathy

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### To the Editor,

In a recent issue of *Nefrología* (vol. 32, issue 3, 2012), Espinosa-Hernandez et al. published a study titled “*C4d como herramienta diagnóstica en la nefropatía membranosa*” (C4d as a diagnostic tool in membranous nephropathy).<sup>1</sup> In the introduction, the authors pointed out that the information regarding C4d deposition in glomerular nephropathies is very scarce, and set the objective of their study to determine whether immunohistochemical detec-

tion of C4d in patients with membranous nephropathy (MN) could be useful as a diagnostic tool. In the discussion, they pointed out that the information on the role of C4d in MN is limited to a single study of 12 patients using immunofluorescence, published in 1989.<sup>2</sup> They concluded their study by indicating that C4d detection using immunohistochemistry is a very useful tool for the differential diagnosis of MN and minimal change disease.

However, Espinosa-Hernandez et al omitted our publication titled “C4d immunohistochemical staining is a sensitive method to confirm immunoreactant deposition in formalin-fixed paraffin-embedded tissue in membranous glomerulonephritis”.<sup>3</sup> In this article, we showed that there was a characteristic glomerular, granular C4d deposit in the basal membrane in 31 cases (100%) with idiopathic MN and in 5 cases (100%) with pure membranous lupus nephritis, class V, following fixation in formalin, paraffin embedding, and immunoperoxidase-based detection. In all cases, the previous diagnosis of lesions was made by immunofluorescence. In addition, in 19 cases with different glomerulonephropathies, including IgA nephropathy, membranoproliferative glomerulonephritis type I, focal segmental glomerulosclerosis, and minimal change disease, we found several reproducible patterns of C4d deposits, without intrinsic background staining. Our results showed that C4d staining in tissues fixed in formalin and embedded in paraffin can be used to detect membranous granular deposits of complement factor in MN. This method proved to be so reliable that it might obviate the need for further biopsies when glomeruli in frozen slides or ultrafine slides for electron microscopy are not available. We concluded our article by indicating that immunostaining using the immunoperoxidase method deserves recognition as a complementary method for the biopsy-based diagnosis of MN.

We would like to see our article receive the recognition it deserves.

### Conflicts of interest

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

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## Author's reply: C4d as a diagnostic tool in membranous nephropathy

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### To the Editor,

Dr. Fernando Val-Bernal and his collaborators commented that we have