

according to aetiological sub-type. *Neurología*. 2011, <http://dx.doi.org/10.1016/j.nrl.2011.06.003>.

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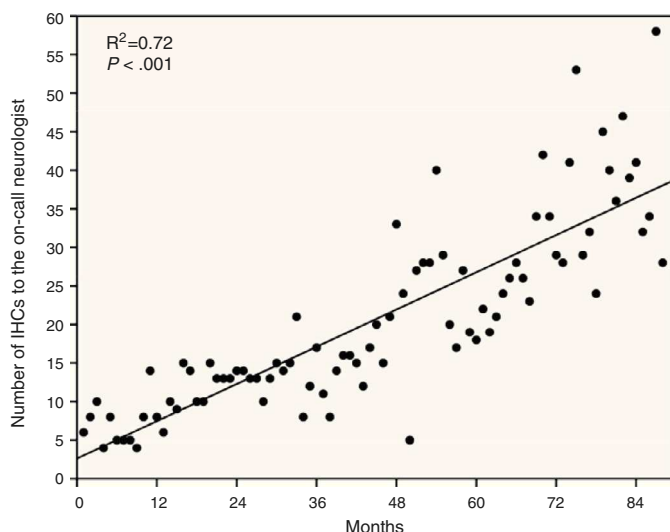
## Regarding emergency department consultations with neurologists<sup>☆</sup>

### Acerca de las interconsultas a los neurólogos formuladas desde urgencias

Dear Editor:

We have read with great interest the recently published study by Ramírez-Moreno et al. reporting an increase in the number of in-hospital consultations (IHC) to the on-call neurologist between 2005 and 2009.<sup>1</sup> This is an innovative study as there are no articles in the literature analysing IHC activity in Spain over time. One of the most striking findings is the increasing demand for IHCs by the emergency department from 2005 to 2009; in fact, this department was the one that had recorded the most consultations with the neurology department by the end of the study period.

Some might argue that the study by Ramírez-Moreno et al. lacks external validity since it was conducted in only one hospital. However, we can provide data from the opposite standpoint (an emergency department) that confirm their findings. The emergency department at Hospital Universitario Donostia has kept an electronic database of all IHCs since April 2004. We analysed IHCs with the on-call neurologist by month for 88 consecutive months ending at February 2013, and found a continuous and statistically significant increase over that period (Figure 1). Both at the beginning (2006) and at the end (2012) of the study period, assessment of focal neurological signs was the leading cause of IHCs, and this cause has also undergone a statistically significant increase in its relative weight. We feel that this increase is the result of implementing 'code stroke' in the past decade: specialists from emergency medical services<sup>2,3</sup> and emergency departments<sup>4</sup> have been key players in this initiative. Later therapeutic improvements and adaptations of this process have highlighted the importance of neurologists in emergency services,<sup>5,6</sup> which are usually saturated:



Reasons for ICH	2006 n (%)	2012 n (%)	P-value
Focal neurological signs	46 (52.9)	279 (65.3)	<.05
Patient transferred from another centre	7 (8.0)	46 (10.8)	.72
Dizziness	7 (8.0)	14 (3.3)	.07
Headache	4 (4.6)	5 (1.2)	.52
Convulsions	4 (4.6)	7 (1.6)	.10
Abnormal movements	3 (3.4)	0 (0.0)	<.01
Other*	16 (18.4)	76 (17.8)	.88
Total	87 (100.0)	427 (100.0)	

**Figure 1** Monthly changes in the number of emergency department IHCs with the on-call neurologist (to the left: linear regression analysis; month 1 corresponds to May 2004, and month 88 corresponds to February 2013). Comparison of reasons for consultation between the first (2006) and last (2012) complete years of the study period (to the right: chi-square test).

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in these services, managing conditions requiring rapid intervention is a top priority.<sup>7</sup> From the perspective of emergency services, close and fluid cooperation with other professionals is essential and results in higher quality and safer care.<sup>8,9</sup>

The results reported by Ramírez-Moreno et al., and our own, are a reflection of the changes taking place in the relationships and needs of different professionals involved in diagnosing and treating a condition. Stroke is one of the best examples. The role of neurologists in emergency services, which was more limited a decade ago, is now especially relevant and gives very satisfactory results. Any study addressing the connections between medical professionals and the factors that contribute to those connections, such as this one by Ramírez-Moreno et al., is therefore a necessary and welcome addition.

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## Regarding emergency department consultations with neurologists: Author's reply<sup>☆</sup>

### Acerca de las interconsultas a los neurólogos formuladas desde urgencias: respuesta del autor

Dear Editor:

We very much appreciate the comments made by Drs Busca and Miró about our study and agree with their conclusions.<sup>1</sup> Viewing such an important part of our workload from the perspective of an emergency department gives us the opportunity to comment on a few aspects that we did not examine in our study. Our purpose was to provide a descriptive and

retrospective analysis of the in-hospital consultations (IHC) requested of our department during a 5-year period; we agree with Busca and Miró that this is an innovative approach since it shows trends in IHC use.<sup>2</sup> Consultations from emergency departments have not traditionally been considered IHCs, as we mentioned in our study. Nevertheless, we deemed it appropriate to include them in our analysis since the emergency department frequently requests formal ICHs, using the same procedure as other hospital departments, when staff have questions about how best to manage or diagnose neurological diseases. We should also point out that our hospital did not have an on-call neurology service and pagers were not used in the morning hours during this study period.

Several studies with different methodological approaches provide useful data on neurological care in emergency departments.<sup>3–7</sup> According to 2 different series, these emergencies account for 3% to 14% of all medical emergencies. An observational prospective study conducted several years ago in a general hospital found that 5% of all emergencies were neurological conditions, and that 90% required assessment by a neurologist. We should highlight that nearly 75% of neurological emergencies in tertiary hospitals can be considered life-threatening or potentially life-threatening, while this percentage would be 60% for all other medical specialties.<sup>6</sup> Several studies have cited that these neurology-related consultations are more frequent between mid-afternoon and night-time,<sup>7</sup> which points to a need for

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