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- J. Olazarán Rodríguez^{a,b,*}, F. Bermejo Pareja^{c,d,e}
- ^a *Servicio de Neurología, Hospital General Universitario Gregorio Marañón, Madrid, Spain*
^b *Unidad de Investigación, Centro Alzheimer Fundación Reina Sofía, Instituto de Salud Carlos III, Madrid, Spain*
^c *Servicio de Neurología, Hospital Universitario 12 de Octubre, Madrid, Spain*
^d *Ciberned 5 (Enfermedades Neurodegenerativas), Madrid, Spain*
^e *Universidad Complutense de Madrid, Madrid, Spain*
- *Corresponding author.
 E-mail address: jolazaran@fundacioncien.es (J. Olazarán Rodríguez).

Reflections on endovascular treatment for ischaemic stroke. A stroke care plan for the Region of Madrid[☆]



Reflexiones sobre el tratamiento endovascular en el ictus isquémico agudo. Plan de atención al ictus en la Comunidad de Madrid

Dear Editor:

We are pleased that our study, 'Reflections on endovascular treatment for ischaemic stroke. A stroke care plan for the Region of Madrid', has generated the interest expressed in this letter, which raises the possibility of establishing criteria for defining, from the very beginning, which stroke patients are candidates for endovascular treatment. These patients would therefore be transferred directly to the on-call reference hospital with no other unnecessary transfers.

We fully agree that proper identification of candidates will contribute to reducing treatment delays. Nevertheless, we believe that the current system now achieves a good balance between effectiveness and optimal use of resources.^{1–3}

First of all, all patients with stroke, and particularly those who may be candidates for specific treatment, must be assessed in centres with all the necessary resources to provide an exact diagnosis and indicate the appropriate treatment.⁴ The right actions carried out by non-hospital

emergency medical services are crucial in order to stabilise patients and transfer them to the hospital as quickly and in the best condition as possible. Nevertheless, these services are not able to identify candidates for endovascular treatment with sufficient precision given the means at their disposal. This intervention is indicated based on strict criteria and expert assessment, after which only a small percentage of all stroke patients will be determined eligible to undergo endovascular treatment.⁵ Sending patients who have not received this initial screening to hospitals of reference for treatment would saturate them with patients who, for the most part, would not be candidates for the procedure. This would make the system less efficient. The 2014 update to the Region of Madrid's Stroke Care Plan has improved the system with the addition of the 'neurologist-case manager'. The effect of this addition is that as soon as the emergency services make contact with the neurologist to activate code stroke, the doctor can then determine if the patient is not a candidate for intravenous thrombolysis but may benefit from endovascular treatment. In that case, the neurologist will contact the reference hospital for neurointerventional surgery to address immediate transfer of the patient.

On the other hand, the treatment shown to be the most effective in patients with ischaemic stroke is care in a stroke unit and intravenous thrombolysis in selected cases.⁴ The Region of Madrid's Stroke Care Plan ensures that all patients with stroke in our area will have rapid access to these resources, regardless of place of residence, by means of a code stroke system to facilitate emergency patient transfers to the nearest stroke units. This system is under the very effective management of the Madrid emergency medical responders (SUMMA/SAMUR), and it has yielded excellent results with regard to both the number of patients treated and the number of good outcomes. Endovascular treatment may be an alternative for some patients who are not candidates for or do not respond to standard treatment, but it has

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not been shown to be superior to intravenous thrombolysis. As such, it is not an alternative that can be generalised as an overall first line of treatment.⁶

Decreasing the delay to reperfusion treatment in patients with ischaemic stroke is a key strategy for increasing probability of recovery. Since the consensus statement for an endovascular treatment protocol for acute ischaemic stroke was implemented in the Region of Madrid, we have observed that the time to endovascular treatment increases only slightly when hospital transfers occur. Although times are comparable to current recommendations,⁷ we continue striving to improve the organisational system in areas such as interhospital communication and others. To this end, we are implementing new resources including Teleictus⁸ and the 'neurologist-case manager' mentioned above. From the time that code stroke is activated, these innovations enable better selection of candidates for treatment so as to provide the best feasible treatment in the shortest possible time with no unnecessary transfers.

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Conflicts of interest

None.

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M. Alonso de Leciñana^a, J. Díaz-Guzmán^b, J.A. Egido^c, A. García Pastor^d, P. Martínez-Sánchez^e, J. Vivancos^f, E. Díez-Tejedor^{e,*}, on behalf of Comité ad hoc del Foro de Ictus de la Asociación Madrileña de Neurología

^a Unidad de Ictus, Servicio de Neurología, Hospital Universitario Ramón y Cajal, Madrid, Spain

^b Unidad de Ictus, Servicio de Neurología, Hospital Universitario Doce de Octubre, Madrid, Spain

^c Unidad de Ictus, Servicio de Neurología, Hospital Universitario Clínico San Carlos, Madrid, Spain

^d Unidad de Ictus, Servicio de Neurología, Hospital Universitario Gregorio Marañón, Madrid, Spain

^e Servicio de Neurología y Centro de Ictus, Hospital Universitario La Paz, Madrid, Spain

^f Unidad de Ictus, Servicio de Neurología, Hospital Universitario de La Princesa, Madrid, Spain

* Corresponding author.

E-mail address: exuperio.diez@salud.madrid.org (E. Díez-Tejedor).