

patient's neurological condition deteriorated and he died after an episode of pulmonary aspiration.

We present a case of superficial siderosis caused by cerebral metastatic melanoma, a tumour type particularly likely to cause bleeding during metastasis.<sup>4</sup> Although some articles link superficial siderosis to melanocytomas of the central nervous system,<sup>5,6</sup> we have not found any descriptions of superficial siderosis secondary to metastatic melanoma. Superficial siderosis is an infrequent finding in normal clinical practice, but it is important to include it in the differential diagnosis of symptoms of cerebellar ataxia and progressive hypoacusis. MR imaging is the diagnostic test of choice; if superficial siderosis is confirmed, we must then search for a source of bleeding.<sup>7,8</sup> It is especially important to consider metastatic origin in patients with a history of cancer.

### Conflicts of interest

The authors have no conflicts of interest to declare.

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### Remarks on cerebral infarct from another point of view<sup>☆</sup>



### Algunas consideraciones sobre el infarto cerebral desde otra óptica

Dear Editor:

It was with great interest that we read the review article 'Guidelines for the treatment of acute ischaemic stroke'.<sup>1</sup>

We believe that quality care for this disease is a multidisciplinary issue involving multiple participants, such as hospital emergency departments and emergency medical services among others.<sup>2</sup> Acute ischaemic stroke is a time-dependent entity,<sup>3</sup> and as such, emergency medical services play a key role in early detection and transfers, and in providing access to imaging tests, which are essential for starting treatment. While this role was indeed highlighted in the article, no mention was made of the fundamental value of emergency services and of having developed activation

codes (code stroke) for use both inside and outside the hospital. Different articles highlight how important it is to implement these processes correctly in order to reduce morbidity and mortality in patients who suffer these events.<sup>4</sup> Their importance resides in reducing the time from symptom onset to definitive treatment, a factor which affects the prognosis: time is brain.<sup>1</sup> Developing procedures undertaken jointly between the specialties involved in treating time-dependent diseases has meant a significant qualitative improvement in the management of these entities. Codes for acute coronary syndromes, for example, which have been fully implemented in some regions, have had an undeniable impact on treatment results for acute coronary syndrome with ST-segment elevation.<sup>3,5</sup> Therefore, we agree with the authors' conclusion that treatments for stroke should be administered in stroke units (SU) when available. However, we also believe that the existence of 'code stroke' is what makes this approach possible.

The authors of the review article also cite the role of telemedicine, but only in passing. It is important to highlight how useful telemedicine could be on islands and in areas with difficult access.<sup>6</sup> Furthermore, we should be aware that in some Spanish regions, up to 40% of all emergency cases have a community hospital designated as their first response hospital.<sup>7</sup> In many rural areas, the percentage of subjects older than 65 is higher than in urban health districts.<sup>8</sup> There are a few Spanish regions that already have telemedicine systems for stroke care<sup>2</sup> which are obtaining results similar

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to those described in the literature.<sup>9,10</sup> Their results are also comparable to those achieved when intravenous fibrinolytic therapy is administered in SUs. Furthermore, emergency department doctors have experience administering fibrinolytic drugs.<sup>11–13</sup> We also wish to mention that current telemedicine systems not only enable video-conferences and joint examinations between the receiving and the referring centres, but also real-time sharing of the patient's relevant information. The different healthcare centres thus connect to share the patient's history and examine CT images and any of them can adjust the display characteristics of those images.<sup>14</sup>

Our preliminary results under this system show very similar modified Rankin Scale scores at 3 months between patients treated in a community hospital using telemedicine systems and patients treated in the SU at the hospital of reference. In fact, our preliminary results show that symptom onset-CT scan times, symptom onset-treatment times, and door-to-needle times are shorter in community hospitals with telemedicine systems than in the hospital of reference.<sup>15</sup> Once the study is completed we will publish our results.

It is still to be determined if, when using telemedicine, the fibrinolytic drug should be administered entirely in the community hospital (1 h) or if the patient's secondary transfer should be started during that treatment.<sup>16</sup>

In conclusion, we wish to highlight the role new technologies have played in ensuring equal access to care for the entire population of patients affected by this highly prevalent disease.

## Conflicts of interest

The authors have no conflicts of interest to declare.

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