

LETTERS TO THE EDITOR

EMERGENCIAS and impact factors for Emergency Medicine journals in 2009

In the June 2010 issue of EMERGENCIAS, the Editorial Board published an article analyzing the evolution of the journal during the period 2005-2009¹. Among other things, the article dealt with an estimate of its impact factor (IF). The result was highly encouraging, since EMERGENCIAS progressed during those five years from being scarcely cited in established scientific journals to having a citation index of its articles in Journal Citation Reports® (JCR). Precisely in mid-June, a few days after publication of that article, JCR published their data for 2009². This edition of 2009 was characterized by a marked increase in the number of scientific journals covered by JCR, with more than 1,000 newcomers, which means that there are currently more than 9,000 journals with an IF. This growth, as ac-

knowledge by the publishing enterprise itself, is due to a clear intention to extend coverage to more regional journal areas which until now had been under-represented. One of the areas benefiting from this increased coverage has been "Accident and Emergency Medicine" (Emergency Medicine) which has grown from 13 journals in 2008 to 19 in 2009. Of these, 15 are published in English, 3 in German and 1 in Turkish. Clearly missing from this list is a journal that represents and shows the research activities in our field by the Spanish-speaking scientific community; one that disseminates research results in Emergency Medicine in Spanish. EMERGENCIAS is striving to fill this gap. As made public a few months ago in an editorial³, EMERGENCIAS applied for JCR indexation in late 2009 and is presently waiting to receive an official response in the coming months, because the evaluation process can be extended for over a year. Considering that the decision depends on the citation of articles published in EMERGENCIAS by other journals, the prospects could not be more promising. If EMERGENCIAS is incorporated in JCR as expected, it would figure as the twentieth journal on Emergency Medicine, and in the light of results for 2009, would occupy the 7th position in IF ranking if self-citation is counted and the 10th without self-citations (as a regional magazine, its rates of self-citation are higher than those usually found in Anglo-Saxon journals) (Figure 1). This is evidence of the growing influence of articles published in our journal. Thank you to all the researchers who send us their work for making this possible.

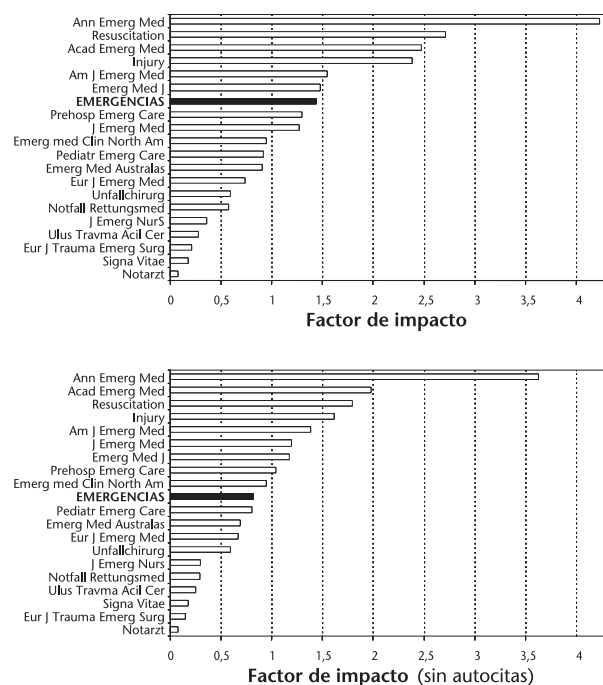


Figure 1. Impact factor with (upper) and without (lower) self-citations of the journals included in the section Emergency Medicine of Journal Citation Reports and the ranking calculated for EMERGENCIAS in relation to them.

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Intravenous Enalapril and hypertension

Sir,

I have carefully read the excellent article by Drs. Gómez Angelats and Bragulat Baur on arterial hypertension¹. I would however like to draw particular attention to the paragraph devoted to enalaprilat (the active form of enalapril) for intravenous use. One of its main side effects is the possibility of producing undesirable and uncontrollable hypotension^{2,3}. Intravenous Renitec® registration was canceled in May 2007 by the Spanish authority "Agencia Española de Medicamentos y Productos Sanitarios", at the request of the laboratory marketing it, since there are other therapeutic alternatives available in authorized indications (personal communication, Fátima García, Medical Information, Merck Sharp & Dohme, Spain).

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Response

Sir,

In response to the letter from Dr. Salmerón Beliz on the subject of intravenous enalapril, we would like to point out the following:

– In our review we have taken an approach based on the literature of recent years. We wanted to combine various guidelines and recommendations, both national and international.

– A warning was issued about "stock shortage" by the competent Spanish authority "Agencia Española de Medicamentos y Productos Sanitarios" of 15 March 2005 which reported that Merck Sharp and Dohme for Spain had sought the annulment of the pharmaceutical specialty Renitec® IV blister pack. Among the reasons for requesting the annulment was the closure of the manufacturing plant located in France.

– The "Practical Guide on treatment of hypertensive crisis" by the Catalan Society of Arterial Hypertension recommends the use of intravenous enalapril (and warns that it may produce hypotension in patients with high rennin levels).

– The 30th edition (December 31, 2009) of products approved by the Federal Food, Drug and Cosmetic Act includes intravenous enalapril.

– A recent review of therapeutic measures for arterial hypertension includes intravenous enalapril among others¹.

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Fine index and decision on admission of patients with community-acquired pneumonia

Sir,

We have read with interest the work by Llorens et al. on community-acquired pneumonia (CAP)¹. We agree with the authors that CAP often requires hospitalization, and that the decision is usually taken by emergency department physicians. We also share the impression that some of these admissions could be avoided. It would therefore be useful to have a set of criteria to facilitate decision making regarding the need for hospitalization or home treatment. In our opinion, the lack of standardized criteria usually means that the Fine scale is used, alone or in combination with those of the British Thoracic Society (BTS) (CURB-65 and CRB-65 in its reduced version) to decide when admission is indicated. This is based on the experience of some working groups² and was also recommended by different scientific societies (IDSA/ATS, BTS, SEPAR)³⁻⁵.

However, we must not forget that these are prognostic scales^{4,6}, and therefore should not be the only tool to decide whether a patient with CAP should be admitted or not. It is accepted that all these indexes have limitations^{7,8}. For example, a young patient with respiratory failure would be classified in group 1 on the Fine scale, and would therefore not require admission. In this regard, most experts agree that the Fine scale overestimates the parameter age, and undervalues as-

pects such as the presence of pleural effusion or hypoxia. We agree with the authors that the final decision on admission should be based on clinical assessment. The percentage of CAP admissions is inevitably higher than expected if only prognostic scales are used.

Just as there are social, psychological or comorbidity factors, we believe there are other clinical factors (respiratory failure, confusional syndrome, immunosuppression, treatment failure) and radiological data (pleural effusion, involvement of more than one lobe, cavitary infiltrates, image consistent with lung abscess) which may warrant hospital admission regardless of prognostic indices. Recently a consensus document has been published which defines the criteria for admission of CAP patients; in addition to patients rated as Fine IV and V or CURB-65 > 1, these criteria include severity and other factors as determinants of admission⁹.

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Dysphagia as the initial manifestation of amyotrophic lateral sclerosis

Sir,

Amyotrophic lateral sclerosis (ALS), first described in the 19th century by Charcot, is a progres-

sive neurodegenerative disease that causes muscle weakness, disability and eventually death, and is currently incurable. Median survival time from diagnosis is 3 to 5 years¹. Annual incidence is 1 to 3 cases per 100,000 inhabitants, with a peak in the 7th and 8th decades of life, but may also occur in young people. Most cases are sporadic, and family history is found in about 10%.

This case was an 81 year-old man with a history of arterial hypertension and several episodes of stroke without sequelae (he provided a magnetic resonance image (MRI) showing corticosubcortical atrophy, basal and brain stem deposits and leukomalacia, and was awaiting an electroencephalogram), treated with enalapril, aspirin and nimodipine. He consulted the emergency department for dysphagia of solids with tolerance of liquids, of several days duration, and mild symptoms of dyspnea. His family reported progressive deterioration in recent months, with progressive difficulty in speaking. Physical examination revealed dissonant nasal speech that was sometimes unintelligible, tongue fasciculations, symmetrical reduced strength (4/5), generalized hyperreflexia, bilateral flexor cutaneous-plantar reflex and bilateral fasciculations of the calves, biceps and forearm muscles. Proper oral tolerance was obtained with yogurt. Laryngeal fibroscopy showed uncoordinated cordial movement (the vocal cords were almost continuously adducted and opened every few seconds) of possible central origin. Laboratory tests only showed alteration of creatinine level (1.88). Cranial computed tomography (CT) showed wide sulci with enlarged ventricular system in relation to cortico-subcortical atrophy, and white matter hypodensity in relation to small vessel demyelinating disease. All these findings were compatible with involutive brain changes. The patient was assessed by the neurology department and, suspecting ALS, we decided to perform an electromyogram which suggested multi-segmental denervation compatible with motor neuron disease. Treatment was started with riluzole; nimodipine was discontinued, and we maintained the current antihypertensive and antiplatelet treatment, with a diet of blended solids and liquids with thickeners. The patient is currently followed by the department of neurology, without changes in the treatment prescribed.

ALS can present with any combination of symptoms suggesting upper and lower motor neuron involvement at any level. Weakness, hyperreflexia and spasticity are the result of degeneration of the upper motor neurons; muscular atrophy and fasciculations are due to muscular denervation with lower motor neuron involvement. In the most typical form, initially there is difficulty in the use of one hand in tasks requiring fine movements of the fingers, spasticity of the fingers, slight weakness and atrophy of hand mus-

cles. Cramps and fasciculations in forearm muscles, arm and shoulder often occur. Later, the disease becomes evident in the other arm, and then the combination of atrophic weakness of the upper limbs, spasticity of the lower limbs and generalized hyperreflexia, without sensory impairment. Strength and muscle mass decrease, although tendon reflexes increase. Finally, atrophic weakness extends to the neck, tongue, pharyngeal and laryngeal muscles and eventually to the trunk and lower extremities². Therefore, the most common presentation of ALS (up to 80% of cases) is progressive asymmetric weakness of a limb but, as in the case described here, dysphagia and progressive dysarthria may be the initial symptoms of the disease in up to 20% of cases.

The diagnosis is confirmed by electromyography to detect signs of acute and chronic denervation (spontaneous activity, fasciculations, giant motor unit potentials). Other complementary investigations are aimed at ruling out other diseases that may mimic ALS, such as cervical myelopathy³.

Current treatment is riluzole, a glutamate antagonist, whose mechanisms are not well known but which seems to slow down functional decline in some patients with non-terminal stage ALS, delaying the need for mechanical ventilation, and one study has shown a 12-month improvement in survival^{4,5}. Transaminase levels may become elevated and patients should be monitored for this, especially on initiation of treatment, and rarely neutropenia in the first two months of treatment.

The interest of this case lies in the main complaint and reason for seeking help, namely dysphagia, which initially led us to think of a gastrointestinal or otolaryngologic origin of the picture. Other more atypical causes should not be forgotten in cases such as these.

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Carbon monoxide poisoning without a known source in a hotel

Sir,

The real incidence of carbon monoxide (CO) poisoning is not known as it may occur and not be reported¹, but when the result is fatal it receives high media coverage^{2,3}. This poisoning is caused by the affinity of CO for hemoglobin, resulting in carboxyhemoglobin (HbCO), which displaces oxygen (O₂) and prevents its transport to the tissues, resulting in tissue hypoxia, primarily in the brain and myocardium^{1,4,5}.

We present the case of an adult couple who, some two hours after going to sleep to sleep in their hotel room, suffered from confusion and dizziness. They called a friend who, on arriving at the room, noticed an odd smell which prompted her to open the windows and alert the emergency services on number 112. On arrival of the medicalized ambulance team (at 03:20 h), the man also reported syncope and the woman holocraneal headache. Clinical examination and complementary tests (capillary blood glucose, electrocardiogram and pulse oximetry) were normal. After administration of O₂ the symptoms improved. CO poisoning was suspected and the patients were transferred to our hospital emergency department by ambulance, with 50% O₂ and 10mg metoclopramide treatment. A hospital value of 13% CO by co-oximetry in the woman confirmed the diagnosis of CO poisoning in both, given the simultaneous and same symptoms. Treatment was continued with 50% O₂ and the couple was discharged from hospital the next day. The technical inspection by the health authorities determined that the probable cause was a CO leak from the diesel-powered boiler ventilation system. No determination of CO was carried out in situ for lack of the correct detector device.

The diagnosis of this condition is not easy. CO poisoning (the "invisible killer")², presents specific symptoms^{3,5}, which can mimic food poisoning⁵. Despite the fact that CO is an odorless gas, some people perceive an odour⁶. Pulse oximeters are not useful in this situation since they detect oxyhemoglobin and COHb. Noninvasive devices that measure COHb improve this aspect of diagnosis⁷.

CO poisoning in hotel establishments without a known source of fire are not so unusual: one study reports CO poisoning of 711 guests due to

faulty boilers and ventilation systems⁸. Compulsory regulation fire alarms in public places detect smoke, but not CO. Sensor devices for CO are only required in certain locations (parking lots and garages of more than 5 parking places or for public use)⁹. Public health legislation along with an action protocol should be updated and enforced with a view to decreasing the possibility these incidents.

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