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Letters to the Editor

Reply☆

Réplica

Dear Madam,

Firstly, I would like to thank Drs A. Esquinas and C. Zamarro for their comments on our paper.[1]

The ageing of the population is a current reality. On a worldwide level, it is estimated that by 2050, around 2 billion people will be over 60 years of age.[2] This phenomenon will be more acute in countries such as Spain, Italy and Japan. Ageing in itself is not a disease state, but fragile individuals are likely to be more susceptible to a series of comorbidities.[3]

This situation means that specific strategies for acute respiratory failure in the elderly must be implemented and, above all, we should further develop our understanding of the patients who would benefit most from non-invasive mechanical ventilation (NIMV).

In response to the questions raised by Drs Esquinas and Zamarro:

1. In our study, 65% of the patients had a "do not intubate" (DNI) order. The main reason for signing the DNI orders was the patients' underlying situation and advanced stage of disease. While no guidelines are currently available for placing a patient on a DNI order, the decision is made by the treating pulmonologist in the Respiratory Monitoring Unit (RMU) or the on-duty pulmonologist, and, in the large majority of cases, agreed with family members after they have been informed of the patient's clinical situation.

   At present, our group is performing a study in patients on a limited treatment plan (LTP), in an attempt to define the characteristics of this population, and our aim is publish these data shortly. In general, according to the preliminary data, we limit therapeutic intervention in patients who are more highly dependent (as determined using the Barthel index), those with more comorbidities and those of more advanced age.
2. We agree that heart failure had an impact on mortality and was one of the reasons why mortality was higher than that in other series which included more patients with a diagnosis of chronic obstructive pulmonary disease (COPD).[4]

   In our analysis, patients with COPD with a worse prognosis during their hospital stay had lower pH levels and higher $PaCO_2$ levels. They also had higher C-reactive protein levels (P<.008) and a higher percentage of neutrophils (P<.009). Other factors increasing the relative risk (RR) of readmission in this group were home oxygen therapy on discharge (RR=1.65; 95% confidence interval [95% CI], −2.62 to 5.92) and previous admissions with respiratory acidosis requiring NIMV (RR=2.18; 95% CI, 1.77–2.59). We did not specifically analyse any data on the underlying life situation of the patients, although we are developing a hypothesis on the possible impact of the patient's life situation on readmission.
3. In our experience, patients who required NIMV in subsequent readmissions were managed in the RMU under the same care protocol. With some exceptions, when NIMV was initiated outside the RMU, the patient was transferred to this unit within 24–48 h, depending on the availability of beds.
4. Any complications that the patients presented during their RMU stay, including cardiovascular and renal problems, were managed by the unit pulmonologist or the on-duty pulmonologist. If the patient required specialised care or if specific techniques needed to be performed, the case was discussed with the appropriate specialist. The application of specific techniques, such as dialysis in the case of renal failure or the use of biogenic amines, was limited on a case-by-case basis, after a multidisciplinary assessment of the patient and with the agreement of the patient and/or the family.

   With regard to your question on when NIMV should be limited, no data are currently available to support a clear answer. In our practice, we base the decision on clinical criteria and in accordance with the wishes of the patient and the family. The data from our ongoing LTP study will allow us to define more clearly the characteristics of the patients for whom the decision is taken to limit treatment and reasons for coming to that decision. We believe that these data will help us to plan larger studies and establish action guidelines.
5. Home mechanical ventilation (HMV) is prescribed for COPD after a second admission with respiratory acidosis and hypercapnia. In this subgroup, HMV was a protective factor against readmission (RR=0.76; 95% CI, 0.35–1.17).
6. We have not carried out a cost-efficacy analysis, so we cannot provide any specific data in that respect. According to data from other studies, a bed in a RMU is cheaper than an intensive care unit bed.[5] Thus, the use of specialised units which shorten hospital stay and reduce complications should entail a reduction in costs. In any case, this would be an interesting basis for a future study that might confirm this supposition.

In conclusion, we agree on the need for the creation of specific spaces for the application of NIMV and for multidisciplinary protocols, both during admission and on discharge, aimed specifically at the elderly population.

Conflict of Interests

The authors declare that they have no conflict of interests.

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Local Recurrence of a Bronchial Carcinoid Tumor☆

Recidiva local de tumor carcinoide bronquial

Dear Editor,

A 74-year-old man presented in the emergency room in November 2012 with bloody expectoration, having expelled a solid "foreign body" of a fleshy appearance. He reported that in the days leading up to the event, he had experienced a sensation of self-limiting wheezing without dyspnea. The patient had no history of smoking or substance or alcohol abuse. In 2003, he required hospital admission for pneumonia and, in April 2008, underwent right upper lobectomy for a typical bronchial carcinoid tumor. At the time of presentation, he was attending regular check-ups and remained free of recurrence.

Physical examination revealed wheezing in the right hemithorax, with no other findings. Clinical laboratory tests showed hemoglobin 11.1 g/dl; all other parameters were normal. The chest X-ray revealed a loss of right hemithorax volume due to the right upper lobectomy, but was unchanged compared to previous images. Computed tomography (CT) of the chest and abdomen showed polypoid lesions in the right main bronchus and in the stump of the right upper lobar bronchus. On bronchoscopy, bloody remnants and several rounded, hypervascular, millimeter-sized lesions were observed in lower third of the trachea and right anterolateral and anterior wall of the right main bronchus, above the entrance to the middle lobe. The carina and left bronchial tree were normal. A lobulated mass was observed in the area of the right upper lobectomy stump, suggestive of carcinoid tumor (Fig. 1). The bronchial biopsy results reported a well-differentiated carcinoid type lesion with an organoid growth pattern and no necrotic foci that was determined to be a high grade carcinoma due to the 70% proliferation index. Immunohistochemistry showed positive Ki-67 expression in 70% of the intensely synaptophysin-positive tumor cells. The extension studies were completed with an octreotide scintigraphy that did not show any pathological radiotracer uptake.[1]

In the Chest Surgery Department, the tumor tissue was locally excised with argon gas cryoablation of the lesions, with the exception of the most distal infiltration of the right and intermediate bronchus. The patient then received systemic chemotherapy.[2]

Carcinoid tumor is a malignant neuroendocrine carcinoma originating in the glandular basal enterochromaffin cells ("Kulchitsky cells"). The most common locations are gastrointestinal (55%) and pulmonary (30%). In the lung, it occurs most frequently in endobronchial regions of the main or lobar bronchi (70%). Histological subtyping categorizes these tumors as typical carcinoid (very slow growth and 4 times more common) and atypical carcinoid, depending on the number of mitosis per field and the presence of necrosis.[3]

The clinical presentation is often asymptomatic or it can present with bleeding and obstruction, causing cough, wheezing, chest pain or recurrent pneumonia. In only 5% of cases is there secretion of the vasoactive substances responsible for the carcinoid syndrome. It is diagnosed by chest X-ray, CT and bronchoscopy. Magnetic resonance imaging and somatostatin receptor scintigraphy are used for staging.[4]

Treatment modalities include elective radical surgical, endobronchial excision by laser, somatostatin analogs, interferon alfa, chemotherapy and radiotherapy. Five-year survival rates for the

Fig. 1. Endoscopic image showing a polylobulated mass with areas of necrosis in the region of the right upper lobectomy stump.

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