The Unpredictable Behaviour of the Solitary Fibrous Pleural Tumour

El comportamiento impredecible del tumor fibroso solitario pleural

To the Editor:

Solitary fibrous tumours of the pleura (SFTP) are rare neoplasias of mesenchymal origin,[6] of frequently unpredictable behaviour which does not always correlate with their histology. They are usually benignant and remain asymptomatic for long periods of time until they become malignant.[1,2] We present the case of a male with a SFTP without a malignant histology but with aggressive behaviour.

A male patient, 66 years old, smoker, 40 packs a year, with HT, dyslipidaemia, intolerance to glucose and peripheral arteriopathy with a left iliofemoral bypass in 2001. Referred to pneumology due to findings on a chest CT requested because of left pleural effusion seen on a chest X-ray. In the CT (fig. 1A) it was possible to see a great left diaphragmatic extrapulmonary mass of 15.6 cm. Which was heterogeneous with peripheral calcification areas. And which penetrated into the epidural space at D11-D12 levels causing canal stenosis. The patient was asymptomatic from the respiratory point of view; he only reported pain in his lower limbs, especially at night, of some months' evolution. During physical exam left lung base hypoventilation up to the middle field during auscultation was found. Basic laboratory analyses were normal and on echocardiogram moderate pulmonary hypertension was seen. A MR was performed (fig. 1B) in which the CT findings were confirmed. The tumour was seen to contact the thoracoabdominal aorta without infiltration and signs of spinal compression were seen so treatment with dexamethasone was begun.

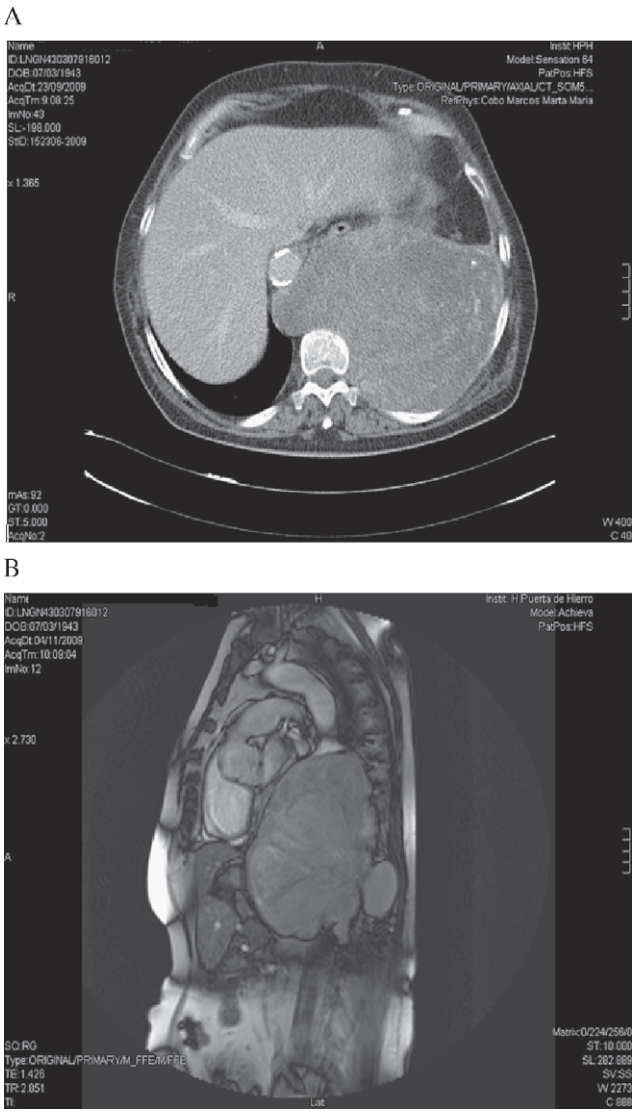

Figure 1. A) Chest CT: Large extrapulmonary mass in left base, heterogeneous with peripheral calcifications. B) Chest MR: Large heterogeneous tumour measuring 18 cm, located at the left thoracoabdominal junction, extrapulmonar, supradiaphragmatic, penetrating the spinal canal.

Finally, by means of Trucut puncture a neoplasia was seen with immunohistochemical expression of CD34 and bcl-2, negative for cytocheratin and actin, with overexpression of p53 complying with criteria for non-malignant SFTP.

Respiratory function tests were normal and surgery was programmed. Only the intraspinal tumour was removed as it was very vascularised and bled abundantly, which caused postoperative instability and the patient died of respiratory distress. The anatompathology of the resected surgical specimen confirmed diagnosis.

SFTP is a rare type of tumour with about 800 cases described in the literature.[1,3,5] This tumour constitutes 5% of tumours of the pleura and the second primitive tumour in that location, after diffuse malignant mesothelioma.[2,3,5]

About 80% are benign and it is difficult to distinguish them from malignant tumours due to their histological similarities, a larger size and invasion of neighbouring structures are more typical of malignant tumours and can serve as orientation.[1,5]

The immunohistochemical profile of SFTP is characteristic with positive reactions to vimentine and CD34 and a negative reaction to citocheratin, that distinguish it from malignant mesothelioma. Overexpression of p53 and an increase in neoplastic Ki67 positive cells are associated with a poor prognosis.[2] It is not associated with exposure to asbestos, tobacco or other carcinogens.[1-5] These tumours are more frequent between 60-70 years of age and there is no difference between sexes.[1,3,5] 50% of cases are asymptomatic and their finding is casual in an imaging study.[1,2,5] They present as well circumscribed peripheral pulmonary masses which are sometimes lobulated or have pedicles. Their density is usually homogeneous, it can be heterogeneous in malignant variants or benign ones with necrosis, haemorrhage or myxoid degeneration. Pleural effusion is rare and is usually a sign of malignancy. Calcifications in contrast are non-specific. MR better defines the relationship with neighbouring structures.[1,5] The most frequent symptoms are cough, dyspnoea and chest pain. The can cause paraneoplastic syndromes: Hypoglycaemia due to production of insulin like substances, hypertrophic pulmonary osteoarthropathy and drumstick fingers (10-20%) that disappear after tumour surgery.[1,3,5] The treatment of choice is surgery, with complete resection of both benign and malignant masses and perioperative mortality is low (0-1.5%).[3]

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Is it Possible to Improve the Management of Community Acquired Pneumonia in Hospital Emergency Departments?

¿Es posible mejorar el manejo de la neumonía adquirida en la comunidad en los servicios de urgencias hospitalarios?

To the Editor:

In 2008, the document "Management of community-acquired pneumonia in emergency departments" was published,[1] which was a collaboration between TIR-SEPAR (Area of Tuberculosis and Respiratory Infections of the Spanish Society of Pneumology and Thoracic Surgery) and INFURG-SEMES (Infections in Emergency Departments Study Group of the Spanish Society of Emergency Medicine). The objective of the document was to serve as a tool for reducing clinical variability and improving the comprehensive management of community-acquired pneumonia (CAP) in Hospital Emergency Services (HES). The document defines CAP as a disorder where there are "acute infectious compatible clinical features and its radiological demonstration." Undoubtedly, one of its key points is based upon the importance of administering the first dose of antimicrobial as early as possible, which is also indicated by the experts, as recommended by several of the most significant guidelines.[2,3] This cannot only be feasible in HES, but it needs to be an overriding aim today.[4] Experience shows that achieving this is not an easy task. This is due to many adverse factors (HES saturation, hospital admissions awaiting free beds, total number of emergencies per day and number of patients assigned per doctor), which have proven to be independent predictors of the delay in administering the antibiotic for CAP within the first 4 hours in HES.[5] However, in order to achieve the early administration of the antibiotic, we decided to do the following: improve the triage or the initial evaluation of the patient; carry out an early detection of patients with CAP and/or criteria for sepsis; implement a management protocol for patients with suspected CAP (the above-mentioned SEMES-SEPAR document); and implement systematically a prognostic score to better complement the decision of admission or discharge, thus determining and administering the appropriate treatment at an early stage.[6] It is well known that adherence to clinical practice guidelines has shown a reduction in mortality, an improvement in the adequacy and precocity of treatments and an optimisation in the use of additional tests, thus increasing the rate of diagnoses achieved by HES. Therefore, we carried out a single-blind, prospective observational study from 6 January 2008 to 30 September 2008 (control group) and from 10 April 2008 to 15 January 2009 (study group) of adult patients with CAP in HES. The aim of the study was to analyse the performance, differences and improvement in the management of CAP, following the implementation of "the aforementioned 2008 SEMES-SEPAR recommendations for HES," by comparing the implementation of a previous group with a subsequent one. For the comparative analysis we used the SPSS 14.0 package (Student's t-test, Mann-Whitney U test and Yates' chi-square test for proportions, considering the $p < 0.05$ value as significant difference). Table 1 shows some of the results obtained. Independent partners carried out the selection and inclusion of the patients and their subsequent follow-ups, until we had 100 consecutive confirmed cases in each group. These

Table 1
Comparative results before and after implementing the INFURG-SEMES and TIR-SEPAR recommendations

Results	GC N = 100	SG N = 100	Difference
SSa/SSb criteria (%)	8	10	NSD
Appropriate empirical antimicrobial treatment (%)	62	97	p < 0.05
Antibiotic administration within 4 h (%)	31	90	p < 0.05
Duration of antibiotic treatment (days)	12.5	9.1	p < 0.05
Hospital stay (days)	8.6 ± 6.2	6.3 ± 4.4	p < 0.05
Appropriate request for additional/microbiological tests (%)	18	74	p < 0.05
Obtaining final microbiological diagnosis (%)	22	47	p < 0.05
Discharge rate on the first visit from the emergency department (including observation within 24 h) (%)	38	42	NSD
Admission to SSU (24-72 h) (%)	23	26	NSD
Admission to a ward (%)	30	24	NSD
Admission to ICU (%)	9	8	NSD
Revisit within 30 days following the initial discharge from the HES (%)	17	8	p < 0-05
Total cumulative mortality at 30 days (%)	11	8	NSD

CG indicates control group (prior to the recommendations); HES, Hospital Emergency Services; ICU, ontensive care unit; N, number of total patients in each group; NSD, no significant differences; SG, study group (post-implementation of the recommendations); SSa, severe sepsis; SSb, septic shock; SSU, short-stay unit.