Table *(continuación)*

LDH, mg/dL	329.23 (164.23)
Leukocytes, cells/mm^3	9655.56 (5701.7)
Platelets, cells/mm^3	182 166.6 (52 925.5)
Use of antibiotics, %	36 (100)
Use of corticosteroids, %	13 (36.11)
Started oseltamivir treatment ≤48 h, %	11 (30.55)
Admission to ICU, %	4 (11.11)
Mean hospital stay, d	6.43 (4.82)
Mortality	0

Continuous variables are represented as mean (SD) and categorical variables as percentage (%).
Abbreviations: BMI, body mass index; COPD, chronic obstructive pulmonary disease; ICU, intensive care unit; LDH, lactate dehydrogenase; PSI, pneumonia severity index

patients at low risk (class I), while the mean hospital stay reached 11 days for more serious patients (class V). However, corticosteroids could be administered as a protective measure as they stop the inflammatory process brought on by the viral infection and prevent clinical deterioration.[1]

In summary, the study highlights that pneumonia is a common complication in patients hospitalized with infection by H1N1 influenza virus. It also shows that the factors identified in this article should be considered in cases of pneumonia when assessing how long patients infected with the H1N1 influenza virus should be hospitalized for.

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Advance Care Planning with COPD Patients

Planificación de cuidados y tratamientos en pacientes EPOC

To the Editor:

After reading the interesting article by A. Couceiro,[1] I think it is appropriate to elaborate on it with the results of a qualitative study[2] that explores decision making in COPD patients in terms of their treatment, based on their knowledge of the disease, information provided by the doctor in charge, and the patient's preferences (Research assistance from the Respira Foundation, SEPAR grants, 2002). Semi-structured interviews were carried out with 40 patients (36 men and 4 women) with a mean age of 68.82 years. Most felt well-informed and none thought the information given was incomplete or that it was being concealed from them. None had ever been spoken to by their doctor in charge about being admitted to the ICU or about mechanical ventilation (MV) as a possible treatment for a severe exacerbation, except for 2 who had previously been admitted to the ICU. After an explanation of MV as part of a the treatment for severe exacerbations, they gave their consent to the procedure if it meant they could improve and maintain their current quality of life–*I would choose intubation if it means I can carry on living like up till now, but if I don't improve after about six days, they can give me something to stop the suffering and that's it…at least we tried.*

The patients included in the study believed that they had the right to participate in the decision-making that affected their health. Although they recognized doctors as the expert, *they know what is good for me…* they preferred to be asked, or at least taken into consideration, about treatment planning.

The patients interviewed had an adequate level of information about the etiology of COPD, its common symptoms, and that it is a chronic and progressive disease. Despite this, many gaps were detected in the information given regarding prognosis, knowledge of MV, and admission to the ICU as treatment options for severe exacerbations. The process of providing information is commonly seen to stop at a point, a boundary that is difficult to cross: talking about end-of-life matters. Going beyond the everyday range of topics of the medical relationship to talk about more transcendental matters and find out the possible ways to proceed when their situation is not as stable as at present is something that still needs to be looked at.

One of the reasons for this lack of information may be the doctor in charge's fear of frustrating the patient's hopes. Certainly, if we want the patients to collaborate effectively in the process, it is important to know what their expectations and wishes are.[3] It appears that the relationship of trust is based on *everything is OK,* and both sides avoid talking about unpleasant matters such as serious complications or the possibility of dying of COPD.

Most patients were unaware of the possibility of putting into writing their preferences regarding health-related matters with an advance directive (AD). Furthermore, it did not occur to them that it might be of interest to them. They believed that it was aimed at people who are dying. Another possible reason for the lack of information about care planning is that the doctor in charge is convinced that they really know their patient's preferences.[4] Several studies have shown that this is often not the case. Even when both opinions coincide, the AD process could be of use because the doctor who has to make the decisions in severe acute situations would most likely not have prior knowledge of the patient.[5,6]

With COPD patients there is a series of circumstances which make this type of conversations easier, for example the patient's trust in their doctor and the numerous opportunities offered by routine consultations during stable phases of the disease. It is important to take advantage of this to find a moment and pause, to talk about the future, about the patient's personal wishes in the event of becoming seriously ill or at times of uncertainty, in order to plan the end of their life according to their values and preferences. Health care professionals need ongoing training in end-of-life problems and advance care planning. If the model of good practice is to become more deliberative and participative, it will be necessary to improve the patients' involvement in decision-making, which nowadays rarely happens. Therefore, the first step is to improve the quality of the information process, a basic requirement to start making decisions.

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Diaphragmoplasty with Patch on the Hepatic Hydrothorax due to Pleuroperitoneal Fistula

Diafragmoplastia con parche en el hidrotórax hepático debido a fístula pleuroperitoneal

To the Editor:

Hepatic hydrothorax (HH) due to a pleuroperitoneal fistula (PPF) is a rare entity. Due to large amounts of pleural fluid, it frequently causes dyspnea and electrolytic imbalances. Its diagnosis is suspected in patients with confirmed cirrhosis and portal hypertension suffering from unilateral pleural effusion, in general found on the right side.[1] We report the case of a patient with HH due to a PPF, which was detected as a transdiaphragmatic defect by scintigraphy using Tc99-labelled macroaggregated albumin. Repair surgery was performed through a right thoracotomy and a mesh was applied, which we called a diaphragmoplasty.

The patient was referred to our clinic with dyspnea that had started 3 months earlier, opacity in the lower right lung, and the presence of pleural fluid, detected with a chest x-ray. The patient's medical records revealed a 7-year history of cirrhosis. The patient had undergone insertion of a small-calibre catheter to drain the pleural cavity and an incomplete pleurodesis with talc. There was no vesicular respiration in the lower area of the right hemithorax. We also inserted a small-calibre catheter for drainage. After 12 h, 3500 ml of liquid had been drained. The suspected diagnosis was HH. Twenty milliliters of diluted methylene blue was administered in the peritoneal cavity. In the following 20 minutes the liquid flowed out of the chest catheters. The scan after the administration of Tc99-labelled macroaggregated albumin showed the location and size of the transdiaphragmatic defect. After the 6th minute of the scan, the contrast medium moved to the right hemithorax from the hepatic area (Figure a, b). The defect was located in the posterolateral segment of the diaphragm. When the thoracotomy was performed, the diaphragm had stopped working. In the posterolateral area there was no muscle tissue in an area of 3×4 cm. This defective area had a fibrotic structure. The patient was treated with diaphragmoplasty through the right thoracotomy. The surgical treatment consisted of: 1) right thoracotomy, complete exploration of the right diaphragm; 2) marking the defective area; 3) placing a layer over the defective area; 4) suturing the layer; and 5) reconstruction of the whole area of the diaphragm with a mesh (Figure c). The defect in the diaphragm component was corrected with a wide 1.4 mm thick Gore-Tex® patch (W. L. Gore & Associates, Flagstaff, AZ) using continuous suture (2-0 Prolene, Ethicon, Somerville, United States). The patch was trimmed to reduce the fold in the diaphragm. The diaphragmaplasty is shown in detail in the diagram (Figure d). The postoperative course was uneventful from a surgical viewpoint and the patient made a full recovery.

HH can be defined as the pathological migration of large quantities of ascitic fluid through the diaphragm in patients without any other underlying disease apart from cirrhosis of the liver.[2] However, it is usual to find proof of these effects with non-invasive imaging techniques. The rarity of detecting these defects of the diaphragm is explained below. Diaphragm defects can be divided into 4 types: Type 1: large; type 2: small; type 3 and 4: smaller.[3] For diaphragm defect types 1-3, drainage and pleurodesis, or a peritoneovenous shunt can be performed. However, type-4 defects require surgical correction. A few case studies have described the satisfactory surgical correction of the defects of the diaphragm responsible for the fluid migration into the pleural cavity.[4] The authors used video-assisted thoracoscopy to correct the defects in the diaphragm, as well as pleurodesis. Six of the cases made a complete recovery and there were no relapses.[5] Furthermore, reinforcing the diaphragm with the pleura or a mesh seems to be a promising treatment for refractory HH.[6] However, migration through the diaphragm may continue. Of course, the suggested treatment is a liver transplant. In conclusion,