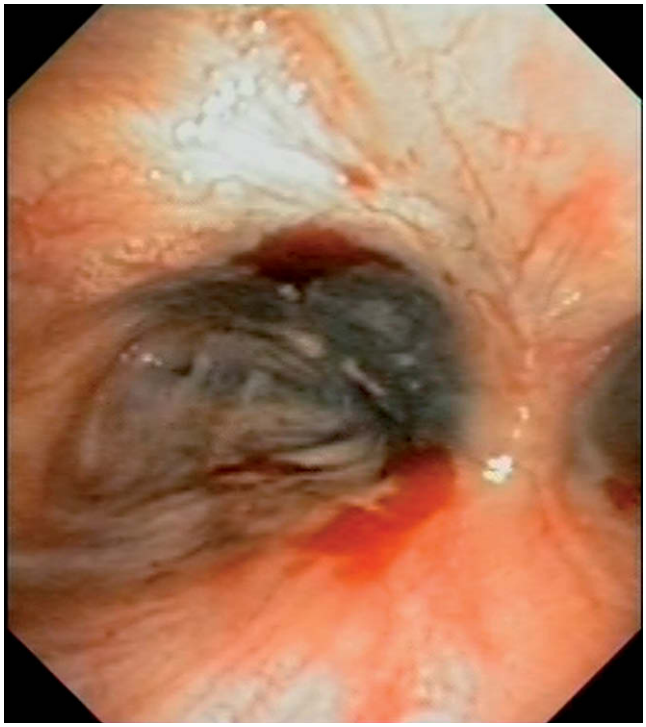

**Figure 1.** Video-assisted bronchoscopy image showing the blackish excrescent lesion obstructing the left main bronchus.

four drugs (isoniazid, pyrazinamide, rifampicin and ethambutol) followed by four months with isoniazid and rifampicin. The patient presented adequate tolerance to the drugs and follow-up sputum smear was negative. The index case was a family member diagnosed with tuberculosis. At a follow-up visit after finalizing treatment, the patient complained of discomfort in the left dorsal region and dyspnea on effort. Chest radiography revealed complete atelectasis of the left lung, at which time the patient was hospitalized in order to run a complete battery of tests. Physical examination was normal, except for a decrease in the vesicular murmur of the left hemithorax.

Laboratory results were normal. Computed tomography showed complete atelectasis of the left lung parenchyma with deviation of the mediastinal structures towards that same side, and complete amputation of the left main bronchus was observed. Video-assisted bronchoscopy (fig. 1) showed a blackish excrescent lesion that completely obstructed the entrance of the left main bronchus, with the appearance of scar tissue. The pathological anatomy of the biopsy from the endobronchial lesion showed granulomas. After having ruled out endoscopic treatment, the patient continues in clinical and function observation and has been stable since hospital discharge. In conclusion, the subject is an EBTB patient with a residual fibrostenotic endobronchial lesion after completing anti-tuberculosis treatment, non-candidate for mechanical resection due to the presence of complete atelectasis of the left lung with deviation of the mediastinal structures.

Complications of EBTB include obstruction, atelectasis (with or without secondary infections), bronchiectasis and tracheal or bronchial stenosis. Chung and Lee[3] classified EBTB into 7 subtypes, according to bronchoscopic findings of the endobronchial lesions: actively caseating, edematous-hyperemic, fibrostenotic, tumorous, granular, ulcerative and the nonspecific bronchitis type. Actively-caseating lesions are the most frequent (43%) while tumorous lesions 10.5%) are the least. Tumorous EBTB is typically described as an endobronchial mass whose surface is covered by caseous material.[3] In a study of EBTB patients, independent factors predicting persistent stenosis of the airway were age > 45, pure or combined fibrostenotic subtype and the duration of symptoms for more than 90 days before the start of anti-tuberculosis treatment.[4]

Stenotic complications can be treated by means of repeated dilatations, mechanical resections or stent placement.[3] New treatments have been tried recently, such as the inhaled administration of anti TGF-beta 1 antibodies, which inhibits scarring.[5]

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## Response to the letter "Palliative Thoracocentesis in Low Income Countries"

### *Respuesta a la carta "Toracocentesis paliativa en países de bajos recursos"*

*To the Editor:*

In response to the Letter to the Editor by Dr. René Agustín Flores-Franco[1] in reference to our article published in this same journal,[2] we wanted to provide some clarifications. We agree that the economic means which are at our disposal limit us in applying certain diagnostic and therapeutic measures. Thus, limited economic resources can require us to use less sophisticated means giving similar results. We know that the tunneled catheter system commercialized under the name of PleurX®, used for malignant pleural effusions and with which we have presented our results, is available in Mexico. It is a safe system with widespread use, and therefore we recommend it in circumstances in which it is indicated and accessible. This device is designed for easy placement and can be inserted in an outpatient setting according to the experience of many authors[3] and [4] and our own. In our study, the catheters were only inserted in the hospital setting when the patient was already hospitalized. Moreover, it allows for patients to be discharged once the catheter is in place for later home follow-up. In this manner, patient hospitalizations and trips are avoided, reducing costs and economizing this system's use.[5]

The PleurX® has a unidirectional valve on the proximal end of the catheter that is inserted into the pleural cavity. The main function of the valve is to avoid the entry of air or other fluids into the pleura. This characteristic liberates the patient from the hospital ward with its wall suction or continuous water seal, as in the system proposed by Dr. Agustín Flores-Franco. However, in those situations requiring pleurodesis or when different types of medication need to be introduced,[6] the unidirectional valve can be easily circumvented by trained personnel. In the case of PleurX®, as our study comments, this circumstance is not common because in an important percentage of patients the catheter itself stimulates the production of pleurodesis by a mechanism that is not clearly understood.

Furthermore, the tunneling of the drain is subcutaneous and is easily done by following the manufacturer's instructions. The catheter is tunneled with the aid of a blunt-tipped lancet that does not necessitate either the use of previous anesthesia or debridement of the area. The only topical anesthesia used, approximately 7 ml of scandicaine in total, is for the two points of incision and only in one is it applied to deeper planes up to the parietal pleura. The catheter is then introduced into the pleural cavity following the Seldinger technique, just as done by Dr. Agustín Flores-Franco with her catheter. In conclusion, we consider that if the PleurX® is available, there is enough experience demonstrating that it is safe and comfortable for the patient, with simple placement and handling in order to be used in recurrent pleural effusions of neoplastic origin. Its outpatient use allows the patient to gain in independence and reduces costs, economizing the health-care system.

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