

Other less common ones are fibrohistiocytomas, sarcomatoid mesotheliomas, synovial sarcomas, carcinoid tumours, benign pleural fibromas and neurogenic sarcomas. Since Davidsohn reported the first case of leiomyosarcoma in 1907, just over 100 more cases have been published.<sup>3,2</sup> The series published, which in general are formed of 12-14 patients in 30-year follow ups, show how rare this type of tumours are, not reaching 0.5% of all malignant tumours of the lung.<sup>1</sup> Generally, they affect people over 60 years of age, although some cases have occasionally been described in children.<sup>7</sup>

Patients have little clinical expression. The most common symptoms are cough, chest pain, dyspnoea, haemoptysis, asthenia and general implications.<sup>5</sup> Since these tumours tend to grow quickly and invade other tissues, they are diagnosed at advanced stages, even after metastases have spread hematogenously to the brain, lungs and/or bones.<sup>1</sup>

The treatment providing the best results is surgery. The options are a lobectomy or pneumonectomy, which on occasions can require resection of sectors of the chest wall, diaphragm or vascular structures.<sup>6</sup> Adjuvant radio- or chemotherapy treatment, although not improving survival, is indicated in cases of incomplete resection, technically unresectable tumours and those with a high degree of histological malignancy.<sup>8</sup>

Factors for a poor prognosis have been described: tumour size (over 4-5 cm), the degree of histological malignancy, endobronchial invasion and the impossibility of performing complete resection.<sup>1,6</sup>

## References

1. Corpa-Rodríguez ME, Mayoralas-Alises S, García-Sánchez J, Gil-Alonso JL, Díaz-Agero P, Casillas-Pajuelo M. Evolución posquirúrgica de 7 sarcomas pulmonares primitivos. Arch Bronconeumol. 2005;41:634-7.
2. Alexandre N, Odashiro A, Mijji O. Primary lung leiomyosarcoma detected by bronchoscopy cytology. Diagnostic Cytopathology. 2005;33:220-2.
3. Ramanathan T. Primary leiomyosarcoma of the lung. Thorax. 1974;24:482-9.
4. Etienne-Mastroianni B, Falchero L, Chalabreysse L, Loire R, Ranchère D, Souquet PJ, et al. Primary sarcomas of the lung. A clinicopathologic study of 12 cases. Lung Cancer. 2002;38:283-9.
5. Fadhli HA, Harrison HW, Shaddock SH. Primary Pulmonary Leiomyosarcoma: Review of the Literature and Report of One New Case. Chest. 1965;48:431-3.
6. Porte HL, Metois DG, Leroy X, Conti M, Gosselin B, Wurtz A. Surgical treatment of primary sarcoma of the lung. Eur J Cardiothorac Surg. 2000;18(2):136-42.
7. Lai DS, Lue KH, Su JM, Chang H. Primary bronchopulmonary leiomyosarcoma of the left main bronchus in a child presenting with wheezing and atelectasis of the left lung. Pediatric Pulmonology. 2002;33:318-21.
8. Corpa-Rodríguez ME, Mayoralas-Alises S, García-Sánchez J, Gil-Alonso JL, Díaz-Agero P, Casillas-Pajuelo M. Evolución posquirúrgica de 7 sarcomas pulmonares primitivos. Arch Bronconeumol. 2005;41:634-7.

Raúl Rozada, Álvaro Vila and Leonardo Sosa \*

*Clínica Médica B, Hospital de Clínicas Dr. Manuel Quintela, Universidad de la República, Montevideo, Uruguay*

\*Corresponding author.

*E-mail address:* leososa@hc.edu.uy, leonarsosa@gmail.com (L. Sosa).

## Palliative Thoracocentesis in Low Income Countries

### *Toracocentesis paliativa en países de bajos recursos*

*To the Editor:*

I read with great interest the paper published recently by Cases et al<sup>1</sup> regarding their experience using a commercial tunnelled catheter in patients with malignant pleural effusion. This paper has shown that once enough experience has been gained using it and if the necessary facilities are available for patients to be handled as outpatients, it is an effective option for controlling recurrent malignant pleural effusion. However, in underdeveloped countries, like ours, it is rather unfeasible to apply this technique given that this pleural drainage device is not readily available and there is limited experience using it. Furthermore, costs associated with maintenance and purchasing specific vacuum bottles are high. These factors mean that chest-tube pleural drainage, repeated thoracocentesis and small-diameter catheters are the main palliative methods for treating patients with symptomatic malignant pleural effusions. In order to reduce patient discomfort and costs derived from hospitalisation and, bearing in mind the high burden of institutional work in our country, we have used a personalised thoracocentesis technique aided by wall suction. Our method follows the same principles used in thoracocentesis, and is preferably guided by ultrasound to locate the worst-affected area. It involves free pleural fluid aspiration using a 3 ml syringe as an adaptor between a fenestrated angiocath and a 6 mm diameter tube (Argyle connecting tube; Kendall-LTP; Chicopee, MA), connected to the vacuum collection system on the wall (fig. 1). The wall suction regulator reduces the high negative pressure to more

physiological levels. The suction pressure must be gentle and similar to the flow generated by a syringe during standard thoracocentesis. Optionally, a 3-way stopcock can be placed between the syringe and the catheter so as to provide manual control or to monitor intrapleural pressure with one of the methods described previously. The procedure should be interrupted if the patient suffers oppressive chest pain, dyspnoea or other significant symptoms, even if a substantial amount of pleural effusion remains. One advantage of continuous aspiration is that it minimises the risk of iatrogenic pneumothorax, which in theory could occur, principally during intermittent handling of a syringe. When the liquid has been drained, a guide wire is inserted through the angiocath and using the Seledinger technique, a 20 cm-long triple-lumen central venous catheter (Arrow International, Reading, Pennsylvania, USA) is inserted into the pleural cavity. The catheter can be used to drain pleural fluid on a daily basis in recurrent cases and to perform chemical pleurodesis in the outpatient clinic. The effectiveness of using small-diameter catheters has been shown in previous studies.<sup>2,3</sup> The inconvenience of the increased likelihood of obstruction is outweighed by the fact that it is easy to handle and exchange when necessary. Furthermore, the insertion technique is less painful and thus less local anaesthetic is needed. However, its use can be limited by the presence of a malignant bronchopleural fistula, in which case a large-diameter catheter or chest tube may allow greater flow during the fluid and/or air aspiration. In this case, connecting the chest tube to a urine bag can be useful as it has a valve which stops its contents from backflowing and can be emptied easily.<sup>4</sup> With the techniques described above, our main aim is to propose ideas for improving the quality of life of patients with malignant pleural effusion in centres that have limited resources and whose objective is to offer safe treatment to patients through simple, economical and easily implemented actions, guided by a sense of ethics, humanity and quality.

## References

1. Cases E, Seijo L, Disdier C, Lorenzo MJ, Cordovilla R, Sanchis F, et al. Uso del drenaje pleural permanente en el manejo ambulatorio del derrame pleural maligno recidivante. Arch Bronconeumol. 2009;45:591-6.
2. Seaton KG, Patz EF, Goodman PC. Palliative treatment of malignant pleural effusions: Value of small-bore catheter thoracostomy and doxycycline sclerotherapy. Am J Roent. 1995;164:589-91.
3. Saffran L, Ost DE, Fein AM, Schiff MJ. Outpatient pleurodesis of malignant pleural effusions using a small bore pigtail catheter. Chest. 2000;118:417-21.
4. Kuan YC, How SH, Yudisthra G, Ng TH, Fairus M, Sapari S. The urine bag used in pneumothorax. Med J Malaysia. 2008;63:79-80.

René Agustín Flores-Franco

*Neumología, Hospital General Regional, Sistema Estatal de Salud, Chihuahua, Mexico*

*E-mail address: rflores99@Prontomail.com*

**Figure 1.** Above, therapeutic thoracocentesis procedure aided by wall suction. Below, angiocath fenestrated with a scalpel at its distal third and connected to the suction tube by means of a 3 ml syringe.

## Acinar Cell Carcinoma of the Lung

### *Carcinoma de células acinares de pulmón*

*To the Editor:*

A 55 year old male, smoked 2 packs of cigarettes and drank 100 g of alcohol per day, with a history of arterial hypertension, grade IV chronic arterial ischemia in lower limbs, chronic bronchitis, alcoholic and deficiency neuropathies, twice admitted to hospital to be studied for constitution syndrome. The first time, in May 2005, the patient underwent fibrogastroscopy, fibrocolonoscopy, abdominal ultrasound and thoracoabdominal computerized tomography (CT), and a 1 cm indeterminate nodule was found in the lingula. For this reason he was admitted again in December 2006, undergoing another CT scan which showed an area of consolidation of pseudonodular morphology in the lingula, with an air bronchogram inside, of 2 cm in diameter. Both hospital admissions were attributed to disorders due to alcohol dependence. To test the lesion in the lung he was referred to the pneumology department, which recommended a PET scan and functional breathing tests, which the patient refused to undergo for personal

reasons. He went to hospital after suffering progressive dyspnoea for 10 days, during which time he suffered no fever and there was no increase in his typical cough. On arrival at the casualty department he was normotensive, afebrile, showed signs of chronic alcohol abuse, and had cardiac arrhythmia at 100 bpm, general hypophonesis in left hemithorax, pain in right hypochondrium, hepatomegaly to 3 fingers breadth, and bilateral horizontal nystagmus. The electrocardiogram revealed auricular fibrillation at 126 bpm, QRS axis at 0° and left bundle branch block. Analysis showed a high MCV and parameters of inflammatory activity. The chest x ray revealed a mass in the left parahilar region with a loss of left lung volume. A chest CT scan revealed a mass of about 3 cm in the upper left lobe, with peribronchovascular thickening in the ipsilateral pulmonary hilus and significant mediastinal and contralateral lung hilar adenopathy. These findings strongly suggested pulmonary neoplasia affecting the ipsilateral and contralateral mediastina, and left-sided pleural effusion with nodular thickening of the pleura of the left costophrenic sinus, suggestive of tumour implants (fig. 1). A diagnostic thoracocentesis provided exudative pleural fluid, according to Light's criteria. The study was completed with a bronchoscopy, which showed extensive, very friable lesions covering the whole of the left bronchial tree, suggesting infiltration and resulting in complete occlusion of the lingula; in the right bronchial tree the same, but more diffused, lesions were observed from the main bronchus. Both the results