

Oligo-Recurrence From a Lung Adenocarcinoma. Usefulness of Resection[☆]

Oligorrecurrencia a partir de un adenocarcinoma del pulmón. Utilidad de la resección

Dear Madam:

Non-small cell lung cancer (LC) accounts for 80%–85% of all the varieties of this neoplasm, with adenocarcinoma being the most common histological type.¹ The prognosis of this disease is poor due to low survival and high recurrence rates.² We present here a patient who presented oligo-recurrences during the course of his disease, which were treated surgically.

This is a male, 42-year-old smoker investigated due to a lung shadow appearing on an unrelated chest X-ray. Computed tomography (CT) showed central radiodensity 4 cm×2 cm in the upper left lobe, without adenomegalies. Fiber optic bronchoscopy and aspiration cytology gave a diagnosis of epithelial type LC, confirmed by frozen section biopsy during thoracotomy, which was complemented by left upper lobectomy and mediastinal lymphadenectomy (stations 5–7 and 10). The post-operative histopathological result showed predominantly solid, mucin producing, poorly differentiated invasive adenocarcinoma, with no epidermal growth factor receptor overexpression or mutation and metastases in two aortopulmonary window lymph nodes. Treatment was complemented with sequential chemotherapy.

Nine months later, the patient presented visual disturbances and vertigo. Magnetic resonance imaging of the head with contrast medium was performed and a single tumor lesion was found in

the left temporal lobe (Fig. 1, right panel). Metastasectomy with adjuvant radiotherapy was performed. Five months later, abdominal tumoration of the right adrenal gland was detected on an abdominal ultrasound (Fig. 1, left panel), confirmed on a CT scan with contrast. Adrenalectomy was performed. The patient is currently in follow-up, 5 years after the last procedure.

The terms oligo-metastasis, proposed by Hellman and Wechselbaum in 1995 and revised by Niibe et al. in 2006 to oligo-recurrence^{2,3} are LC stages in which metastases or recurrences (between 1 and 5 lesions) can be treated with local treatments. The differences originate in the control of the primary tumor and how it appeared: in oligo-recurrence, the primary tumor is controlled and recurrence is metachronous; in oligometastases, the opposite occurs. In brief, oligo-recurrence is a metachronous, oligometastatic state where the primary tumor is controlled.³

Positron emission tomography has reduced the diagnosis of oligo-recurrences, since many of them are metastatic in the initial diagnosis. However, despite being included in the diagnostic protocols, these imaging studies are not available in some countries.

Control of the primary tumor, nutritional status, histological type and the number of metastases are factors which impact on the treatment of oligo-recurrence.³⁻⁵ However, a determinant factor for survival is the presence or absence of metastatic lymph node involvement (0%–35%).^{4,5}

In view of the current technological advances and the use of local and systemic treatments, surgery³⁻⁵ is appropriate for some patients with oligo-recurrences. Our patient, despite having N2 lymph nodes, has had good survival, reinforcing the “seed and soil” theory of interaction between the cell and host in LC or in any other type of cancer.

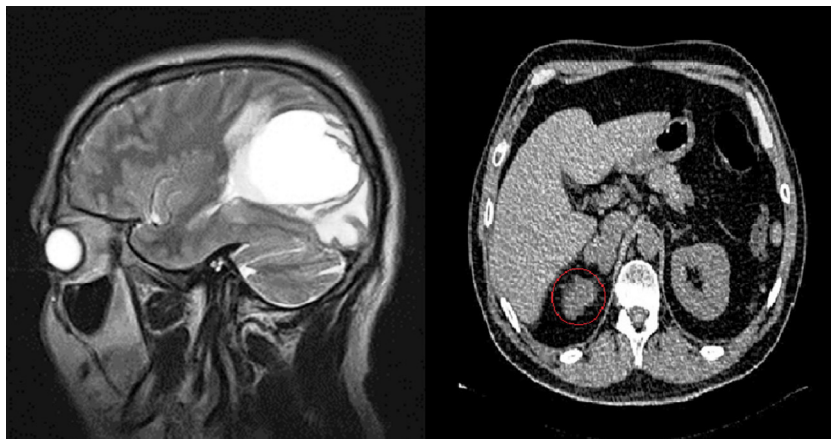


Fig. 1. Left panel: magnetic resonance imaging of the head showing a metastatic lesion with contrast uptake in the left temporal lobe and perilesional inflammatory lesions. Right panel: computed tomography of abdomen showing a metastatic lesion of the right adrenal gland.

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Treatment of Severe Subcutaneous Emphysema by Microdrainage. A Case Report[☆]

Tratamiento de enfisema subcutáneo severo por microdrenaje. A propósito de un caso

To the Editor:

Subcutaneous emphysema (SE) is defined as tumefaction produced by the presence of air or gas in the skin.¹ It is a primarily aesthetic problem which does not usually cause complications, unless it is very extensive. We present a case of severe SE due to iatrogenic pneumothorax treated with a fenestrated angiocatheter, according to the method described by Beck,² used for the first time in our centre.

A 77-year-old male, with a history of GOLD stage III COPD, was admitted for percutaneous pulmonary biopsy for the study of a lung nodule suggestive of bronchogenic carcinoma. After the procedure, pneumothorax was detected, requiring the placement of a drainage tube which was only maintained for 24 h before it was accidentally removed. The patient subsequently developed exten-

sive SE (face, neck, upper and lower limbs) and reappearance of the pneumothorax. A new drainage tube with aspiration was placed, resolving the pneumothorax, but not the SE. The decision was taken to withdraw the chest drainage and continue with conservative treatment. However, the SE progressed, causing dyspnoea and difficulty seeing and swallowing, so treatment was initiated with a fenestrated angiocatheter, according to the technique described by Beck,² consisting of several fenestrations made in a spiral pattern along a 14G-calibre angiocatheter. Two fenestrated catheters were inserted in the subcutaneous space, 2 cm lateral the midclavicular line at the level of the third rib (Fig. 1), achieving immediate improvement after placement. It was connected to continuous suction and the nursing staff and family members were instructed in performing massage manoeuvres from the distal to the medial regions to facilitate aspiration. In less than 48 h, the patient could open his eyes and his dyspnoea had resolved. He was discharged after resolution of symptoms.

Studies on the mechanism of pulmonary interstitial emphysema, pneumomediastinum and SE have shown that air begins to migrate from a rupture in the alveoli to the pulmonary interstitial tissue and then on to the perivascular space until it reaches the mediastinum.^{2,3} When the passage of air is greater than the pleural resorption, SE occurs. This may also develop in the case of SE due to iatrogenic pneumothorax. Serious complications have been described, such as pacemaker malfunction, compromised airway, intracranial hypertension or respiratory failure, but these are uncommon. Conservative management is generally sufficient for the resolution of SE,¹ although several therapies have been proposed, such as making holes in the skin, placement of chest tubes, pig-tail drainage or trocar drainage, all of which have limited use and are associated with risks of infection, scarring and patient discomfort.^{1,2} Fenestrated catheter placement is easy, fast and simple and is minimally invasive, since the risks of infection and skin scarring are reduced, although its use for periods longer than 72 h is not recommended.⁴ This technique for the management of SE must be used on an individualised basis, depending on the clinical context and severity of the symptoms, although its ease of use, high effectiveness, low cost, minimal invasiveness and low risk of complications make it a good option in selected cases.



Fig. 1. Severe subcutaneous emphysema. Fenestrated catheters placed according to the technique described by Beck, connected to continuous aspiration.

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