

Letter to the Editor

“Clown Nose” as an Initial Manifestation of Squamous-Cell Lung Carcinoma

“Nariz de payaso” como manifestación inicial de un carcinoma epidermoide de pulmón

To the Editor:

Cutaneous metastasis of internal tumors is rare compared with metastasis to other visceral sites. The frequency ranges between 1% and 3% of cases,¹ and no tumor shows a particular tendency to metastasize to the skin. Cutaneous metastasis of lung carcinoma is also uncommon (2.8%-24%) and it appears as the first sign in 7% to 19%

of cases.¹ We report the case of a patient whose initial manifestation of squamous-cell lung carcinoma was metastasis to the nose, causing the condition known as “clown nose,” a rare presentation of cutaneous metastasis.

A 74-year-old man, a smoker of 30 pack-years with no other relevant medical history and not receiving chronic treatment, presented with an inflamed lesion that had appeared several months' earlier. It had shown no improvement after treatment for folliculitis with topical and systemic antibiotics. The patient reported a dry cough and dyspnea on exertion during the previous 2 weeks. He also described a hard, rounded, purplish erythematous plaque, 2 cm in diameter, with poorly defined edges on the left wing of the nose, extending towards the tip (Figure A). Lung sounds and physical

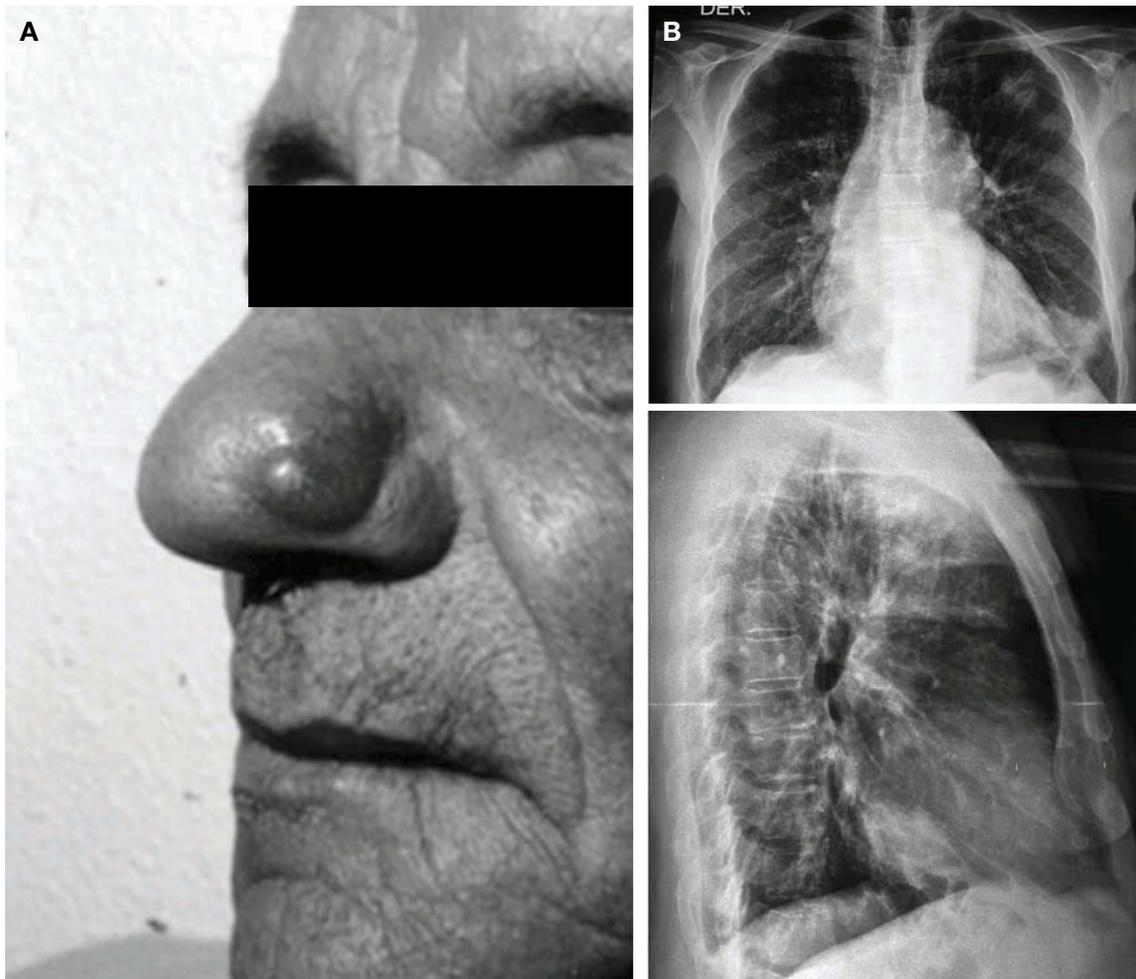


Figure. Raised metastatic lesion on the left wing of the nose (A) and posteroanterior and lateral chest radiograph (B), showing an irregular lesion in the left upper lobe, indicating bronchogenic carcinoma.

examination were normal. A standard workup revealed a carcinoembryonic antigen concentration of 20 ng/mL and lactate dehydrogenase concentration of 1321 U/L; the other variables were normal. A skin biopsy of the lesion revealed a dense cellular proliferation occupying the dermis. The lesion was composed of small cells with irregular basophilic nuclei, indicating poorly differentiated squamous cell carcinoma. The chest x-ray showed a mass with irregular borders in the anterior segment of the left lower lobe and another in the anterior segment of the left upper lobe, with accompanying pneumonitis (Figure B). Computed tomography of the chest and abdomen revealed a mass in the left upper and lower lobes, with enlarged hilar and mediastinal lymph nodes and possible adrenal metastasis. Fiberoptic bronchoscopy revealed a tumor in the posterior segment of the left lower lobe and infiltration of the mucosa in the trachea, the carina, the main bronchus, and the left upper lobe. The histologic and anatomic examination of the tumor biopsy and the bronchial aspirate showed cells indicating squamous cell carcinoma. The subsequent clinical course included additional cutaneous metastases of 1 to 2 cm in the paraumbilical region, with no ulceration. Respiratory symptoms worsened and the patient died 3 months after the initial diagnosis.

Tumors tend to invade other organs, including the skin, but distant cutaneous metastasis is rare. Lung tumors, which metastasize to the brain, bone, liver, and adrenal glands, are also responsible for most cases of metastases to the skin in men; in women, cutaneous metastasis is usually from a breast tumor.²

Cutaneous invasion may develop by direct extension from underlying structures, such as from lung and breast tumors, which are usually located in the anterior chest wall; by accidental seeding during diagnostic procedures, leading to lesions around the scar; by lymphatic embolization, in which case there is a predilection for the skin near the tumor; and by hematogenic spread, with possible early-onset lesions at remote sites. The preferred location is the anterior side of the chest, followed by the abdomen, the back, the scalp, and the face; metastasis to the skin of the extremities is rare.³ The most common forms are isolated or multiple nodules that are hard, normal to reddish-purple in coloring, and 5 to 60 mm in diameter. They grow rapidly, are painless, and may ulcerate. They may extend deep into the dermis and subcutaneous layers or may remain superficial. Histologically, undifferentiated lung cancer is the type that most frequently metastasizes to the skin (50%), followed by adenocarcinoma and squamous cell carcinoma (30% each).⁴ Pathology

of a metastatic skin lesion does not indicate the location of the primary tumor, but can suggest it.⁵

Cutaneous metastasis as the first sign of lung cancer is rare. In a large series of lung cancer cases with cutaneous metastatic lesions, the latter preceded the diagnosis of cancer in 14%. Metastasis to the skin of the nose as a first location has occasionally been reported associated with breast^{6,7} and, exceptionally, lung cancer.⁸ Lung cancer metastases may resemble lymphoma.⁹ As occurred in our patient, they may cause a "clown nose," so called because of the red color of the lesion, particularly at the tip.

The prognosis is poor for patients with lung cancer that metastasizes to the skin, as the disease has already reached an advanced stage. Survival ranges from 2.6 to 10 months after the discovery of metastasis; mean survival is 5 months.¹³ It is important to recognize cutaneous metastasis, as it may be the first sign of a silent neoplasm. These lesions always indicate an advanced stage of the disease, however, and their presence is considered a preterminal event.² "Clown nose" should therefore warn of the presence of an internal tumor.

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Continuous Interscalene Brachial Plexus Block: A Rare Cause of Pleural Effusion

Bloqueo continuo del plexo braquial por vía interescalénica: una causa poco común de derrame pleural

To the Editor:

We report a rare case of transient pleural effusion due to an interscalene brachial plexus block.

An 80-year-old woman was admitted to the orthopedics department for rupture of the tendons of the subscapularis and supraspinatus muscles of her right shoulder. Her past history was unremarkable. Routine preoperative clinical and laboratory examinations, arterial blood gases, and chest radiography were all normal.

The patient underwent right shoulder arthroscopy. After successful surgery, a continuous interscalene brachial plexus block was started to provide postoperative analgesia. The morning after surgery the patient complained of dyspnea and chest pain and was referred to the respiratory medicine clinic. On physical examination,

diminished breath sounds and egophony were found at the right lower lung region. A chest radiograph demonstrated a small right-sided pleural effusion. The routine laboratory findings were still within normal ranges and an electrocardiogram was normal. Thoracentesis was performed and 50 mL of pleural fluid was removed. The effusion was an exudate with lymphocyte predominance (75%). Cultures and cytology of the fluid were negative. A spiral computed tomography scan of the chest was performed to rule out the possibility of pulmonary embolism. A small right-sided pleural effusion with atelectasis of the underlying lower lung regions were the only findings. The interscalene catheter was removed. During the following days the patient's symptoms gradually improved and on the sixth postoperative day the pleural effusion had completely resolved with no further intervention.

As far as we know, this is only the second reported case of pleural effusion after a continuous interscalene brachial plexus block for postoperative analgesia.¹ This procedure is common in arm and shoulder surgery and is generally considered safe. A number of complications have been reported, including cardiac arrest, pneumothorax, central nervous system toxicity, aspiration of blood,