

Claude Bernard–Horner Syndrome as a Rare Complication of Postoperative Drainage

Síndrome de Claude Bernard–Horner como complicación poco frecuente del drenaje postoperatorio

To the Editor:

The relationship between Claude Bernard–Horner syndrome and drainage tubes or pleural drainage, though a rare complication, has led to 2 case reports in the Spanish and Latin American literature within a 6-month period. Each case evolved differently.

In the first case, in a patient with atypical carcinoid tumor, after a left posterolateral thoracotomy through the fifth intercostal space to perform a lower lobectomy and mediastinal lymph node dissection, 2 pleural drainage tubes were placed.¹ The dorsal tube was removed on the second day and the presence of Claude Bernard–Horner syndrome was detected; the condition persisted 3 years after surgery. In the other case, left video-assisted thorascopic surgery was performed for resection of the pulmonary apex to treat subpleural bubbles that had caused a third recurrence of pneumothorax.² In this case only 1 tube was placed, anterior to the lung; the syndrome was detected 36 hours after surgery, but the condition gradually improved and remission was complete 6 months after surgery.² In both cases the drain was removed as soon as the syndrome was detected.

What is noteworthy is that in both cases, each in a different disease context and after different surgical approaches to the left

hemithorax, Claude Bernard–Horner syndrome may have been due to inappropriate placement of the drainage tubes or to displacement when the patients were changed to decubitus position or transferred. To avoid such risks, we recommend the use of silicon drainage tubes marked with radiopaque threads that warn when placement is dangerously close to the stellate ganglion.³ Displacement is avoided by securing the tube on each side with sutures. The tube should not be removed early unless it is fulfilling no function because the lung has re-expanded and there is no further air leakage or if the amount drained is less than 150 mL/d. There is no fixed number of days the drainage tube should remain in place.

References

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Melanoptysis: An Unusual Complication in Fiberoptic Bronchoscopy

Melanoptysis: una complicación inusual de la fibrobroncoscopia

To the Editor:

Melanoptysis may occasionally present as a complication of coal worker pneumoconiosis in the form of an isolated cough or as a severe attack,¹ with sputum in small or massive amounts that can lead to severe acute respiratory failure and death.² To date, only 1 case associated with a complication of fiberoptic bronchoscopy has been reported.³ We report the first case to be published initially in Spanish.

The patient was a 77-year-old man referred to our department because of an abnormal chest radiograph taken when he consulted for urinary symptoms. He was an active smoker of 52 pack-years who had worked in the iron and steel industry in Russia for 45 years and had been diagnosed with silicosis in 1970 (no clinical or radiographic reports were provided). The physical examination showed blood pressure of 170/80 mm Hg, a respiratory rate of 15 breaths/min, an axillary temperature of 39°C, and a heart rate of 100 beats/min. Lung auscultation revealed diminished vesicular sounds and vocal fremitus in both hemithoraces with rhonchi that could be cleared by coughing. The patient had a distended bladder with overflow incontinence. Noteworthy laboratory findings included a white blood cell count of 13 200/ μ L (85% neutrophils), a urea concentration of 52 mg/dL, an alanine aminotransferase level of 49 U/L, a C-reactive protein level of 11.15 mg/dL, and an erythrocyte sedimentation rate of 43 mm. The following parameters were recorded in the arterial blood gas analysis (with an inspired oxygen fraction of 0.21): pH of 7.46, PaCO₂ of 34 mm Hg, PaO₂ of 83 mm Hg, and bicarbonate of 24 mmol/L. Chest radiography showed loss of

volume in the right hemithorax, an interstitial nodular pattern in the middle and upper lung fields, areas of emphysema, signs of air trapping, a right parahilar mass measuring 5×4.5 cm, and another mass of similar characteristics in the left apex (Figure 1a). The chest computed tomography scan also showed enlarged hilar and subcarinal lymph nodes of 1 cm or more and calcified retrocausal precarinal nodes. Lung function tests showed a forced vital capacity (FVC) of 4270 mL (101%), forced expiratory volume in 1 second (FEV₁) of 2580 mL (88%), FEV₁/FVC of 60 (85%), diffusing capacity of lung for carbon monoxide (DLCO) of 76%, and a ratio of DLCO to alveolar volume of 73%. Fiberoptic bronchoscopy showed anthracotic pigmentation in both bronchi of the upper and intermediate lobes, distortion of the bronchial tree, scar lesions, and mucosal irregularity on the bifurcation ridge of the middle lobe bronchus. Microbiology and pathology of the bronchial aspirate and brushing were negative. A second fiberoptic bronchoscopy using radiological imaging techniques was performed to rule out the presence of cancer. Following a transbronchial biopsy of the posterior segment of the right upper lobe, the patient produced more than 100 mL of a dark dense fluid, indicative of melanoptysis, which required aspiration and repeated lavage until it stopped (Figure 1b). The transbronchial biopsy showed lymph node silicosis and macrophages with anthracotic pigment. Melanoptysis (a total of 200 mL) subsided spontaneously in the next 24 hours with no evidence of cavitation on the radiograph taken after the fiberoptic bronchoscopy. At 8 months of follow-up, the patient had presented no new episodes of melanoptysis and showed no radiographic changes.

Melanoptysis (from the Greek *melas*, meaning black, and *ptysma*, meaning “spit”—*ptysis atra* in Latin⁴) consists of the expulsion or expectoration of black sputum made up of large quantities of carbon dust together with cholesterol crystals, collagen fibers, bronchial secretions, and, occasionally, blood.¹ This symptom can appear in both simple and complicated pneumoconiosis. It is most frequently associated with the cavitation of conglomerate masses in progressive