

**Figure.** Lung scintigraphy with Tc99 contrast. Arrows at diaphragm level: a) First minute, b) 6th minute, c) Placing the Gore-Tex® mesh on the diaphragm, d) Diagram of the diaphragmoplasty. *Legend:* 1. Mesh. 2. Upper layer 3. Defective area.

diaphragmoplasty may be a good choice for treating respiratory failure due to significant transdiaphragmatic defects.

#### Conflict of Interest

The author affirms they have no conflicts of interest.

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#### Pneumonia Due to *Dialister pneumosintes* in a Patient With Chronic Obstructive Pulmonary Disease

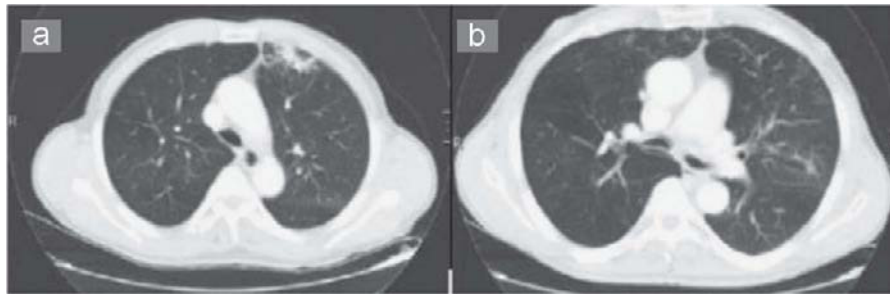
#### *Neumonía por Dialister pneumosintes en un paciente con EPOC*

To the Editor:

In patients with chronic obstructive pulmonary disease (COPD), pneumonia is a frequent complication that is generally caused by common microbes. We report a clinical case of a patient with pneumonia due to *Dialister pneumosintes*. A review of PubMed from 1960 to the present revealed that this microbe has not been isolated as a cause of pneumonia in patients without risk factors.

The patient was 74 years old at the time of examination, and was an ex-smoker and ex-drinker. He also had COPD and was undergoing no regular treatment. The patient was being followed up as an outpatient in the pneumology department as he had suffered from recurrent infections in the past 5 years. During this time, pseudonodular infiltrates that changed location had been observed in follow-up chest CT scans. Fiberoptic bronchoscopy had also been performed and showed no malignancy or bacteria that could have caused these infiltrates. Tumor markers had also been found that ruled out the presence of malignancy. After 3 years without COPD exacerbations, the patient was discharged.

One year later, the patient was readmitted as the dyspnea had worsened with the patient suffering even at rest, accompanied by



**Figure.** In this chest CT scan, a pseudonodular lesion can be observed in the right middle lung field (a). After antibiotic treatment, the pseudonodular lesions disappeared (b).

hemoptoic expectoration on 5 different occasions during the previous month, and a fever of 38°C. A general blood test performed during this time indicated abnormal levels of leukocytes (15 600/dL), erythrocyte sedimentation rate (24 mm/h), C-reactive protein (3.8 mg/dL), and partial pressure of oxygen in the artery (52.6 mm Hg). We performed a chest x-ray that showed condensation in the right lower lobe. Spirometry values were as follows: forced expiratory volume in the first second of 32% and forced vital capacity of 45%. The patient examination was completed with a chest CT scan, showing pseudonodular lesions in the anterior segment of the left upper lobe and right middle lung field, as well as convergence of bronchovascular structures with laminar atelectasis and multiple fibrous tracts in both lung bases (Figure a).

In light of these findings, we decided to complete the patient examination with a bronchoscopy. On this occasion, the microbiology tests detected an anaerobic diphtheromorphous and gram-negative bacillus in pure culture (pending identification). The patient was then re-examined, revealing a septic condition in the mouth. This finding prompted us to change the antibiotic treatment, and whereas levofloxacin had been previously used, this was replaced by amoxicillin-clavulanic acid. The patient progressed satisfactorily following the change in antibiotics and was, therefore, discharged.

The microbe was identified as *D. pneumosintes*, and so the patient was prescribed amoxicillin-clavulanic acid in 10-day treatment cycles at the start of the month and referred to a dentist. After 4 months follow-up, the lesions in the CT scan had disappeared (Figure b). The patient has not suffered any subsequent episodes.

*D. pneumosintes* is a small, gram-negative, strictly anaerobic, non-fermenting bacteria belonging to the common flora of the mouth. It was described for the first time by Olisky and Gates as *Bacterium pneumosintes*, after being isolated in nasopharyngeal swabs during the flu epidemic of 1918-1921. After its phylogenetic classification, it was reclassified as *D. pneumosintes*. It is a common microorganism belonging to the normal flora of the mouth (particularly in the periodontal area), nasopharynx, intestines, and vagina.<sup>1</sup>

This bacteria does not grow in traditional culture media, and so genetic amplification techniques are required to diagnose it, specifically, 16S RNA nucleotide sequencing.<sup>2</sup> In our study, we suspected its presence when a colony grew in a strict anaerobic environment, and when we were unable to identify it, genetic amplification techniques were used, leading to the diagnosis. Typical infections of this bacteria are periodontitis, gingivitis, and dental-

alveolar abscesses, generally associated with other saprophytic bacteria.<sup>3,4</sup> After such an infection, isolated cases have been described associated with other bacteria in respiratory infections of patients on mechanical ventilation in intensive care units.<sup>5</sup> Two cases of cerebral abscesses have been described in patients with ear and nose infections.<sup>6</sup> Vaginal and amniotic-fluid infections have also been described in women with early placental abruption.<sup>7</sup>

Regarding treatment, these infections have proved resistant to macrolides and fluoroquinolones. They have an intermediate resistance to metronidazole, rifampicin, and pristinamycin, and are sensitive to  $\beta$ -lactams, since they do not produce beta-lactamase.<sup>8</sup>

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