Confusional Syndrome as the Main Sign in Pneumonia Due to *Coxiella Burnetti*

Síndrome confusional como manifestación principal en la neumonía por Coxiella burnetti

To the Editor:

Q fever is a zoonosis caused by *Coxiella burnetti*, which is universally distributed in nature. Symptoms vary from no symptoms, to flu-like symptoms, to the appearance of hepatitis or pneumonia. Neurological manifestations, however, are usually infrequent.

We present a case of pneumonia due to Q fever with predominant neurological symptoms.

The patient is a 69-year-old male with no surgical medical history of interest except for arterial hypertension and posttraumatic epilepsy since childhood, treated with valproic acid. The family referred symptoms over the previous week of confusion syndrome without fever, with the patient finding himself disoriented in time and space. Upon arriving to the emergency room, he presented a fever of 39 °C, BP 117/78 mmHg, respiratory rate 20 rpm, creatinine 1.64 mg/dL, 18,000/mm^3 leukocytes, 14% stab cells and a PCR of 395 mg/L. Cranial CT scan was normal. Chest radiograph revealed a condensation in the right lower lobe, while antigens in urine for pneumococcus and *Legionella* were negative. The patient was admitted to the Intermediate Respiratory Care Unit for suspicion of pneumonia. Nevertheless, confusion, together with the appearance of cervical rigidity, continued to be the dominant symptom, and therefore the patient was evaluated for neurological symptoms given the suspicion for bacterial meningitis. Spinal tap obtained a clear liquid with 1 mm^3 leucocytes, 1,500 mm^3 hematites, 31.4 mg/dL proteins and glucose 60 mg/dL. Pneumococcus antigen on CSF was negative. Given the low level of consciousness, marked hypotension and oliguria that the patient presented, he was transferred to the Intensive Care Unit and treatment was begun with levofloxacin and ceftriaxone. EEG produced a tracing with no irritative foci and mild diffuse slowing. Transesophageal ultrasound revealed no data for endocarditis. Blood cultures were negative. Finally, serology was positive for *Coxiella burnetti* with high IgM and IgG antibody titers, compatible with a current infection. The patient evolved favorably and was discharged from the hospital with doxycycline and rifampicin treatment.

Q fever is a disease characterized by a very variable clinical presentation. There is much conflict in reference to the prevalence of the neurological symptoms described in the different publications, ranging from 1% to 22%[1] and often associated with pneumonia, hepatitis or endocarditis.[1] The presence of cephalgia is most frequent, as Spelman[2] reported in a study of 111 cases, while the prevalence of meningoencephalitis or aseptic meningitis varies between 0.2 and 1%. Other manifestations are Guillain-Barré syndrome, peripheral neuropathy, extrapyramidal symptoms or dementia.

Confusion syndrome, which was the debut of our patient's symptoms, is a presentation that is described exceptionally infrequently. In the literature, we have only been able to find two similar cases. McGivern et al.[3] presented a case of Q fever in a 48-year-old male with confusion and lethargy as a form of presentation. Likewise, De Seze et al.[4] described a case of Q fever that debuted with confusion syndrome.

The neurological symptoms often imitate herpetic meningoencephalitis with morphological anomalies in the temporal lobe. In the case of our patient, the imaging tests were normal, like the case described by De Seze et al.[4]

In the cerebrospinal fluid, there is usually a predominantly lymphocytic pleocytosis, normal proteins or high hypoglycorrhachia. However, cases have been described with normal liquid,[5] as has happened in our patient.

It should be noted that our patients lives in a rural area of the Basque Country, where in 1981and 1983[6] epidemic outbreaks of the disease were described.

In conclusion, we would like to highlight the polymorphic character that the disease may acquire in its form of presentation. Confusion syndrome as an initial manifestation of *Coxiella burnetti* infection is without a doubt exceptional, but despite this, given a case of pneumonia with associated confusion symptoms, we believe that the diagnosis of Q fever should be considered.

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Tuberculosis with a Residual Fibrostenotic Endobronchial Lesion

Tuberculosis con una lesión endobronquial fibroestenótica residual

To the Editor:

Endobronchial tuberculosis (EBTB) is a relatively frequent manifestation seen in primary infection as well as in tuberculosis reactivation. Its incidence is estimated between 10-40% of patients with pulmonary tuberculosis.[1] The evolution and prognosis of EBTB is variable, going from complete resolution to residual severe tracheobronchial stenosis.[2]

We present the case of a 58-year-old woman, originally from Morocco but living in Spain for the past 3 years, who came to our services with cough, expectoration, low-grade fever, loss of appetite and weight loss during the previous three months. Acid-fast bacilli were observed in sputum smear and cultures were positive for *Mycobacterium tuberculosis*. The patient was diagnosed with smear-positive tuberculosis and a two-month treatment was begun with

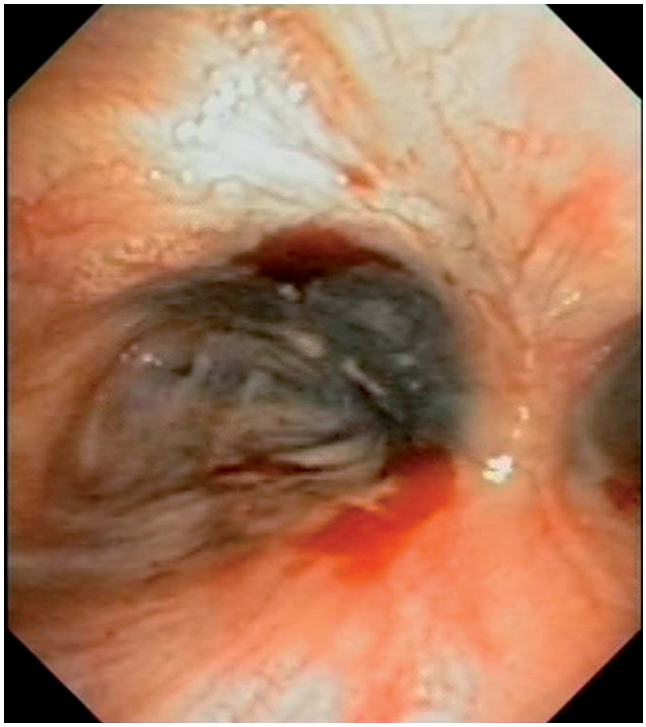

Figure 1. Video-assisted bronchoscopy image showing the blackish excrescent lesion obstructing the left main bronchus.

four drugs (isoniazid, pyrazinamide, rifampicin and ethambutol) followed by four months with isoniazid and rifampicin. The patient presented adequate tolerance to the drugs and follow-up sputum smear was negative. The index case was a family member diagnosed with tuberculosis. At a follow-up visit after finalizing treatment, the patient complained of discomfort in the left dorsal region and dyspnea on effort. Chest radiography revealed complete atelectasis of the left lung, at which time the patient was hospitalized in order to run a complete battery of tests. Physical examination was normal, except for a decrease in the vesicular murmur of the left hemithorax.

Laboratory results were normal. Computed tomography showed complete atelectasis of the left lung parenchyma with deviation of the mediastinal structures towards that same side, and complete amputation of the left main bronchus was observed. Video-assisted bronchoscopy (fig. 1) showed a blackish excrescent lesion that completely obstructed the entrance of the left main bronchus, with the appearance of scar tissue. The pathological anatomy of the biopsy from the endobronchial lesion showed granulomas. After having ruled out endoscopic treatment, the patient continues in clinical and function observation and has been stable since hospital discharge. In conclusion, the subject is an EBTB patient with a residual fibrostenotic endobronchial lesion after completing anti-tuberculosis treatment, non-candidate for mechanical resection due to the presence of complete atelectasis of the left lung with deviation of the mediastinal structures.

Complications of EBTB include obstruction, atelectasis (with or without secondary infections), bronchiectasis and tracheal or bronchial stenosis. Chung and Lee[3] classified EBTB into 7 subtypes, according to bronchoscopic findings of the endobronchial lesions: actively caseating, edematous-hyperemic, fibrostenotic, tumorous, granular, ulcerative and the nonspecific bronchitis type. Actively-caseating lesions are the most frequent (43%) while tumorous lesions 10.5%) are the least. Tumorous EBTB is typically described as an endobronchial mass whose surface is covered by caseous material.[3] In a study of EBTB patients, independent factors predicting persistent stenosis of the airway were age > 45, pure or combined fibrostenotic subtype and the duration of symptoms for more than 90 days before the start of anti-tuberculosis treatment.[4]

Stenotic complications can be treated by means of repeated dilatations, mechanical resections or stent placement.[3] New treatments have been tried recently, such as the inhaled administration of anti TGF-beta 1 antibodies, which inhibits scarring.[5]

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Response to the letter "Palliative Thoracocentesis in Low Income Countries"

Respuesta a la carta "Toracocentesis paliativa en países de bajos recursos"

To the Editor:

In response to the Letter to the Editor by Dr. René Agustín Flores-Franco[1] in reference to our article published in this same journal,[2] we wanted to provide some clarifications. We agree that the economic means which are at our disposal limit us in applying certain diagnostic and therapeutic measures. Thus, limited economic resources can require us to use less sophisticated means giving similar results. We know that the tunneled catheter system commercialized under the name of PleurX®, used for malignant pleural effusions and with which we have presented our results, is available in Mexico. It is a safe system with widespread use, and therefore we recommend it in circumstances in which it is indicated and accessible. This device is designed for easy placement and can be inserted in an outpatient setting according to the experience of many authors[3] and [4] and our own. In our study, the catheters were only inserted in the hospital setting when the patient was already hospitalized. Moreover, it allows for patients to be discharged once the catheter is in place for later home follow-up. In this manner, patient hospitalizations and trips are avoided, reducing costs and economizing this system's use.[5]