

## **TB or not TB? – that is the error!**

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**Learning objectives:** In order to reduce the prevalence of diagnostic errors, healthcare professionals need to improve the collaboration involving patients and their families, and steer the anamnesis.

**Case information:** This paper reveals an atypical case of an 87-years-old man with an insidious onset of dry cough, followed by intermittent changes of this symptom, over a period of 4 months that resulted in multiple nights with lack of sleep. At the time, the primary doctor documented a stage 2 dyspnea (mMRC scale) and subjected the patient to a chest X-ray, spirometry test which turned out to be normal. Over the next 3 months, the patient returned 2 more times to the same clinic with a productive cough and worsening psychological state. The clinical exam revealed coarse crackles of the lungs, a peripheral oxygen saturation of 98% and a heart rate of 71 bpm. However, being deeply involved in the diagnostic process, the patient felt that the initial observations did not find his true affliction. The next step of the investigation was represented by a sputum exam, for which the patient provided samples which consisted mainly in saliva, which could not be processed in the laboratory. Therefore, the next course of action was a bronchoscopy exam, which produced yellowish white mucopurulent secretions, positive in optical microscopy for *M.tuberculosis*, that finally led to the correct diagnosis of bronchial tuberculosis, confirmed by the culture of the samples.

**Discussion:** While TB is rare to encounter in the Western States, which makes it even harder to detect, tuberculosis is a common disease in Romania. However, the atypical presentation of the disease in this case have led to a misdiagnosis. The increasing number of MDR-TB cases may be also due to the diagnostic errors. The presentation of this case outlines that teamwork and perseverance are key factors in reducing diagnostic errors.