Imagens em Medicina

Images in Medicine

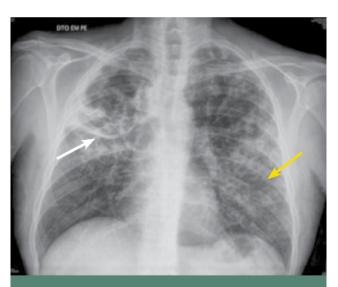
Pulmão ou queijo suíço?

Lung or swiss cheese?

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Pulmonary tuberculosis affects mainly the apical and dorsal segments of the upper lobes and the apical ones of the lower lobes. Its radiologic expression includes cavitary, pneumonic, endobronchial, atypical, miliary and pseudotumoral forms. I Thorax radiography (RX) is the first diagnostic approach of its evaluation but the CT Scan is superior to its diagnosis. This enables to show parenchymal changes that previously were only found in the pathological anatomical study. I

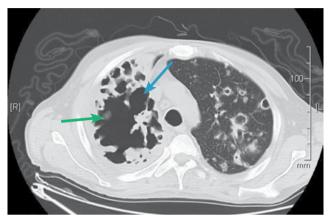
48 years-old man, lorry driver, without pathological background, without smoking, alcoholic or illegal drugs habits, and with a naive epidemiologic history

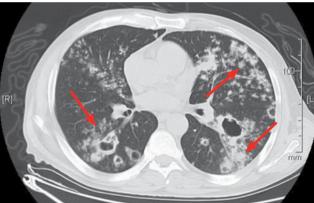


Thorax RX: Nodular-reticular opacity occupying the upper lobe of the right hemi-field with a compatible image with a cavitation wall (white arrow) and nodular-reticular infiltrate in the lower 2/3 of the left hemi-field (yellow arrow) highly suggestive of bronchogenic dissemination T.³

FIG. 1

Medicine I Service of Hospital Santo André, Leiria- EPE, Received for publication on the 22nd February 2011 Accepted for publication on the 17th September 2011





Thorax CT-Scan: Right upper pulmonary lobe filled with a cavitary lesion measuring 140 mm in diameter (green arrow), located further above and individualized by another cavity measuring 34 mm which is surrounded by other satellite cavities with diameter \leq 30 mm (blue arrow). In the remaining pulmonary areas, bronchogenic dissemination foci are seen, identifying multiple nodes of confluent bronchial-pneumonic characteristics. Many of these lesions are also cavitary (red arrow).

FIG. 2

looking for the Emergency Service due to asthenia, chronic productive coughing, in a context of 14% of weight loss. He mentioned fever hard to control. The physical examination showed a thin aspect, fever and bilateral wheezing more evident on the left. The first medical investigation has shown lymphopenia, neu-

trophilia, high C-reactive protein and thorax RX suspect (Fig. 1). Before such condition, the patient was admitted in hospital for study: a strong T suspicion led to the research of bacilli alcohol-acid resistant (BAAR) in the sputum which revealed to be positive. Thorax CT-Scan (Fig. 2) has shown severe lesions in the lungs. A non-reactive Mantoux test and lymphopenia led to serology of the human immunodeficiency virus which was negative. The patient, subject to a four side therapy and fix paracetamol, kept morning daily feverish peaks. Repeated the direct exam on the 14th and 21st day of admission there was always a BAAR presence. The resistance test to antibacili having been negative became a surveyed intake.

Cavitation is due to liquefaction and drainage of a granuloma caseum.² Its bronchogenic dissemination, with implantation in other lung areas leads to the development of distant infiltrates.³ This case corroborates the national statistics which state that 65% of patients are exempt of risk factors.⁴ It also reinforces the concept of high potential to community transmission as the tuberculosis patient with cavitation corresponds to the main infection source and it is the responsible for spreading the disease in the community.²

References

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