

# A case of secondary syphilis with pulmonary involvement in a person living with HIV

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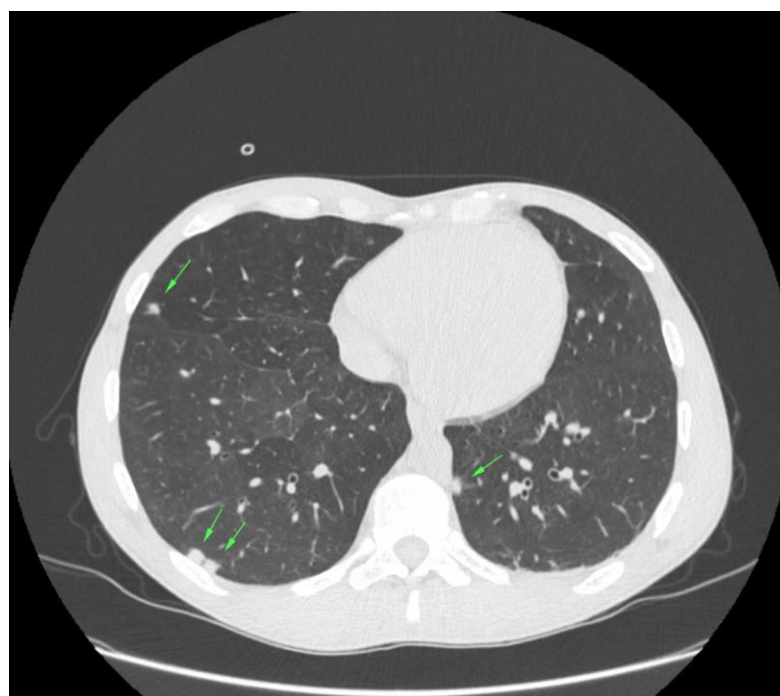
## Background

- Syphilitic pneumonia, known as a manifestation of early congenital syphilis, is a rare manifestation of secondary syphilis in adults. It's a condition described in literature and reported in 8 cases in person living with HIV, include our case.

## Case presentation

- A 35-year-old man living with HIV with ten days history of fever and asthenia came to our emergency department after symptoms worsening. He was receiving ART with DRVc/TAF/FTC and his viral load was stably suppressed with CD4 > 500 cells/ $\mu$ L. Upon arrival, the physical examination showed papulo-erythematous lesions on the trunk and back, the patient had dyspnea, tachypnea (respiratory rate 24 breaths/min) and respiratory failure for which oxygen therapy with Venturi Mask FiO<sub>2</sub> 35% was necessary. At the hospital admission his blood tests showed normal blood cells count, increased C-reactive protein (6x normal value), negative procalcitonin and increased ALT (3x normal value). Widal-Wright, Weil-Felix, blood cultures and QuantiFERON were negative, while rapid plasma reagin (RPR) and Treponema pallidum Haemoagglutination Assay (TPHA) were positive; these were performed five months earlier during follow up and resulted negative. He underwent a lung CT scan with contrast which showed multiple rounded nodular lesions (approximately 5-6 mm) in the middle lobe and in both lower lobes (figure 1). Then, a bronchoalveolar lavage was performed on which the following microbiological tests were requested: cultures for bacteria and fungi, Aspergillus Galactomannan, respiratory panel with film array, *Pneumocystis jirovecii* DNA, *Mycobacterium tuberculosis* DNA. All these exams were negative. *Treponema pallidum* DNA PCR was detected. Therefore, a diagnosis of pulmonary syphilis was made and the patient was treated with intramuscular benzathine penicillin 2.4 MU. The patient was discharged the following week with good oxygen saturation in room air, afebrile, in the absence of skin lesions, with improvement in inflammation indices.

Fig. 1 Chest CT scan showing 5-6 mm bilateral rounded nodular lesions (arrows)



## Conclusion

- Atypical or rare presentation of infections sexually transmitted, in this case of syphilis, must be considered in all person living with HIV, even if they have optimal virological response to ART. Diagnosis may be challenging and more efforts should be made by clinicians and researches for awareness improvement.

## References

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