

# Tuberculosis and COVID-19 association

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## Introduction

- The association between tuberculosis and COVID-19 (coronavirus disease 2019) has been rarely reported, and it represents an important health problem due to the current pandemic situation.
- The interaction between MTB (Mycobacterium tuberculosis) and SARS-CoV-2 (severe acute respiratory syndrome-associated coronavirus-2) is not well known yet.

## Materials and Methods

- We evaluated 5 cases with MTB and SARS-CoV-2 coinfection between March 2020 and March 2021, using biological and imagistic investigations.
- The presence of MTB was objectified through the bacteriological exam for MTB of the sputum, while the SARS-CoV-2 infection was confirmed by a positive RT PCR SARS-CoV-2 test.

### Figure 1

- Appearance of „tree in bud” superior left lobe
- Cavitary lesion 20/45 mm in Fowler segment
- Bronchiectasis
- Bilateral bands of fibrosis



Figure 1- CT aspect of a patient with TB and COVID-19

## Results

- From the 5 patients that met the inclusion criteria, the majority were male (80%), smokers (60%), with a median age of 51.5 (range 22-77).
- As debut symptoms, 4 (80%) of them presented productive cough, and 2 (40%) of them had hemoptysis and weight loss.
- 4 patients were diagnosed at the admission with TB and SARS-CoV-2 and presented pulmonary lesions specific for tuberculosis, without pulmonary damage specific for COVID-19 on the imagistic investigations.
- One patient was already under antituberculous treatment and presented „ground glass opacities”, specific for COVID-19 in associations with TB lesions.
- The most common biological features we identified were inflammatory syndrome (80%), increasing of the D-dimers (60%), and increasing of the liver function tests (60%).

## Conclusions

- These cases highlight the importance of paraclinical investigations because COVID-19 can mask other conditions such as Tuberculosis.
- We must remain alert to any clinical subtleties to ensure a timely and accurate diagnosis.

## References

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