

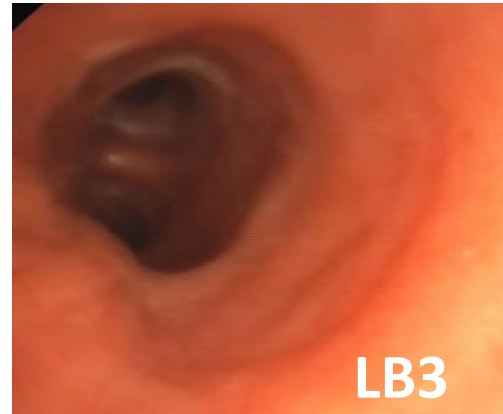
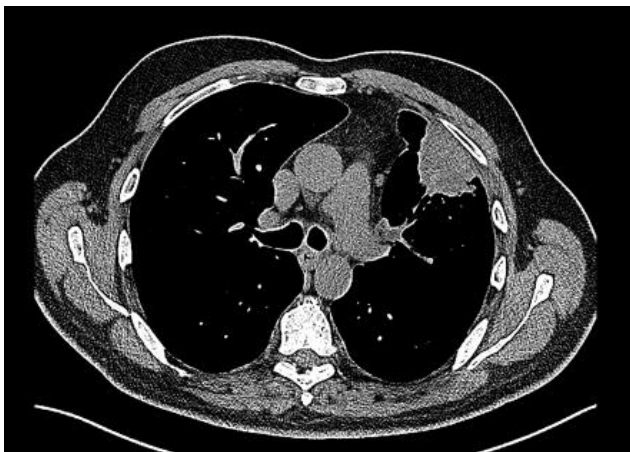
SARS-CoV-2-associated pulmonary aspergillosis

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Background: SARS-CoV-2-associated pulmonary aspergillosis (CAPA) has been described in COVID-19 patients with acute respiratory distress syndrome. The pathogenesis is incompletely understood but several immunological mechanisms may be responsible for the development of CAPA as well as other fungal infections.

Clinical Case: a 61-years old man was recovered in Covid-Unit because of severe bilateral Sars-CoV-2 related pneumonia complicated by a little left pneumothorax. He was treated with non invasive mechanical ventilation (NIV) and O₂ therapy with high flow nasal cannula (HFNC). The thorax-CT performed for the follow-up showed the presence of a new round solid lesion in the left upper lobe. We performed a bronchoscopy, which showed the BALF positive for Aspergillus. The patient undergone therapy with Prednisone and Voriconazol. Due to the poor clinical response, the patient underwent left upper lobectomy surgery.



Conclusions: COVID-19 is associated with an immunosuppressive state, exacerbated by corticosteroid treatment, resulting in a higher propensity to co-infections (bacterial, viral, or fungal). CAPA is a new entity in critically ill patients infected with COVID-19, most of whom are in ICU treated with mechanical ventilation and steroid therapy. Comorbidities also predisposes to the development of this fungal infection, but not the classical classic factors for invasive pulmonary aspergillosis (e.g. haematological malignancy or neutropenia). The timely diagnosis of CAPA is a challenge since the clinical features are non-specific, and because of the delay of diagnosis the mortality risk is up to 40%. The first-choice investigation for pathogen isolation is bronchoscopy, which enables a diagnosis to be made quickly and at low cost.

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References

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