The background of the slide features a microscopic view of coronavirus particles. On the left, a large, detailed structure shows the characteristic surface of a coronavirus, with numerous spike proteins protruding from a spherical core. To the right, several smaller, more distant particles are visible, some showing the same spiky structure. The overall color palette is a mix of light blue and white, set against a dark blue background.

False negative COVID-19 test in patient with corona virus symptoms

- Case report -

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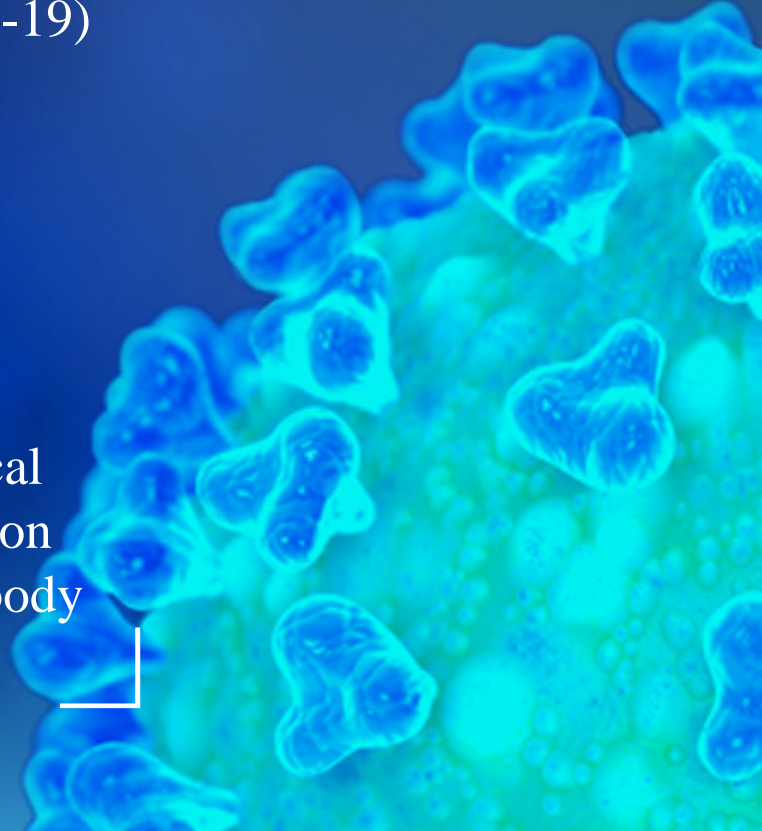
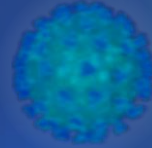
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INTRODUCTION

The epidemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has become a public health problem.

PCR molecular nasopharyngeal swab tests are recommended for the diagnosis of COVID-19.

We present a rare case of COVID-19 with multiple negative results for PCR analysis with typical clinical picture and CT chest finding for coronavirus infection and serological tests with the presence of high antibody titers.



CASE STORY

- 60-year-old man admitted to our hospital due to 5-day temperature up to 38.8°C, fatigue, malaise, dry cough, shortness of breath.
- Laboratory tests, chest CT, and molecular nasopharyngeal swab test for SARS-CoV-2 were performed at admission.
- The patient was treated with infusions, antibiotics, analgesics and vitamin therapy.
- Computerized tomography showed a larger milk glass confluence zone, left peripheral attenuation, and several minor bilateral focal changes in addition to inflammatory interstitial changes (Figure 1), thus isolating the patient as suspicious of COVID-19.
- Nasopharyngeal swab samples were taken twice after admission. However, none of the samples were positive.
- One month later, a serological analysis for COVID-19 was performed and a high antibody titer was found: IgG = 30.50 (<1.00AU / ml) and IgM = 16.75 (<1.00AU / ml).

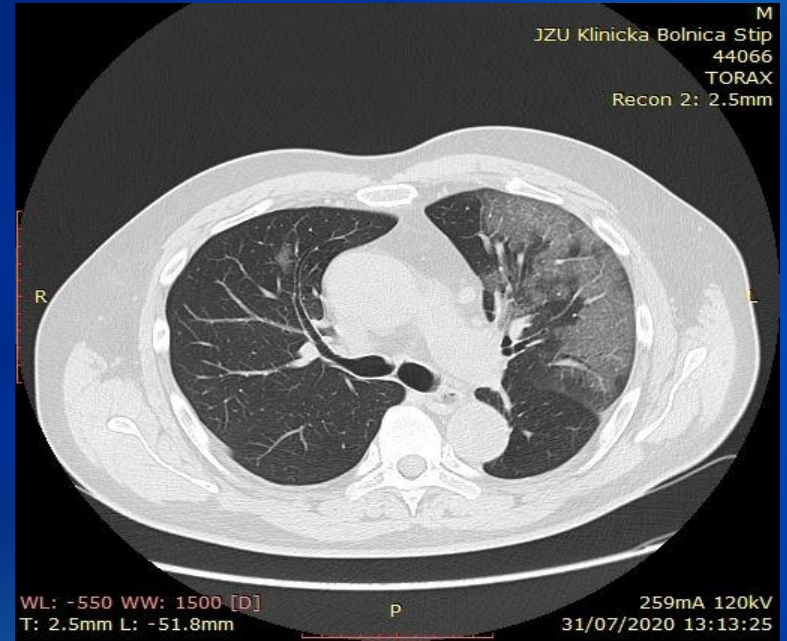
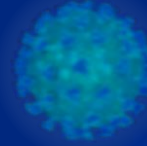


Figure 1. Bilateral interstitial pneumonia with milk glass attenuation, predominantly left

CONCLUSION



This case reminds the clinician that a patient with high clinical suspicion of COVID-19 and multiple negative PCR-molecular test results should not be taken out of isolation.

A combination of the patient's history, clinical manifestations, laboratory tests, and typical chest CT findings play an important role in making a preliminary diagnosis, early isolation of the patient, and appropriate treatment.

Repeated swab tests are useful in diagnosing this type of patient, especially serological tests to test for the presence of antibodies will help us detect the rate of infection in the community and determine the mortality rate from the disease.



THANKS!

- Take care of you -