

MANAGEMENT OF SPONTANEOUS PNEUMOTHORAX IN PATIENTS WITH COVID-19

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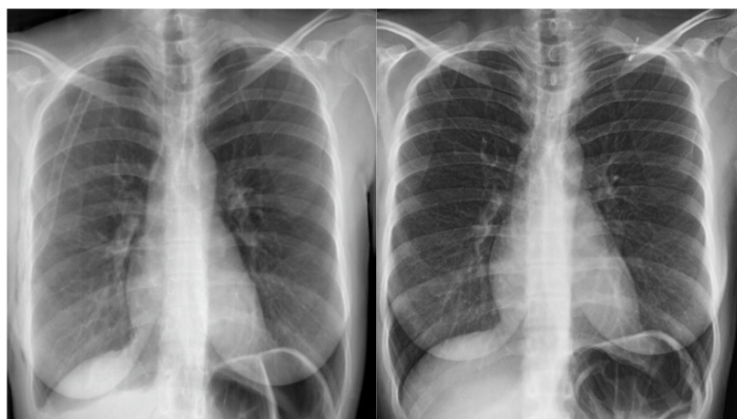
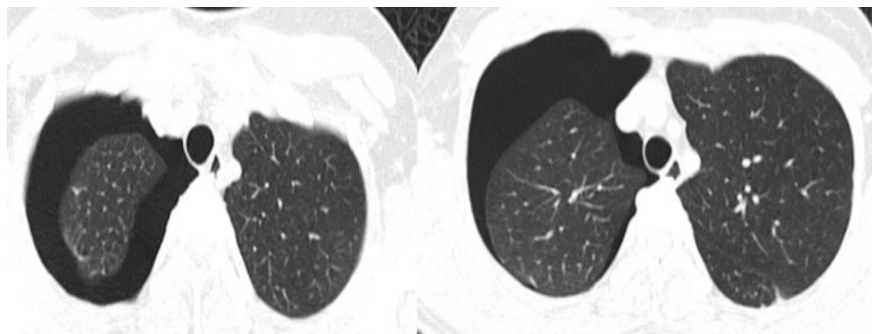
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Abstract

The coronavirus diseases 2019 (COVID-19) pneumonia may cause cystic features of lung parenchyma which can resolve or progress to larger blebs. Spontaneous pneumothorax (SP) was reported as a complication of COVID-19 with an incidence of 1% in hospitalized patients, in 3% of patients hospitalized with pneumonia, in 6% mechanically ventilated patients and in 1% of deceased patients. Pneumothorax was more likely in patients with neutrophilia, severe lung injury and a prolonged clinical course. We present 11 cases of SP managed with chest tube thoracostomy (CTT) or high dose oxygen therapy. Isolated SP was detected in all cases. Eight cases were male and three cases were female. There were bilateral ground-glass opacities or pulmonary infiltrates in the parenchyma of the ten cases. We detected neutrophilia, lymphopenia and increased CRP, Ferritin, LDH, D-Dimer, IL-6 levels in almost all cases. CTT was sufficient to treat pneumothorax in our nine of case. In two cases, pneumothorax healed with high dose oxygen therapy. Favipiravir and antibiotic treatment were given to different ten patients. In our institution, all patients with COVID-19 infection were placed on prophylactic or therapeutic anticoagulation, unless contraindicated. The treatments of patients diagnosed with secondary spontaneous pneumothorax during the pandemic period and those diagnosed with secondary spontaneous pneumothorax in the previous three years were compared with the durations of tube thoracostomy performed in both groups. The increased number of cases of pneumothorax suggests that pneumothorax may be a complication of covid-19 infection. During medical treatment of covid-19, pneumothorax may be the only reason for hospitalization. Although tube thoracostomy is a sufficient treatment option in most cases, clinicians should be aware of the difficulties that may arise in diagnosis and treatment.

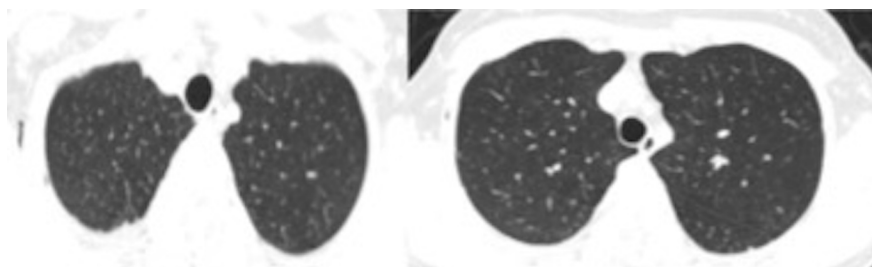
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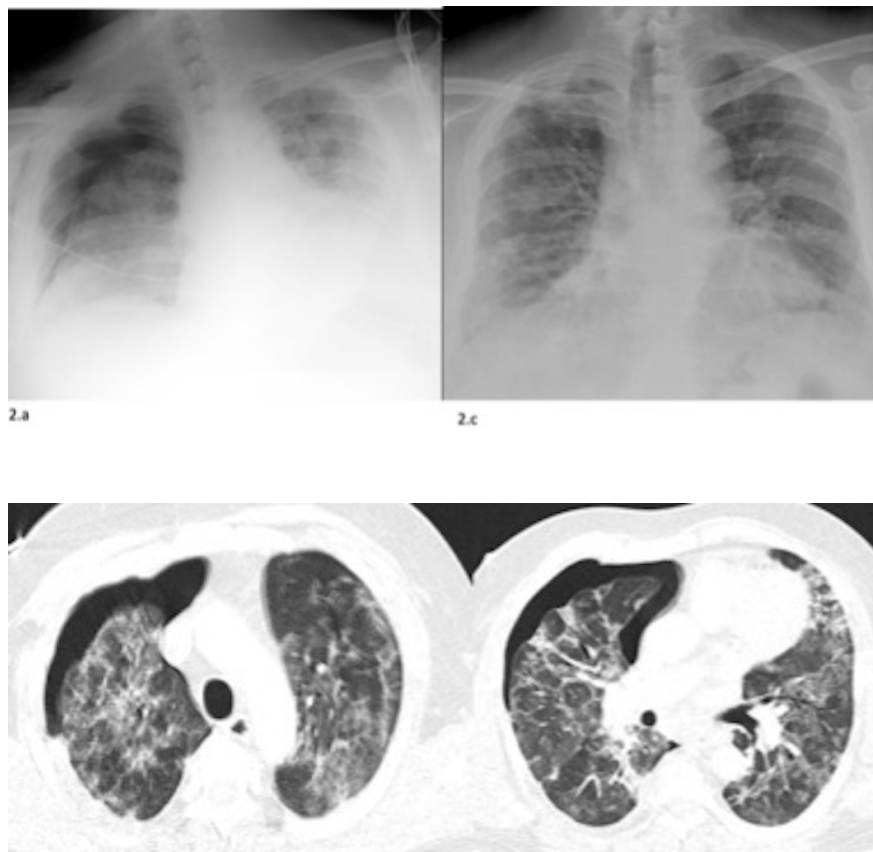
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