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**Case Report** 

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## **COVID-19 Infection, a Telltale Sign of Pulmonary Adenocarcinoma: About A Case**

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### Abstract

The telltale signs of lung cancer are mostly respiratory signs, whether or not associated with general signs. We report the case of a 69-year-old patient, followed at CHU HASSAN II in Fez, admitted for treatment of a Covid-19 pneumonia confirmed by PCR, a scanner was performed to assess the degree of pulmonary involvement found signs of infection with covid-19 associated with meta-static bronchopulmonary cancer, confirmed by pathological examination.

#### Introduction

At the end of 2019, clustered cases of pneumonia in Wuhan in mainland China's Hubei province were reported to be human-to-human transmission of a novel coronavirus, Sars-CoV-2. This disease has given rise to a pandemic, known as Covid-19, which can have the same general signs suggestive of bronchopulmonary cancer [1].

#### **Case Report**

We report the case of a 69-year-old patient, without a pathological history and not smoking, having presented a febrile syndrome associated with respiratory signs such as dyspnea and dry cough evolving for three days, justifying his consultation in the emergency room, a smear realized who showed a Covid 19 infection. Chest CT was performed and showed signs of Covid-19, with the presence of a lung mass in the right upper lobe suggesting a lung tumor (Figures 1 and 2). A bronchial biopsy showed a histological and immunohistochemical appearance in favor of pulmonary adenocarcinoma.

### Discussion

Lung cancer is the leading cause of cancer death, with 2.1 million new cases of lung cancer and 1.8 million deaths expected in 2018, which represents almost 1 in 5 cancer deaths. The clinical picture of lung cancer usually consists of symptoms related to chest disease or depending on the sites of metastases. The most common chest symptoms are cough, dyspnea, chest pain, and hemoptysis. Other symptoms are due to invasion or obstruction of vital thoracic structures such as superior vena cava syndrome, pericardial or pleural effusion, obstructive pneumonia, and Pancoast syndrome [2].



**Figure 1:** CT in Coronal slice (a) axial (b) after PDC injection: Medisatino-pulmonary tumor process, upper right lobe, heterogeneous containing calcifications and areas of necrosis, locally advanced.

COVID-19 infection most often presents as an acute feverish picture, accompanied by cough and possibly ENT, digestive or even skin signs (peripheral digital ulcerations). Aspecific signs therefore, apart from ageusia and anosmia without nasal obstruction, very suggestive, according to current knowledge [3]. Chest CT scan without injection is the gold standard in COVID-19 pneumonia [4,5]. The CT scan can be used to grade the severity of the pulmonary involvement, which provides

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prognostic information [6-8]. The most characteristic CT abnormalities of COVID-19 pneumonia are areas of ground glass (approximately 80% of cases), multifocal, bilateral, asymmetric.



Figure 2: Thoracic CT in parenchymal window in axial section: Presence of several scattered foci of Crazy Paving with peripheral distribution in connection with a viral pulmonary infection type COVID-19.

The involvement classically predominates in the peripheral, posterior and basal regions [9-11]. There is usually no micronodular syndrome, excavation, septal lines, or mediastinal adenomegaly. Other signs have been reported such as the presence of fine reticulations, peribronchovascular thickening, peri or intralesional vascular dilations or signs of parenchymal distortion [11,12]. The classic presentation of COVID-19 could be quite similar to that of other viral lung diseases, but the peripheral topography of the lesions, the presence of fine reticulations and peribronchovascular thickening would be more frequently found in COVID-19 pneumonia [13]. Some patients who are infected but asymptomatic may present with imaging abnormalities, however CT involvement is generally less severe [14, 15]. Frosted glass patches tend to progress over time, both in extent and density. The CT scan classically sees the frosted glass evolve towards a so-called «crazy paving» aspect (superposition of frosted glass and intralobular reticulations) and / or more or less retractile parenchymal condensations.

#### Conclusion

Covid-19 infection and lung cancer can have the same clinical picture with respiratory and extra-respiratory signs, hence the value of CT imaging to support the diagnosis.

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