

# INCIDENTAL DIAGNOSIS OF HEREDITARY HEMORRHAGIC TELANGIECTASIA IN A SUSPECTED CASE FOR COVID 19

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## GOAL

The present work aims to report a case of hereditary hemorrhagic telangiectasia (HHT) diagnosed incidentally in a patient undergoing pleuroscopy for investigation of a lesion described as a pulmonary nodule on chest tomography, performed due to a suspected flu for COVID-19.

## CASE DESCRIPTION

This is a patient J.F.A.V., female, 57 years old. She presented to the emergency department of Hospital Governador Israel Pinheiro - IPSEMG with dyspnea, desaturation and syncope. There were reports of fever spikes, myalgia, malaise and coughing episodes the day before, with the hypothesis of COVID-19 being raised. Computed tomography of the chest was performed, which described the presence of bilateral pulmonary nodules, the largest of which was 31 mm in the posterior base of the right lung.

After an evaluation of the thoracic surgery was requested, the patient underwent videothoracoscopy for histological diagnosis, with identification of pulsatile ectatic vascular lesions on the surface of the right lower lobe, and a deep nodular lesion of soft and pulsating consistency in the same lobe (Figure 2).

It was decided not to proceed with resection of the main lesion, and echocardiography with microbubbles and pulmonary arteriography was subsequently requested to better characterize the pathology. A nodular arteriovenous malformation was observed in the right lower lobe, associated with intrapulmonary shunt. The patient revealed frequent episodes of long-standing epistaxis, with worsening in winter, also present in first-degree relatives. In addition, endoscopic and imaging exams revealed vascular changes in the stomach, duodenum and liver. In view of these findings, the diagnosis of HHT was defined by clinical-radiological criteria. The patient was subsequently referred for follow-up and hemodynamic treatment with embolization.

## DISCUSSION

HHT, also known as Rendu-Osler-Weber Syndrome, is an autosomal dominant disorder characterized by the appearance of telangiectasia in the skin and mucous membranes, and arteriovenous malformations (AVM) in organs such as the lungs, liver and brain 1, 2. The diagnosis is defined by the presence of three or more of the following findings: recurrent epistaxis, mucocutaneous



Figure 01: Chest CT: bilateral pulmonary nodules, the largest being 31 mm at the posterior base of the right lung.



Figure 02: Presence of rounded and pulsating lesions, located on the surface of the lower lobe of the right lung.

telangiectasis, visceral arteriovenous malformations, and a history of first-degree relatives with HHT1, 2, 3. Pulmonary AVMs, when presenting a supplying artery larger than 3 mm, imply a significant increase in the risk of neurological complications, such as brain abscess, transient ischemic attack and stroke, due to direct communication between venous and arterial blood 3, 4. Thus, these cases are indicated for invasive treatment, initially with catheter embolization, or, in specific cases, with surgical resections1, 3, 4, 5.

The COVID-19 pandemic brought an unusual scenario, since the large number of chest CT scans performed can promote an increase in the number of incidental findings of lung injuries. Given this context, the case in question illustrates a possible differential diagnosis for nodular lesions in patients investigated for infection by the new coronavirus.

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