### **IMAGENS EM MEDICINA**

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# Sinal de Palla: Um Caso de Embolia Pulmonar Aguda Palla's Sign: A Case of Acute Pulmonary Embolism

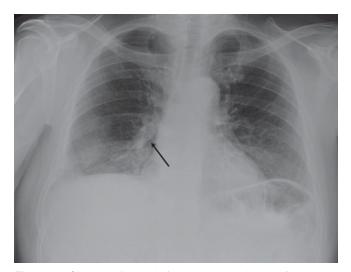
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Palavras-chave: Dor no Peito; Embolia Pulmonar/diagnóstico por imagem; Tosse.

Keywords: Chest Pain; Cough; Pulmonary Embolism/diagnostic imaging.

The authors report the case of a 63-year-old man presenting to the emergency department (ED) with a 2-day history of right-sided pleuritic chest pain. He denied cough, fever, or chest trauma. His previous medical history was unremarkable. On physical exam he was mildly tachypneic at 22 rpm with 96% oxygen saturation on room air. Remainder of exam was normal. Chest x-ray was significant for prominent right descending pulmonary artery (Palla's sign) (Fig. 1). D-dimer was elevated at 1597 µg/mL. Computed tomography pulmonary angiogram (CTPA) showed a filling defect on the inferior branch of the right pulmonary artery (Figs. 2A-B). The patient was started on therapeutic dose of low-molecular weight heparin for acute PE. His symptoms resolved and he was discharged after 5-day admission.

Palla's sign was described in 1983 by Italian radiologist



**Figure 1**: Chest radiograph (posterior-anterior view) showing an enlarged right descending pulmonary artery (black arrow) (Palla's sign).

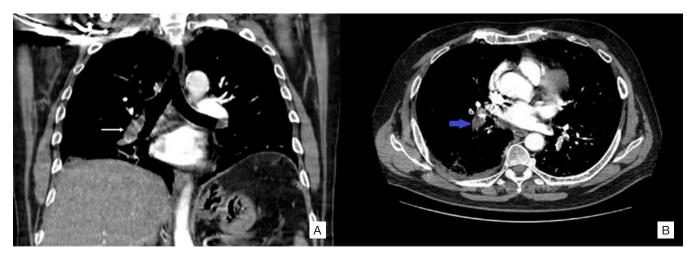


Figura 2: CTPA showing a filling defect on the inferior branch of the right pulmonary artery on coronal view (A, white arrow) and axial view (B, blue arrow).

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Antonio Palla.1 It describes the enlargement of the right descending pulmonary artery, giving it a characteristic "sausage-shaped" appearance. It can be accompanied by Westermark's sign of focal hyperlucency that translates oligemia secondary to obstruction of the pulmonary artery or distal reflex vasoconstriction.<sup>2</sup> Hampton's Hump is another radiological sign corresponding to a peripheral, pleural-based, wedge-shaped opacity representing pulmonary infarction distal to a pulmonary embolus.3 Although CTPA remains the gold-standard in the diagnosis of PE, knowledge of these older radiological signs should not be forgotten. In cases of unsuspicious presentation, careful interpretation of chest x-ray may offer important clues to a diagnosis of acute PE. Moreover, in unstable patients, when therapeutic decisions must be taken expeditiously, or when there is concern with radiation exposure or contrast administration, recognition of these radiological signs can aid in the diagnosis. This case is a reminder of the historic importance of radiographic diagnosis of acute PE and the signs we should not neglect.

# Declaração de Contribuição

AM, PC, ML – Escrita do caso, revisão da literatura e aprovação da versão final

EK – Escrita do caso, edição de imagens, revisão de literatura e aprovação da versão final

Todos os autores aprovaram a versão final a ser submetida

# **Contributorship Statement**

AM, PC, ML - Case writing, literature review and approval of the final version

EK - Case writing, image editing, literature review and approval of the final version

All authors approved the final draft

# Responsabilidades Éticas

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