Palla's Sign and Hampton's Hump in Pulmonary Embolism

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A 37-year-old female with lupus anticoagulant developed severe hypoxia during dilation and curettage for spontaneous abortion. A chest radiograph (panel A) showed a wedge-shaped peripheral opacity (Hampton's hump [1], long arrow) as well as a prominent right descending pulmonary artery with a sharp cutoff (Palla's sign [2], short arrow). Subsequently, a CT angiogram (panel B) demonstrated massive pulmonary embolism in the right main pulmonary artery extending to the upper, middle, and lower lobe branches with features suggesting subacute or chronic thrombus. Bilateral pulmonary arteries were enlarged, indicative of pulmonary hypertension. A peripheral opacity was seen in the right middle lobe consistent with pulmonary infarct.

A recent analysis of CT angiography in patients with massive pulmonary embolism found that 76% had pulmonary artery dilation, and 36% had wedge-shaped pleural-based consolidation [3]. Despite the common occurrence of these findings on CT, the concurrence of both Palla's sign and Hampton's hump on chest radiograph has not yet been reported to our knowledge.

References

- 1 Hampton AO, Castleman B: Correlation of postmortem chest teleroentgenograms with autopsy findings with special reference to pulmonary embolism and infarction. *AJR Am J Roentgenol* 1940;43:305–326.
- 2 Palla A, Donnamaria V, Petruzzelli S, Rossi G, Riccetti G, Giuntini C: Enlargement of the right descending pulmonary artery in pulmonary embolism. *AJR Am J Roentgenol* 1983;141:513–517.
- 3 Findik S, Erkan L, Light R, Uzun O, Atici A, Akan H: Massive pulmonary emboli and CT pulmonary angiography. *Respiration* 2008; 76:403–412.