(*Refer to page 80*)

Answer: Saddle Pulmonary Embolism

The CTPA scan revealed a saddle shaped filling defect partly occupying the bifurcation of pulmonary artery trunk, and bilateral main pulmonary arteries.

Saddle pulmonary embolus (PE) is defined as presence of large thromboembolus at the bifurcation of right and left pulmonary arteries.[1] It occurs in 2.6% to 5.2% of all cases of acute PE. [1-3] There are well-known risk factors for development of saddle PE, including obesity, age > 60 years, malignancy, cancer therapy, surgery within 3 months, and previous venous thromboembolism. [1]

The most common presenting symptom of saddle PE is dyspnea, followed by syncope, chest pain, and nausea.[1] Wider availability of spiral CT allows accurate non-invasive diagnosis of saddle PE. Despite a large clot burden in the pulmonary vasculature, several observational studies suggest that saddle PE is not commonly associated with hypotension or shock, thus does not correlate with mortality. [1-3]

Routine anticoagulation is indicated in all cases of saddle PE. However presence of hemodynamic instability in saddle PE confers high mortality and warrants aggressive therapy, such as intravenous thrombolysis, catheter-directed thrombolysis, catheter thrombectomy, and surgical embolectomy. [4]

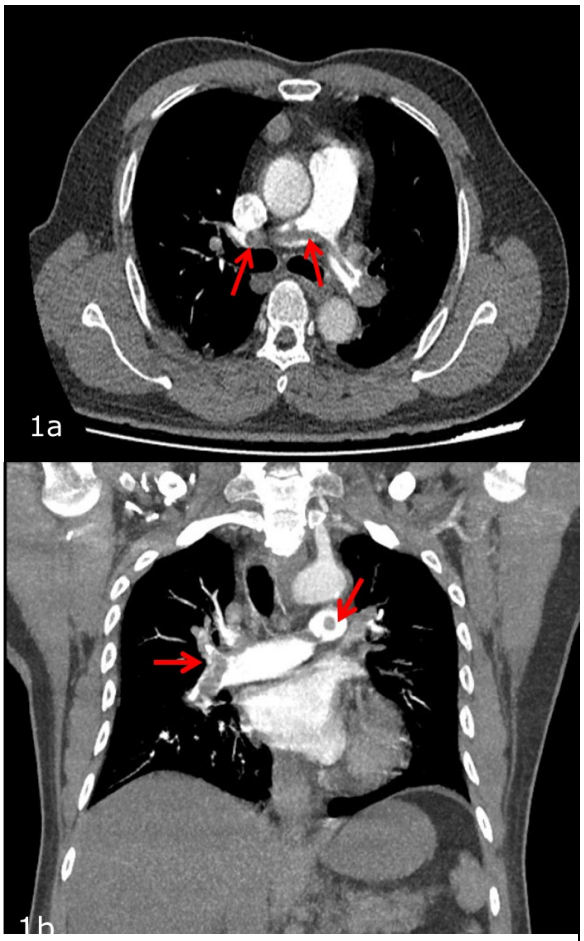

Figure 1a & b (Annotated): Red arrows indicate the site of saddle pulmonary embolus.

Venous thromboembolism prophylaxis in at-risk hospitalized patients is recommended to prevent fatal saddle PE, as in our patient.

REFERENCES

1: Ryu JH, Pellikka PA, Froehling DA, et al. Saddle pulmonary embolism diagnosed by CT angiography: frequency, clinical features and outcome. Respir Med. 2007; 101: 1537-42.
2: Gandara E, Bose G, Erkens P, et al. Outcomes of saddle pulmonary embolism: a nested case-control study. J Thromb Haemost. 2011; 9: 867-9.
3: Pruszczyk P, Pacho R, Ciurzynski M, et al. Short term clinical outcome of acute saddle pulmonary embolism. Heart. 2003; 89: 335-6.
4: Namana V, Siddiqui S, Balasubramanian R, et al. Saddle pulmonary embolism: right ventricular strain an indicator for early surgical approach. Oxf Med Case Reports. 2016; 2016: 130-4.