

SPOT THE CLOT: SADDLE PULMONARY EMBOLUS AND SIMULTANEOUS COMMON CAROTID AND SUBCLAVIAN ARTERY EMBOLI



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Background

- Patent Foramen Ovale (PFO) is present in ~27-35% of the population¹
- Right to left shunts predispose to cerebrovascular accidents and arterial emboli in the presence of deep venous thrombosis(DVT)²
- There should be PFO suspicion in patients with pulmonary emboli(PE), DVT, and arterial emboli²

Purpose

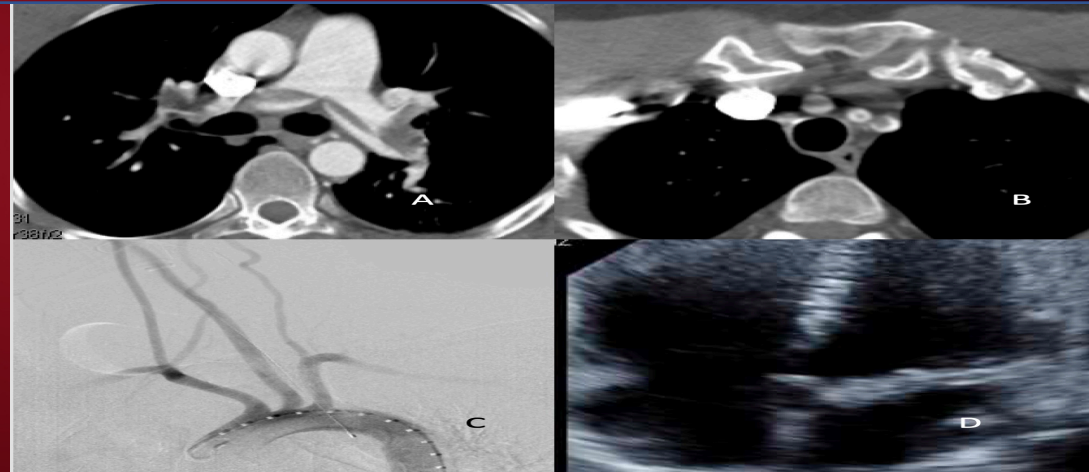
- Case presentation of a patient with both pulmonary and cerebrovascular manifestations of thrombus

Patient information

- 45-year-old male with protein c deficiency and history of DVT
- Weeklong chest pain, shortness of breath, and left arm weakness
- Patient heparinized and consults to vascular surgery and interventional cardiology placed

Treatment Course

- Endovascular mechanical thrombectomy of pulmonary artery with Inari Flow Triever and open thrombectomy of common carotid artery and subclavian artery
- Post thrombectomy angiogram showed improved circulation and normalization of pulmonary artery pressure
- Standard left neck and infraclavicular lesion with thrombectomy via transverse arteriotomy
- No residual thrombus on post thrombectomy angiogram
- Echocardiogram displayed right to left shunt
- Patient discharged on POD 12



A.)Axial view of CT Angiogram showing a saddle pulmonary embolus B.)Axial view of CT Angiogram showing thrombus in R. Common Carotid, L. Common Carotid, and L. Subclavian artery C.)Post thrombectomy angiogram showing patent vasculature D.)Echocardiogram showing Patent Foramen Ovale (PFO)

Outcomes

- Uneventful outpatient recovery with planned closure of his PFO

Discussion

- Paradoxical arterial embolus is a rare manifestation of venous thromboemboli seen in patients with right to left intracardiac shunt
- There should be an evaluation for intracardiac shunt in patients with DVT, PE, and arterial emboli
- Aspiration devices or open thrombectomy can be considered for thrombectomy in situations that are not amenable to thrombolytic therapy³

References

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