A massive hemothorax in a pregnant woman: role of interventional radiology

ABSTRACT

A 30-year-old woman, pregnant at 20 weeks, presented with progressively worsening dyspnea, eventually requiring intubation. Chest radiograph revealed near total opacification of the left chest with right mediastinal shift associated with a collapsed left lung (Fig. 1A). Subsequent computed tomographic scan revealed a left pulmonary AVM, with possible left hemothorax. Pigtail catheter drained a total of 7.1 L of old blood. At the angiography suite, the left pulmonary artery was selectively cannulated with a vertebral catheter (size 4 Fr). The distal most portion of the left pulmonary artery was identified as the feeder vessel to the AVM (Fig. 1B). Initial embolization was achieved using 0.35″ 12 mm×10 cm coils, followed by smaller sized fiber coils. Immediate postcoiling angiographic run showed slower flow; and subsequent angiographic run after 5 minutes showed complete occlusion of the left pulmonary AVM (Fig. 1C). Gynecologic assessment confirmed intrauterine fetal death, for which an emergency cesarian section followed. Her ICU stay was further complicated by an episode of fresh per rectal bleeding, with drop in hemoglobin levels. An urgent computed tomography of the abdomen revealed active hemorrhage from the level of the small bowels, with presence of multiple hepatic AVMs (Fig. 2). The hemorrhage was surgically managed. Postextubation, further history revealed recurrent episodes of hemoptysis since childhood. Targeted clinical examination found telangiectatic lesions of the oral mucosa and upper limbs. A clinical diagnosis of OWR syndrome was made based on the Curacao criteria. Patient and family members were counselled before discharge. A possibility of a diagnostic cerebral angiography was discussed during the outpatient clinic appointment to look for cerebral AVMs; however, patient declined. She remains well and is kept under our follow-up.