[NM-265] Pulmonary Hemorrhage from Major Aortopulmonary Collateral Arteries

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A 20-month old female patient with a history of tetrology of Fallot, pulmonary atresia and secundum atrial septal defect (status post modified BlalockTausig shunt placement, unifocalization of branches of right major aortopulmonary arteries (MAPCAs) with subsequent right ventricle to right unifocalized pulmonary artery Sano shunt placement) presented for diagnostic cardiac catheterization and angioplasty of bilateral pulmonary arteries.
Major aorto-pulmonary collaterals are found in about 35–40% of patients with TOF with pulmonary atresia [1]. The development of major aortopulmonary collateral arteries in the setting of pulmonary atresia is a well known and well described phenomenon, with these patients having highly variable pulmonary vascular anatomy [2]. These patients are prone to stenosis of native pulmonary vessels and MAPCA and often require numerous procedures in the cardiac catheterization suite for management of the patient's resultant pulmonary hypertension [3]. However, these procedures are not without complication, with a rare but documented risk of extravasation into the lung parenchyma with resulting hemoptysis/hemorrhage [3,4]. This risk is a potential area of perioperative morbidity, and should be considered in this patient population as a source of concern.
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