Blood cyst of subvalvular apparatus of the mitral valve in an adult

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Blood cysts of the heart are rare benign tumors, usually involving the cardiac valves. They are found mainly in the first month of life and in children and are rarely seen in adults. Here, we report a case of a blood cyst on the subvalvular apparatus of the mitral valve, which was incidentally discovered during chest computed tomography. To the best of our knowledge, this is the first reported case of blood cyst of the heart in an adult in Korea. Case: A 47-year-old man presented with fever and cough for three weeks and was admitted to a local hospital. Chest CT scan showed a 4 cm sized thick-walled cavity with a small amount of fluid accumulation in the right upper lobe of the lung. A 2 cm sized round mass in the left ventricle of the heart was also seen. He was diagnosed with lung abscess and was treated with intravenous antibiotics. After 1 week, his symptoms completely resolved. He was referred to our hospital for the incidental cardiac mass. On admission, he denied chest discomfort, palpitation. The vital sign and aboratory values were within normal limit. Chest CT scan showed regression of the previous cavitary lung lesion. Transesophageal echocardiogram revealed a mobile, round, cystic and pedunculated mass(14 × 16 mm) with hyperechogenic walls and hypoechoic content attached to the chordal structures of the anterior mitral leaflet and tip of the anterolateral papillary muscle without hemodynamic significance. The cystic mass was successfully resected and a mitral valvuloplasty with neochordae formation. The patient had an uneventful recovery from the operation and has had no symptoms for the 8 months since the excision. Discussion: Blood cysts are rarely reported, so there is no consensus or guidelines for the optimal management of asymptomatic cases. According to some case reports, blood cysts may result in embolism, valvular dysfunction and heart block. Therefore surgical resection consider in patients with symptoms or valvular dysfunction and resection is also suggested to rule out malignancy.

Both renal infarctions and Splenic artery rupture: A case report of segmental arterial mediolysis

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We report a case of a 37-year-old male patient with both renal infarctions and splenic artery aneurysmal rupture resulting in hemoperitoneum with shock. Catheter angiography revealed one focus of aneurysmal change of left renal artery as well as both renal infarctions. The ruptured aneurysm was successfully treated by transcatheter coil embolization. After we ruled out cardiac embolic sources, systemic inflammatory diseases, and inheritable diseases, the presumptive diagnosis was SAM (segmental arterial mediolysis). SAM is a rare, non-inflammatory and non-atherosclerotic vasculopathy involving medium-sized splanchnic arteries showing dissecting hematoma, thrombosis, aneurysm and rupture in the natural course of disease, which is usually benign-course but sometimes has fatal event. On previously reported cases, surgical specimen showed lysed smooth muscle cells within the arterial media with surrounding fibrosis resulting in various vascular deformities. Although definitive diagnosis requires such pathologic evidence of the vessels, we could diagnose the disease just using clinical and radiologic features. In conclusion, SAM is a rare idiopathic vasculopathy in ruptured aneurysms or thrombosed splanchnic vessels. Suspicion about the disease in unexplained acute abdomen and prompt angiographic intervention to identify aneurysms or thrombosis in splanchnic arteries is necessary to minimize mortality. Multidisciplinary approach with interventional radiology and vascular surgery and further studies on pathophysiology is needed.