Leiomyosarcoma of the pulmonary veins extending into the left atrium

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Primary leiomyosarcomas of the pulmonary vein (PV) are extremely rare. A 34-year-old woman admitted to hospital because of a one week history of left sided pleuritic chest pain. A computed tomography (CT) of chest demonstrated an oval shaped, 3.4cm sized, hypodense mass lesion in left atrial appendage (LAA) (Fig. A). A transthoracic echocardiography and a subsequent transoesophageal echocardiography revealed an oval shaped, 2 × 1.5 cm sized, hyperechoic mass lesion in the left superior pulmonary vein (LSPV), which extended to the LAA (Fig. B-C). In excision of mass, the mass was 3.4 × 1.5 cm in dimension and grayish in color with thrombotic nodules on its surface. Histopathological examination demonstrated a proliferation of the spindle cells with fascicular pattern of growth with a high rate of mitosis (Fig. D). Special stainings were performed, as were immunohistochemistry tests, including SMA antibodies (Fig. E), Ki-67 proliferation marker (Fig. F), the results were positive. The final pathological diagnosis was leiomyosarcoma of the PV with direct invasion into the LA. In conclusion, we have reported a extremely rare case of primary leiomyosarcoma of PV extending into the LA.

Comparison of Outcomes Between STEMI and NSTEMI patients with Totally Occluded IRA

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Background: Totally occluded infarct related artery (IRA) in acute ST segment elevation myocardial infarction (STEMI) patients have worse prognosis compared with non total occlusion of IRA patients. We determined the outcomes of patients with STEMI and non-STEMI (NSTEMI) with totally occluded IRA.

Methods: Five hundred fourteen consecutive MI patients with totally occluded IRA who underwent percutaneous coronary intervention (PCI) between March 2003 to July 2010 were enrolled. Patients were divided into two groups as STEMI group (402:78%) and NSTEMI group (111:22%). One-month, 1-year and 2-years major adverse cardiovascular events (MACE; cardiac death, myocardial infarction, target lesion revascularization, stent thrombosis) were compared.

Results: IRA as left anterior descending artery were more in STEMI group (43.0% vs. 27.0% in NSTEMI group, p=0.002). Ejection fraction were lower in STEMI group (47 ± 9% vs. 51 ± 10% in NSTEMI group, p<0.001). Baseline and peak CK-MB were higher in STEMI group (ng/ml, 56.2 ± 113.8 vs. 34.4 ± 70.4 in NSTEMI group, p=0.014; 217.9 ± 288.3 vs. 53.5 ± 109.8 in NSTEMI group, p=0.001). There was a higher trend in 1-month MACE rate of STEMI group, however 1-year and 2-year MACE rate were not different between 2 groups (Graph 1).

Conclusions: There were no differences in long term clinical outcomes between patients of STEMI and NSTEMI with totally occluded IRA.