Görüntülü olgu örnekleri — Case images

Clinical and hemodynamic improvement after stent implantation for pulmonary stenosis in failing Fontan circulation

Çalışmayan Fontan sirkülasyonunda pulmoner arter darlığına stent implantasyonu sonrası klinik ve hemodinamik düzelme

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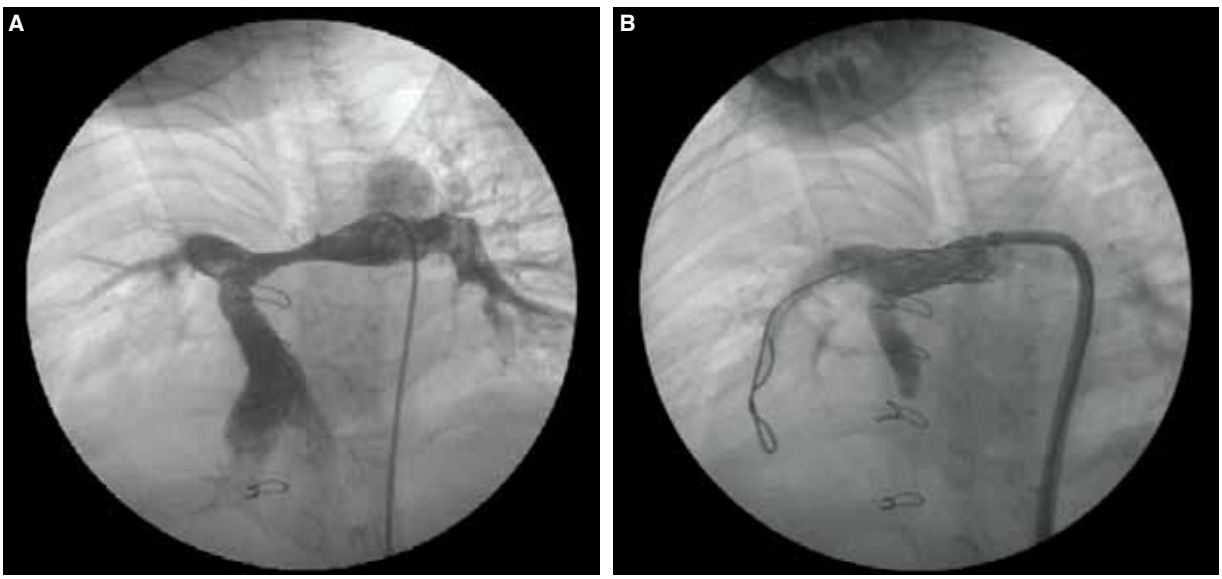
The Kawashima procedure is preferred for complex congenital cardiac pathologies with a single effective ventricle and interrupted inferior vena cava. Pulmonary arteriovenous fistulas are the leading factor of progressive cyanosis after Kawashima operation. It is strongly suggested to direct hepatic veins to the pulmonary circulation both for prevention and regression of the cyanosis. We present herein stent implantation for pulmonary artery stenosis in a 14-year-old girl who had ascites and pleural effusion after the operation for direction of the hepatic veins to the pulmonary artery. The patient underwent Kawashima operation (bilateral bidirectional Glenn operation) in 2002. She had an angiography in February 2011 because of progressive cyanosis since the operation. As the mean pulmonary artery pressure was 14 mmHg and pulmonary index was 1.7, her right pulmonary artery was dissected and hepatic veins were directed to the pulmonary artery. The patient had ascites, pleural effusion, dyspnea, and edema four months after the operation. She underwent a repeat angiography after her clinic status was improved with diuretics. The anastomosis was doing well, but there was an important obstruction in the pulmonary artery without pressure gradient (Video 1*, Fig. A). Mean pulmonary artery pressure was 16 mmHg. Stenting of the right pulmonary artery was decided because of the overt anatomical obstruction (Video 2*). After stent implantation, pleural effusion and ascites improved in a few days (Video 3*, Fig. B). Even though no pressure gradient is detected, removing the anatomical obstruction may improve Fontan circulation.



Figures– (A) Stenotic appearance of the right pulmonary artery before stenting. **(B)** Appearance of the pulmonary artery after stent deployment. **Supplementary video files associated with this presentation can be found in the online version of the journal.*