Percutaneous closure of a hemodynamically significant connection between the inferior vena cava and the left atrium.

A connection between the inferior vena cava (IVC) and the left atrium (LA) can occur as a rare complication after surgical atrial septum defect (ASD) repair. We demonstrate the first case of a percutaneous closure of this connection. A 67-year-old female was admitted to hospital due to exertional dyspnea. A history of a surgical ASD repair in 1960 and 1966 with a residual shunt was already known. Transesophageal echocardiography and a CT scan revealed a hemodynamically significant drainage of the IVC into the LA. This connection was successfully closed percutaneously with an AMPLATZER Duct Occluder I (St. Jude Medical, St. Paul, MN). Post-procedural CT-scan and transthoracic echocardiography demonstrated a stable position and there was also no evidence of a residual shunt. The patient reported a significant reduction of exertional dyspnea. Percutaneous closure of an IVC to LA connection in this case was safe and feasible. The decision about which device is optimal must be made on an individual basis.