

8. Haggman DL, Moodie DS, Sterba R, Gill CC. Intravenous digital subtraction angiography in the evaluation of systemic and pulmonary venous anomalies. *Cleve Clin Q* 1985; 52:55-60.
9. Gossman DE, Moodie DS, Gill CC, Sterba R. Scimitar syndrome: its diagnosis by digital subtraction angiography and an anatomical review. *Cleve Clin Q* 1987; 54:510-512.

## Commentary

**E**LIOT Rosenkranz, MD, *Department of Thoracic and Cardiovascular Surgery, The Cleveland Clinic Foundation*, comments: The method of repair employed for isolated partial anomalous pulmonary venous return is dictated by the anatomic type of anomalous return encountered. The most common is isolated drainage of a single pulmonary vein, usually the right upper pulmonary vein, to the superior vena cava. This is typically repaired by constructing a pericardial baffle between the orifice of the anomalous vein and the usually coexisting sinus venous atrial septal defect. Rarely, the atrial septal defect is small or nonexistent. In that situation, the atrial septal defect is enlarged or created by excising the secundum septum, and the baffle is then constructed as described.

The right pulmonary vein can also drain directly to the body of the right atrium. Repair of this defect is identical to that employed for anomalous drainage to the superior vena cava.

A third type of partial anomalous drainage, to the inferior vena cava, is frequently called scimitar syndrome. A pericardial baffle is constructed within the inferior vena cava and right atrium, directing the anomalous

venous drainage across the atrial septum to the left atrium.

A right- or left-sided anomalously draining pulmonary vein may enter the coronary sinus. This is repaired by incising the atrial septum between the os of the coronary sinus and the secundum septum defect and constructing a pericardial baffle directing the coronary sinus drainage to the left atrium.

In the case of the rare type of partial anomalous drainage to the left superior vena cava or the innominate vein, the anomalous pulmonary vein is detached from the systemic vein and reimplanted in the left atrial appendage or body of the left atrium itself.

The method of repair described by Hanhan et al is a novel technique that uses an extracardiac conduit to drain pulmonary venous blood to the left atrium. As the authors point out, this method may be especially useful when access to the draining vein is difficult. Their concerns about the risks of conduit thrombosis or stenosis secondary to pseudointimal hyperplasia must be taken into consideration when a more standard method of repair might be safely employed.