Correspondence

Tricuspid atresia with transposition of the great arteries in adolescents and adults: current state and late complications

Sir,

In their recent article (1987;57:543–7) on tricuspid atresia with transposition of the great arteries Warnes and Somerville emphasised the importance of subaortic stenosis in these patients, especially those with coarctation. They suggested that the Fontan procedure was the procedure of choice in these patients but remarked that in patients with subaortic stenosis the prognosis after Fontan surgery is very poor.

I recommend a combination of a modified Damus-Stansel-Kaye operation\(^1\) and the Fontan operation in patients with tricuspid atresia with transposition of the great arteries, especially when there is appreciable subaortic stenosis that must be bypassed. I believe that this combination gives better emptying of the left ventricle and prevents the development of a poorly compliant left ventricle, pulmonary hypertension, and increased right atrial pressure that can cause deterioration and death after the Fontan procedure.

During my recent sabbatical year at the Hershey Medical Center, Pennsylvania, when I worked with Dr John Waldhausen and Dr Jack Meyers, we used this technique very successfully in a few patients with tricuspid atresia and transposition of the great arteries. In newborn babies with this anomaly (in whom the Fontan procedure is impossible) instead of banding the pulmonary artery we dissected the proximal pulmonary artery and anastomosed it to the ascending aorta; a shunt to the branching pulmonary artery was achieved by a modified Blalock-Taussig technique with a 4 mm Goretex graft. We planned to perform a Fontan procedure when these patients were older, after disconnecting the Blalock-Taussig shunt.

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Reference


This letter was shown to Dr Somerville, who replies as follows:

Sir,

I was interested in Dr Glaser’s recommendation that a combination of modified Damus-Stansel-Kaye and the Fontan operation should be used to treat patients with tricuspid atresia and transposition of the great arteries with significant subaortic stenosis. Technically virtuoso operations are always attractive and appear, on some occasions, to have short term benefits. But I doubt whether this operation will produce good long term survival into adolescence or adult life, which is our prime concern. We could not mention all the “experimental” operations for this complex condition because none has yet been shown to stand the test of time.

We wish Dr Glaser and his colleagues good fortune in their efforts to help patients with tricuspid atresia complicated by transposition and subaortic obstruction and look forward to reading about their long term survivors.

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