Welcome to Week 19 of the TSDA Congenital Curricula. The Congenital Curricula is based on a 32-week lesson plan, and you can expect to receive e-mail messages every Thursday for the upcoming week, with the exception of holiday weekends. The weekly assignments are a supplement to your program curriculum and include basic readings for congenital fellows, faculty, and others interested in congenital heart surgery. TSDA hopes the Congenital Curricula expands your current knowledge base and enhances your learning experience.

TOPIC: Congenitally Corrected Transposition of the Great Arteries

I. Morphology
   a. Isolated CCTGA
      i. Situs solitus
      ii. Situs Inversus
   b. CCTGA with VSD
   c. CCTGA with VSD and LVOTO
   d. Coronary artery anatomy
      i. Origins
      ii. Course
   e. Conduction system
   f. “Ebsteinoid” Tricuspid Valve

II. Pathophysiology/Natural History
   b. CCTGA with VSD: Left-to-right shunt, excessive pulmonary bloodflow
   c. CCTGA with VSD and LVOTO: Right-to-left shunt, inadequate pulmonary bloodflow
   d. Tricuspid regurgitation
      i. “Ebsteinoid” valve
      ii. Interventricular interactions
   e. Progressive systemic (morphologic RV) ventricular dysfunction
   f. Diagnosis/Determination of operability
      i. Echocardiogram
      ii. Cardiac Catheterization
         1. Calculation of Qp:Qs
         2. Coronary artery anatomy
         3. Morphologic LV pressure
III. Surgical repair
   a. Indications/Timing
   b. Conduct of Operation (Including Cannulation, CPB, Myocardial Protection, Approach)
      i. Palliative Procedures
         1. PA Band
         2. Modified Blalock-Taussig Shunt
      ii. Physiologic Repair
         1. VSD Closure
         2. VSD Closure, LVOT reconstruction
   a. LVOT resection
   b. LV-PA conduit
      iii. Anatomic Repair
         1. Atrial switch/Rastelli
         2. Atrial switch/Arterial Switch
   c. Associated technical considerations
      i. LeCompte maneuver
      ii. Technique of coronary transfer
      iii. Approach to VSD
      iv. Tricuspid Valve Repair/Replacement
   d. Post-operative management
   e. Outcomes

IV. Controversies
   a. Anatomic vs physiologic repair
   b. Double switch for asymptomatic patients with “simple” CCTGA

Readings:


The next message will be sent on December 6 for the week of December 10.