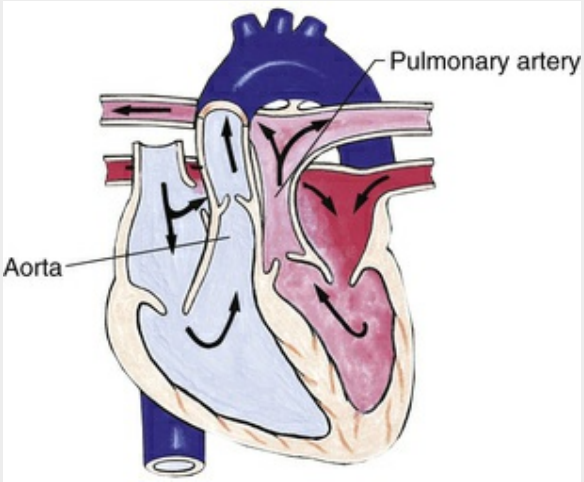
pulmonary blood flow. Cardiac output decreases because of a volume load on the ventricle. Clinically, these patients have a variable picture that combines some degree of desaturation (although cyanosis is not always visible) and signs of HF. Some defects, such as transposition of the great arteries, cause severe cyanosis in the first days of life and later cause HF. Others, such as truncus arteriosus, cause severe HF in the first weeks of life and mild desaturation.

Box 23-4

Mixed Defects

Transposition of the Great Arteries, or Transposition of the Great Vessels



Description: The pulmonary artery leaves the left ventricle, and the aorta exits from the right ventricle with no communication between the systemic and pulmonary circulations.

Pathophysiology: Associated defects, such as septal defects or PDA, must be present to permit blood to enter the systemic circulation or the pulmonary circulation for mixing of saturated and desaturated blood. The most common defect associated with TGA is a patent foramen ovale. At birth, there is also a PDA, although in most instances, this closes after the neonatal period.