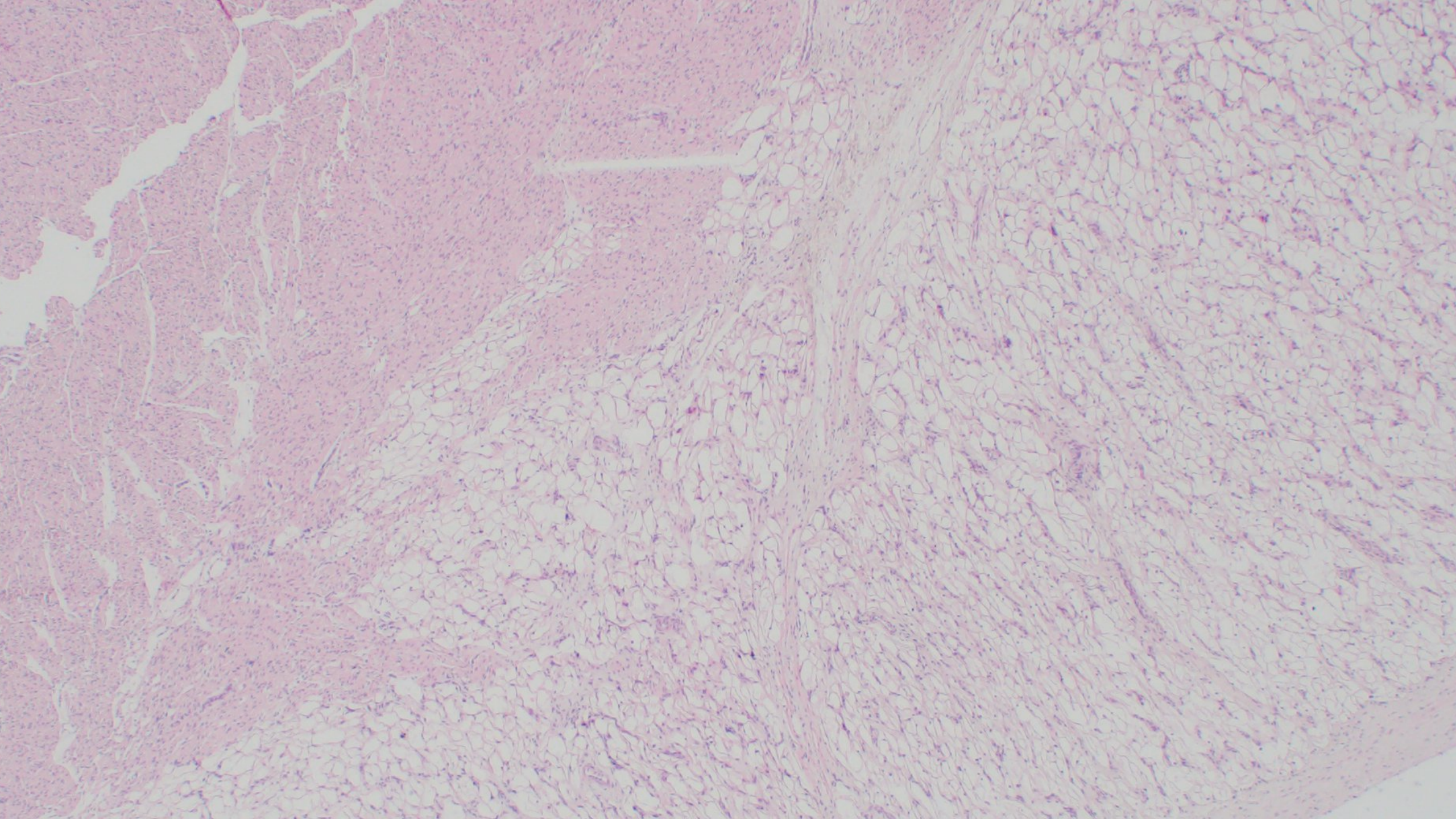
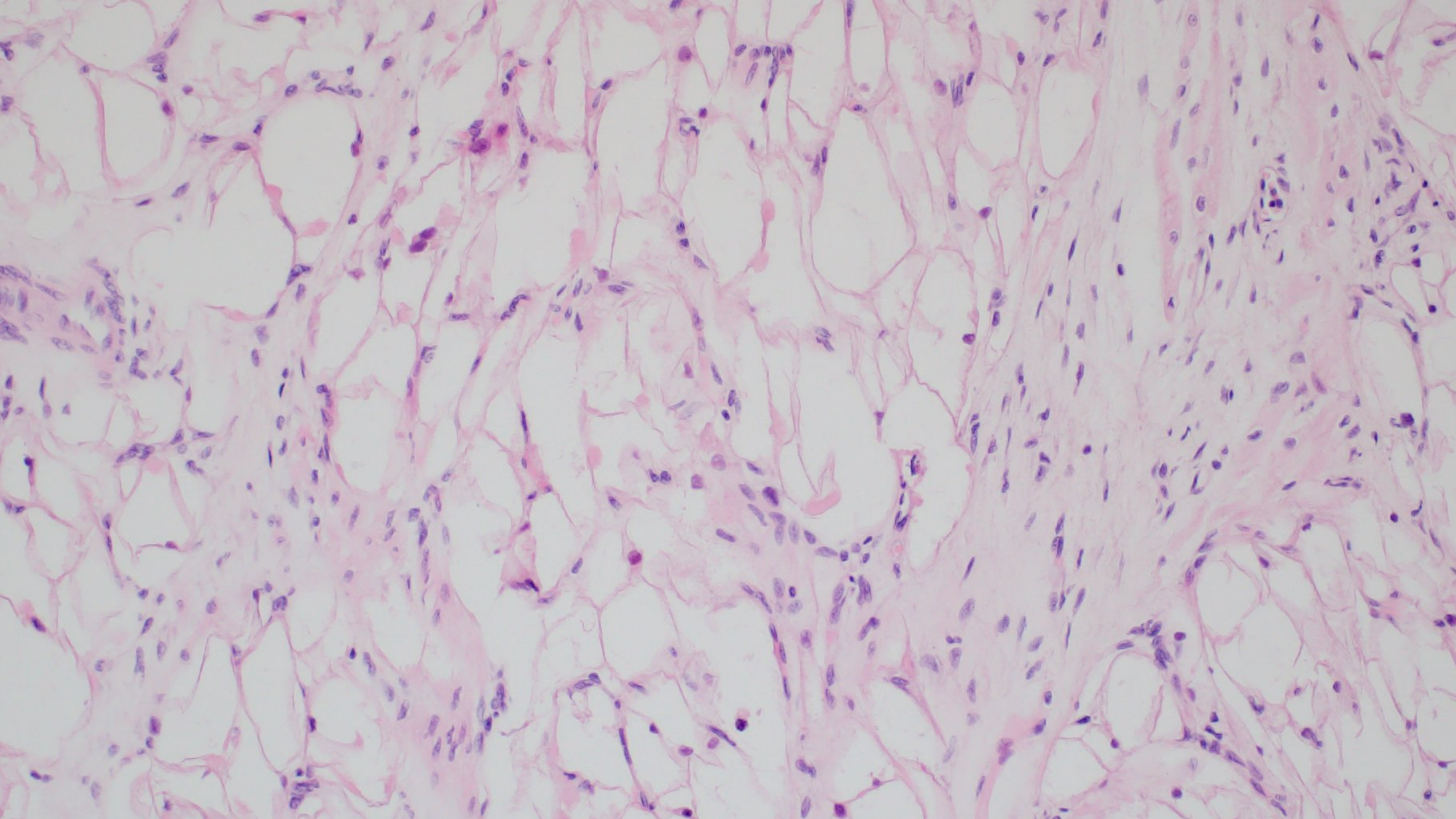
A male infant born at 36-weeks gestational age experienced cardiac dysfunction including ventricular dysrhythmias. Echocardiogram revealed multiple masses, the largest of which involved the left ventricle. Cardiac transplant was performed. Immunohistochemical stains for S100 and calretinin were negative. Electron microscopy studies are pending.





Rhabdomyomas are the most common cardiac tumor in children and may occur as solitary or multiple nodules

Clinically, many rhabdomyomas remain asymptomatic; larger tumors can cause conduction system disruption resulting in arrhythmias

Rhabdomyoma cells:

- Significantly larger than normal myocardiocytes due to glycogen accumulation within the cell cytoplasm, forming characteristic “spider cells”

- Stain positively for markers of muscle differentiation and negatively for S100 and calretinin

- Glycogen may be confirmed with electron microscopy or with periodic acid-schiff staining with and without diastase

Rhabdomyomas may be the initial clinical manifestation of tuberous sclerosis

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