

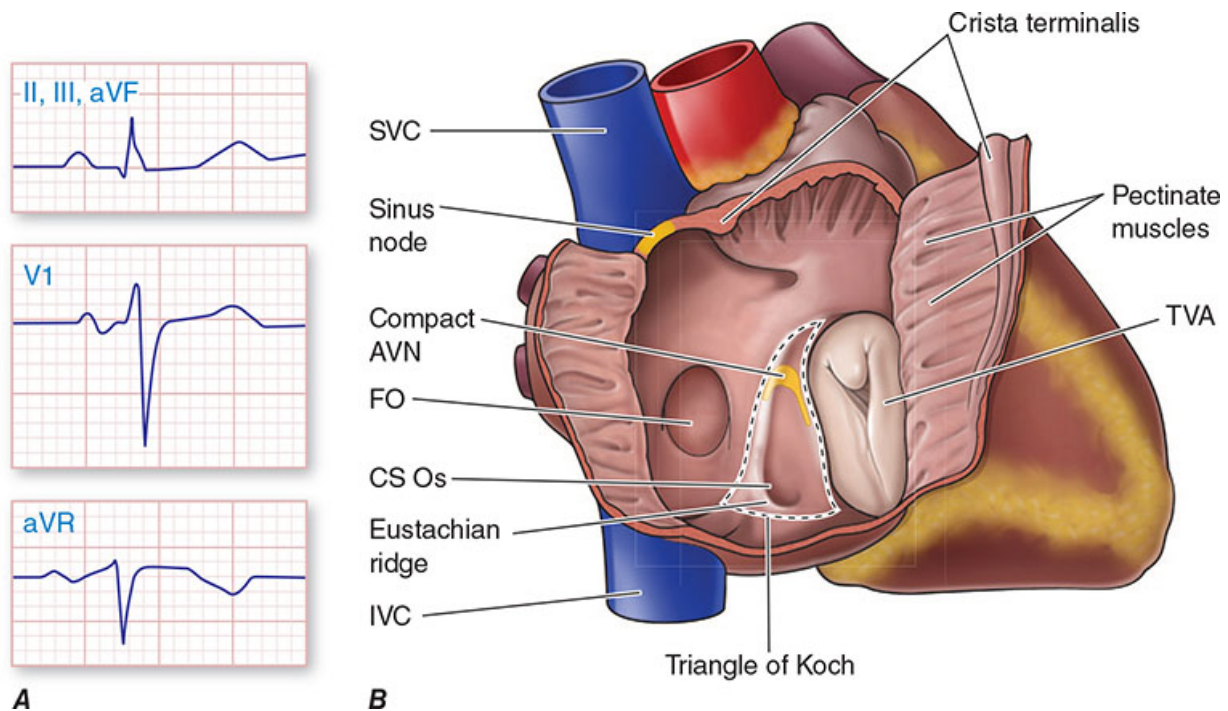


FIGURE 247-1 Right atrial anatomy pertinent to normal sinus rhythm and supraventricular tachycardia. A. Typical P-wave morphology during normal sinus rhythm based on standard 12-lead electrocardiogram. There is a positive P wave in leads II, III, and aVF and a biphasic, initially positive P wave in aVR. **B.** Right atrial anatomy seen from a right lateral perspective with lateral wall opened to view the septum. AVN, atrioventricular node; CS Os, coronary sinus ostium; FO, fossa ovalis; IVC, inferior vena cava; TVA, tricuspid valve annulus.

PHYSIOLOGIC SINUS TACHYCARDIA

Sinus tachycardia (>100 beats/min) typically occurs in response to sympathetic stimulation and vagal withdrawal, whereby the rate of spontaneous depolarization of the sinus node increases and the focus of earliest activation within the node typically shifts more leftward and closer to the superior septal aspect of the crista terminalis, thus producing taller P waves in the inferior limb leads when compared to normal sinus rhythm. Sinus bradycardia is defined as rates <60 beats/min; however, bradycardia can be normal during sleep and in fit individuals.

Sinus tachycardia is considered physiologic when it is an appropriate response to exercise, stress, or illness. Sinus tachycardia can be difficult to distinguish from focal atrial tachycardia