

- AV Block, 1° (first-degree)



- PR interval > 200 msec (usually 210 to 400 msec but may be as long as 800 msec)
- Each P wave is followed by a QRS complex

The PR interval represents the time from the onset of atrial depolarization to the onset of ventricular depolarization (i.e., conduction time from the atrium → AV node → His bundle → Purkinje system → ventricles). It does not reflect conduction from the sinus node to the atrial tissue. If the PR interval is prolonged and the QRS complex is narrow, then conduction delay usually occurs in the AV node. If the QRS is wide, then conduction delay or block usually occurs in the His-Purkinje system (although block in the AV node can manifest as a prolonged PR and wide QRS if BBB or rate-dependent aberrancy is present).

Etiologies include:

- Normals
- Athletes
- High vagal tone
- Drugs (digitalis, quinidine, procainamide, flecainide, propafenone, amiodarone, sotalol, β -blockers, diltiazem, verapamil)
- Acute rheumatic fever
- Myocarditis
- Congenital heart disease (atrial septal defect, patent ductus arteriosus)

First degree AV block



Second degree AV block (Mobitz I or Wenckebach)



Second degree AV block (Mobitz II)



Second degree AV block (2:1 block)



Third degree AV block with junctional escape

