

First-Degree AV Block

All atrial impulses are conducted to the ventricle
PR interval is abnormally long (>200 ms)
AV delay usually occurs within the AV node

Second-Degree AV Block (intermittent failure of conduction between atrium and ventricle)

Two subtypes

Type I/Mobitz I/Wenckebach block: progressive prolongation of the PR interval until loss of conduction occurs.

Type II/Mobitz II: fixed PR interval precedes loss of conduction

Usually associated with QRS widening

Third-Degree AV Block (complete heart block)

Complete interruption of conduction between atria and ventricles

Conduction block in the AV node is classified based on the appearance on electrocardiography (ECG), which may also be a reflection of the location of block along the AV conduction axis. First-degree AV block involves a fixed prolongation of the PR interval (>200 ms). In first-degree AV block, delay usually occurs within the AV node, although the atria, His bundle, and Purkinje system may also be involved. Although the term *block* is a misnomer of sorts because electrical conduction is delayed and not interrupted, it remains in use. Second-degree AV block involves intermittent failure of conduction between the atrium and ventricle. There are two subtypes of second-degree AV block. Type I (Mobitz I, Wenckebach) AV block manifests as progressive prolongation of the PR interval prior to one or more “dropped” QRS complexes. Progressive shortening of the RR interval and “grouped beating” QRS complexes are classically seen in Mobitz I AV block. In addition, comparison of the last PR interval before and the first PR interval after the dropped QRS complex will often reveal the greatest discrepancy of PR interval, making the diagnosis of Mobitz I AV block most evident. Mobitz I AV block typically involves the AV node, is hemodynamically stable, and in the absence of symptoms, does not typically require pacing. Type II second-degree AV block manifests on ECG as failed AV conduction preceded by fixed PR interval (no prolongation of PR