- AV Block, 2° (second-degree) – Mobitz type I (Wenckebach)

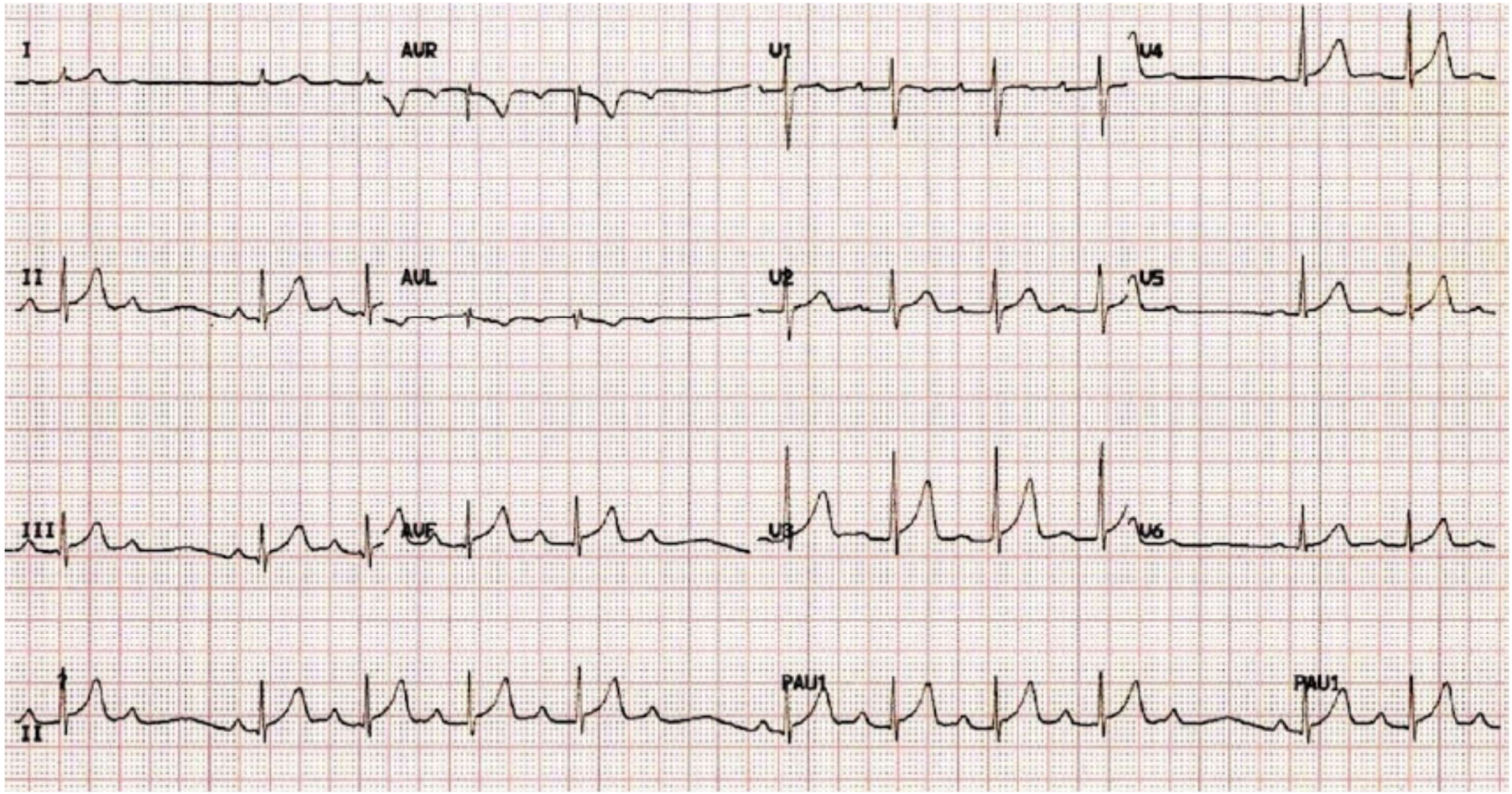
- Regular sinus or atrial rhythm with intermittent nonconducted P waves and no evidence for atrial prematurity
- Progressive prolongation of the PR interval and progressive shortening of the RR interval until a P wave is blocked

  Progressive shortening of the RR interval is due to a decrease in the beat-to-beat increment of PR prolongation.

- RR interval containing the nonconducted P wave is less than two PP intervals

Classical Wenckebach periodicity may not always be evident, especially when sinus arrhythmia is present or an abrupt change in autonomic tone occurs.

In Mobitz Type I block with high conduction ratios (i.e., infrequent pauses), the PR interval of the beats immediately preceding the blocked P wave may be similar, suggesting Mobitz Type II block. In these situations, it is best to compare the PR intervals immediately before and after the blocked P wave: differences in the PR intervals suggest Mobitz Type I block, whereas a constant PR interval suggests Mobitz Type II block


I
AUR
U1
U4
II
AUL
U2
U5
III
AUF
U3
U6
II
PAU1
PAU1

Mobitz Type I results in “group” or “pattern beating” due to the presence of nonconducted P waves. Other causes of group beating include:

- Blocked APCs
- Mobitz Type II 2° AV block
- Concealed His-bundle depolarizations: Premature His depolarizations render the AV node refractory to subsequent sinus beats, resulting in blocked P waves and pseudo-AV block

Type I block usually occurs at the level of the AV node, resulting in a narrow QRS complex. In contrast, Mobitz Type II block usually occurs within or below the bundle of His, resulting in a wide QRS complex in 80% of cases

Etiologies include:

- Normals
- Athletes
- Drugs (digitalis, β-blockers, calcium blockers, clonidine, flecainide, sotalol, amiodarone, diltiazem, propafenone, lithium)
- MI (especially inferior)
- Acute rheumatic fever
- Myocarditis

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