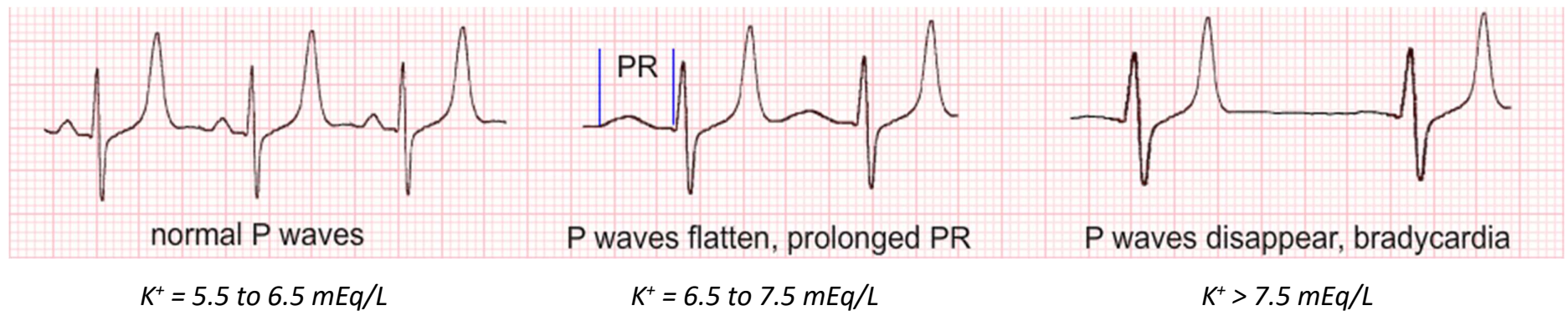


- **Hyperkalemia**



ECG changes depend on serum  $K^+$  level and rapidity of rise:

- **$K^+ = 5.5 \text{ to } 6.5 \text{ mEq/L}$**

- Tall, peaked, narrow-based T waves

Generally defined as  $> 10 \text{ mm}$  in precordial leads and  $> 6 \text{ mm}$  in limb leads. May also be seen as normal variant or in acute MI, LVH, or LBBB.

- QT interval shortening
- Reversible LAFB or LPFB

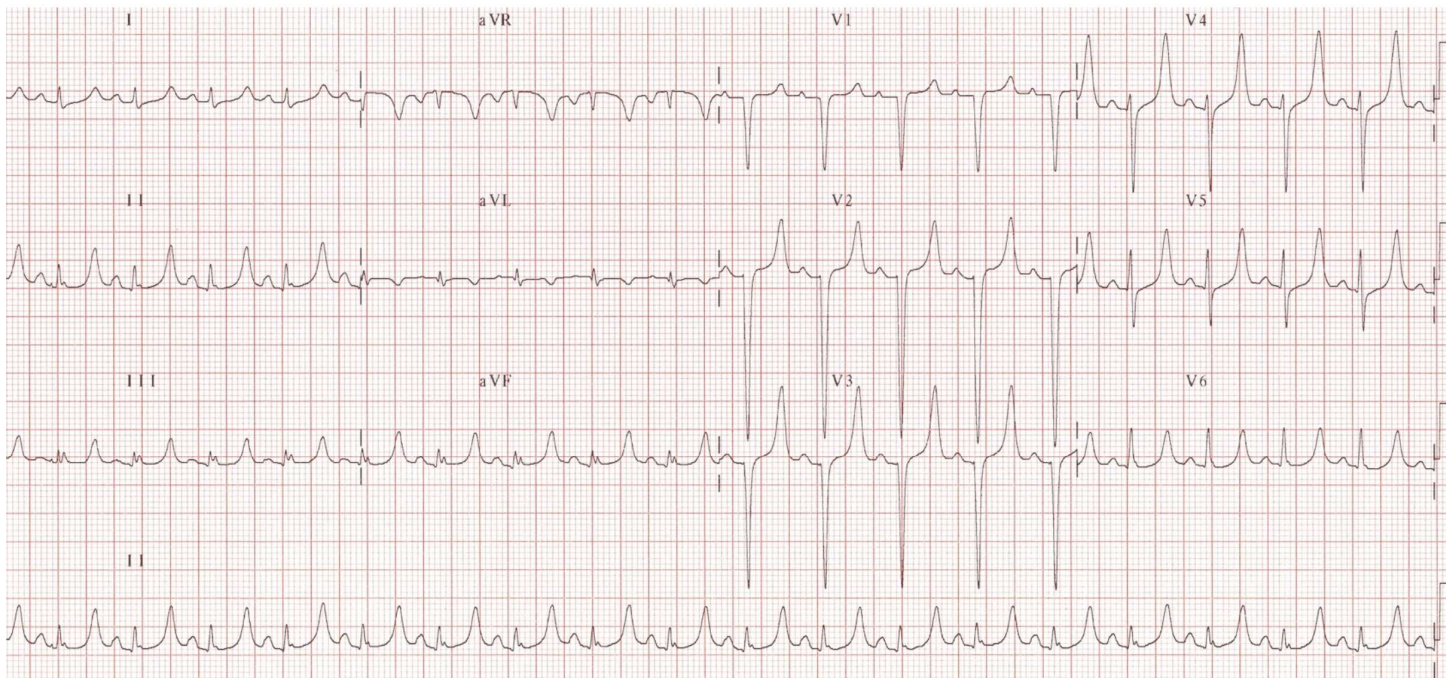
- **$K^+ = 6.5 \text{ to } 7.5 \text{ mEq/L}$**

- 1° AV block
- Flattening and widening of the P wave
- QRS widening

▪  **$K^+ > 7.5 \text{ mEq/L}$**

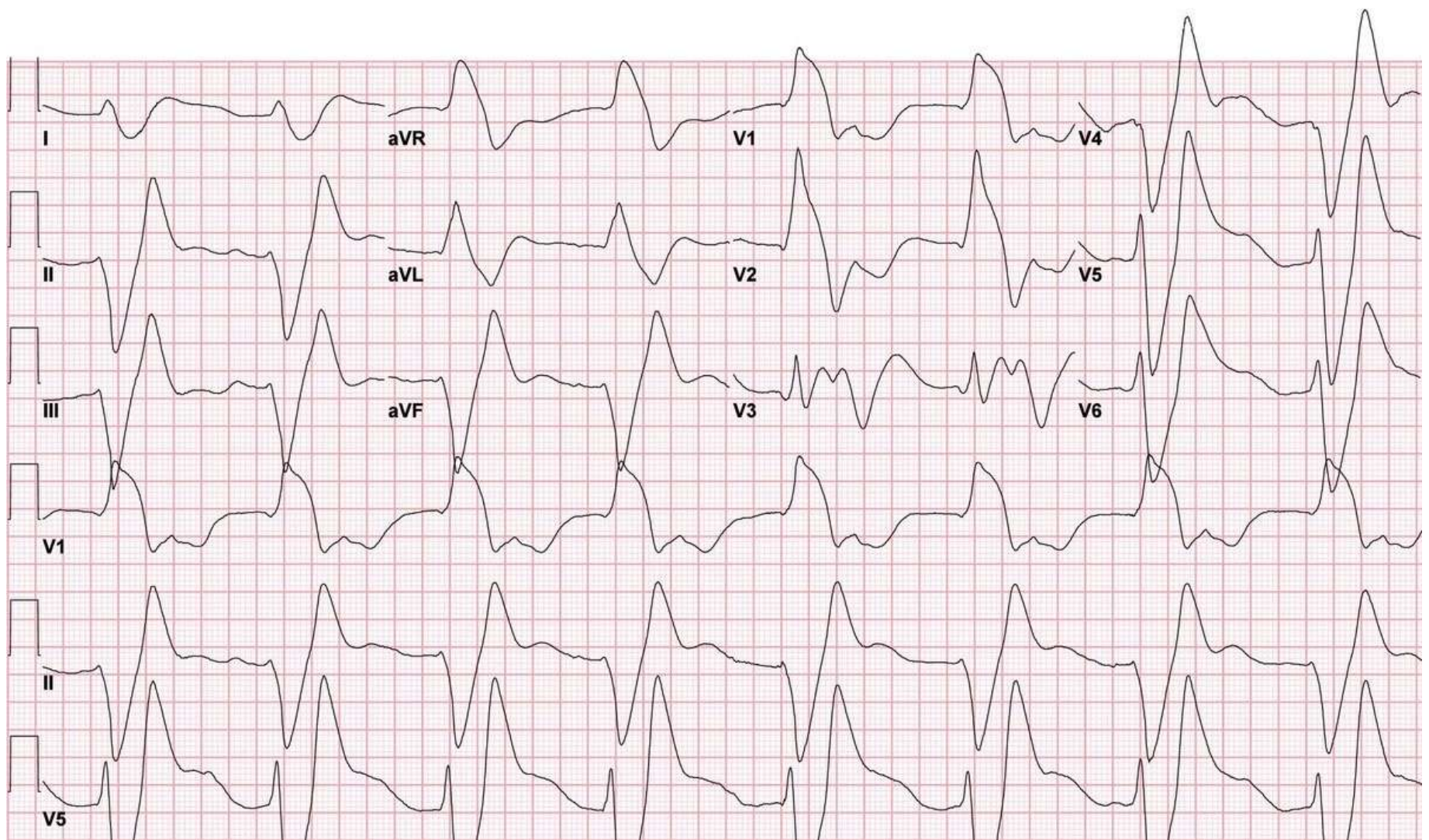
- Disappearance of P waves, which may be caused by:
  - Sinus arrest, or “Sinoventricular conduction” (sinus impulses conducted to the ventricles via specialized atrial fibers *without* atrial depolarization)
- LBBB, RBBB, or markedly widened and diffuse IVCD resembling a sine-wave pattern
- ST segment elevation
- Arrhythmias and conduction disturbances including VT, VF, idioventricular rhythm, asystole

An extremely wide QRS complex ( $>200 \text{ msec}$ ) with high-amplitude T waves ( $>10 \text{ mm}$ ) strongly suggests hyperkalemia.



*Markedly increased size and peaked appearance of the T wave. Potassium level was  $7.0 \text{ mEq/L}$*





*Severe hyperkalemia with  $K^+$  level = 8.9 mEq/L*