

Arterial pulse:

The **arterial pulse**: is a pressure wave distending the arterial wall starting from the aorta toward peripherally. Arterial pulse reflects the number of heartbeats per minute, and it is measured at different parts of the body. (Fig 4). Most common part:

1. Radial artery in the wrist
2. Brachial artery in the elbow
3. Common carotid artery in the neck

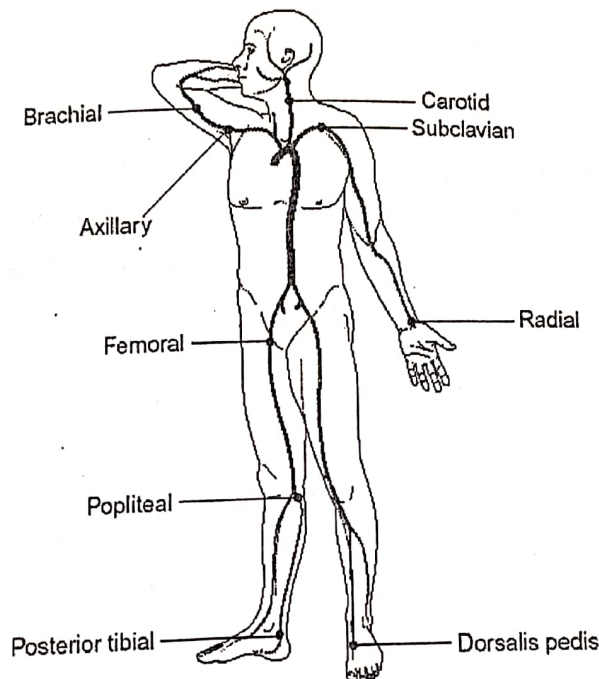


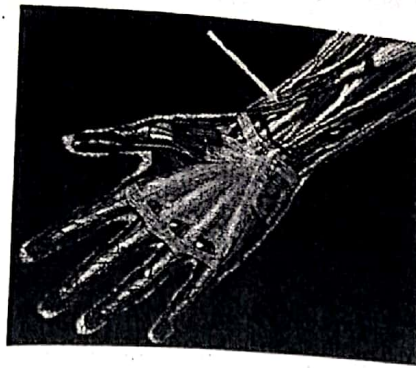
Figure 3: Arterial pulses

When you examine the arterial pulse, you are going to study the following characteristics:

1. Heart Rate: number of beats/min.
2. Rhythm: regularity of intervals.
3. Condition of the artery (soft or hard)
4. Character of the pulse wave.

The radial pulse is usually used to assess for rate, rhythm, character and volume. All the pulses should be palpated and the volume compared with the other side (not simultaneously in the case of the carotid pulse). **Radial artery (Fig. 5)**

Figure 5: Radial artery



Assess the following, using the right radial pulse.

A- Rate: To measure the pulse at the wrist, place the index and middle finger over the underside of the opposite wrist, below the base of the thumb. Press firmly with flat fingers until you feel the pulse in the radial artery, To determine heart rate, one feels the beats at a pulse point like the inside of the wrist for 30 seconds, and multiplies this numbers by two. This is the per-minute total (**Fig.6**).

The radial pulse is felt on the wrist, just under the thumb

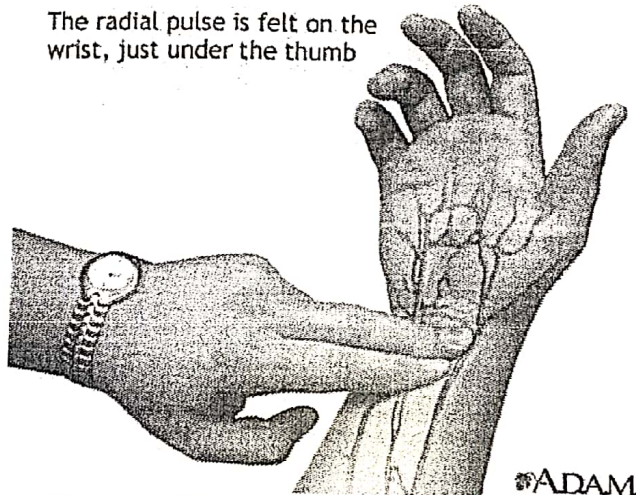


Figure 6: The measurement of radial pulse

Abnormal rates could be:

- Bradycardia (rate below normal). Below 60
- Tachycardia (rate above normal). Above 100

B- Rhythm: can be classified into 2 categories:

- Regular:

- Irregular:

C- Character: The character of the pulse may be one of the following weak or strong