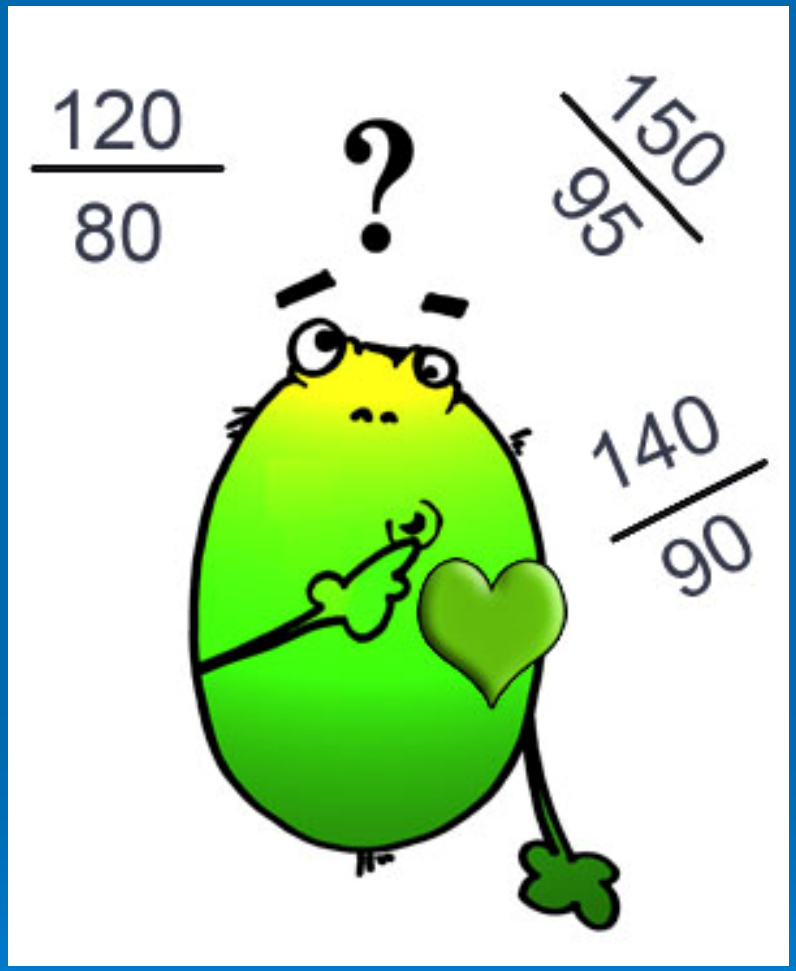

120
80
?
150
95
140
90

1. What is the name of the method used to take blood pressure that involves listening for Korotkoff sounds?

2. What is the name of this device used to take blood pressure?

3. In what units is blood pressure measured?

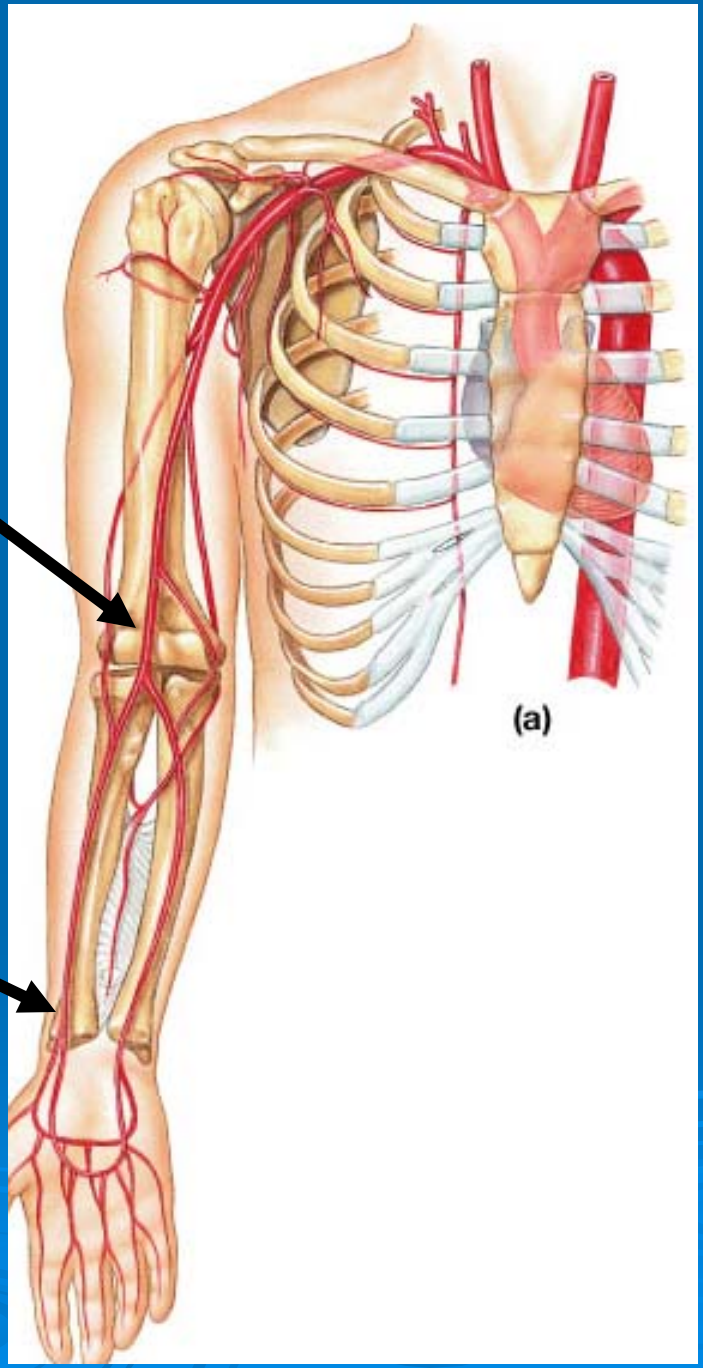
4. What is the name of this device used to listen to blood flow when taking blood pressure?

5. What is the name of this blood vessel?

6. What is the vessel in Question 5 used for when taking blood pressure?

7. What is the name of this blood vessel?

8. What is the vessel in Question 7 used for when taking blood pressure?



A patient's has the following pulse and blood pressure (BP) readings:

Sitting: Pulse = 76, BP = 135/85

Immediately after standing: Pulse = 85, BP = 125/80

9. What is this patient's mean arterial pressure when sitting?

10. What is this patient's mean arterial pressure immediately after standing?

11. Describe the changes that occurred in this patient immediately after standing from a sitting position.

12. Explain why these changes occurred.

13. If you took this patient's blood pressure after 3 minutes of standing, would you expect to obtain the same readings for pulse and BP as those obtained immediately after standing? Why or why not.

1. The auscultory method of taking blood pressure.

2. Sphygmomanometer

3. Millimeters of mercury, abbreviated mm Hg.

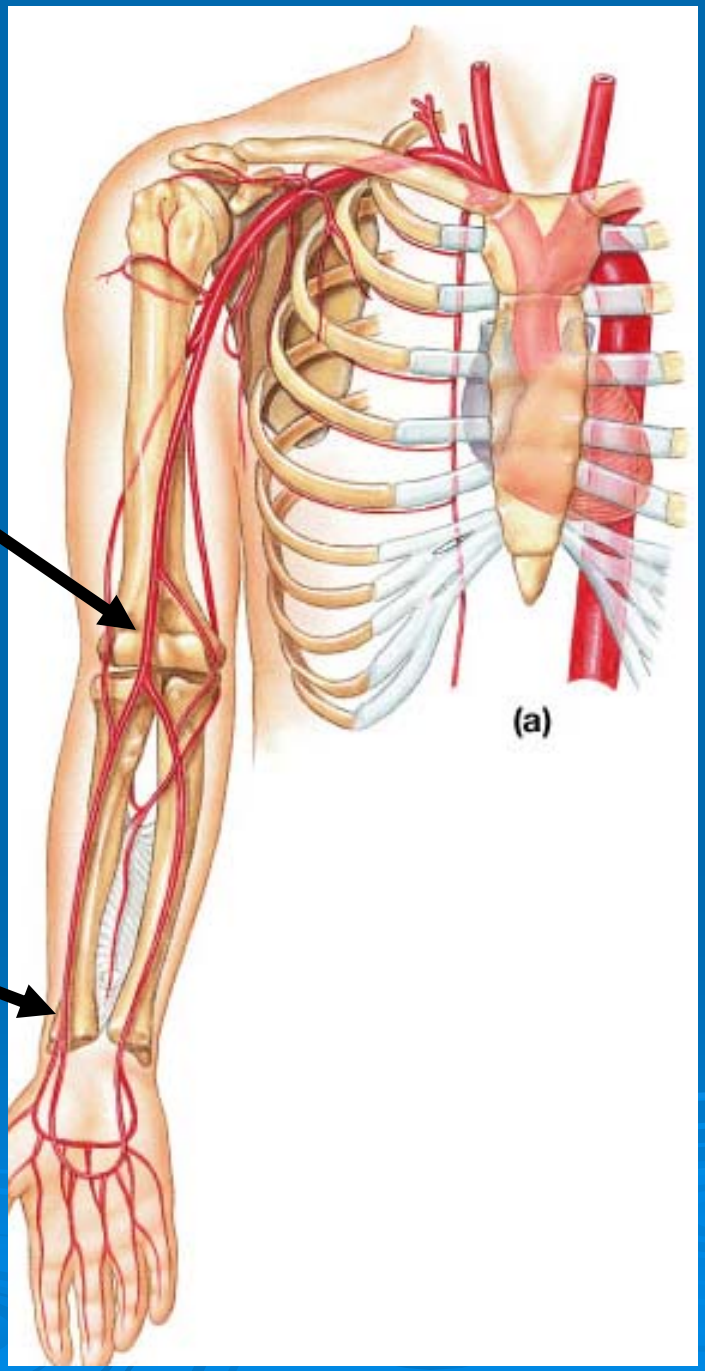
4. Stethoscope

5. Brachial artery

6. Used for listening to Korotkoff sounds

7. Radial artery

8. Used for detecting the pressure at which the radial pulse can no longer be felt when inflating the blood pressure cuff.



A patient's has the following pulse and blood pressure (BP) readings:

Sitting: Pulse = 76, BP = 135/85

Immediately after standing: Pulse = 85, BP = 125/80

9. Sitting MAP = 85 + (135 - 85)/3 = 102 mm Hg

10. Standing MAP = 80 + (125 – 80)/3 = 95 mm Hg

11. MAP decreased while pulse increased.

12. Immediately after standing blood begins to pool in the lower extremities due to gravity, providing less blood to the heart (decreased EDV, decreased SV). This reduces BP and the heart attempts to compensate for this by increasing the heart rate (pulse).

13. No. Given sufficient time, the baroreceptors (aorta, carotid bodies) would detect the lower blood pressure and stimulate a reflex vasoconstriction, bringing pulse and BP back toward normal levels.