Arterial and venous pressure

The pressure in the arteries reaches approximately 16 kPa (120 mmHg) in systole and 9.3 kPa (70 mmHg) in diastole.

Today, the maximum physiological level of systolic pressure is recognized as 17.3 kPa (130 mmHg) and 11.3 kPa (85 mmHg) diastolic.

In the venules, the blood pressure is 1.6–2.4 kPa (12–18 mmHg), in the large veins at the entrance to the right atrium (central venous pressure) an average of 0.6 kPa (4.6 mmHg), where it fluctuates with respiration and heart action. Pressure in peripheral veins (as well as in arteries) is affected by gravity and body position. In a standing person, the blood pressure in the lower limbs also depends on their height (approximately 1 mmHg corresponds to 1 cm of the distance "from the heel to the heart"), so it is higher in tall people. In the head region, venous pressures can be negative in an upright position (must be respected during major surgical procedures in the head region (Trendelenburg position). On the contrary, relatively high venous pressure in the lower limbs during prolonged standing can cause fainting and contributes to the formation of congested venous dilations (varicose veins).

Links

Related articles

- Systolic blood pressure
- Diastolic blood pressure
- Mean arterial pressure
- Pressure amplitude
- Blood pressure measurement
- Blood pressure monitoring
- Regulation of blood pressure

Source

- KYMPLOVÁ, Jaroslava. *Katalog metod v biofyzice* [online]. [cit. 2012-09-20]. <https://portal.lf1.cuni.cz/clanek-793-katalog-metod-v-biofyzice>.