



synoptic table

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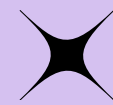
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English

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Semiology of vital signs



What are vital signs?

Vital signs are the quantification of physiological actions, such as heart rate and rhythm (HR), respiratory rate (RR), body temperature (BT), blood pressure (BP) and oximetry (OXM), which indicate that an individual is alive and the quality of the body's functioning.

Main variables that affect vital signs

- age
- gender
- physical exercise
- pregnancy
- emotional state
- hormones
- medications
- fever
- hemorrhages

Arterial pulse

It is the pulsating wave of blood, originating in the contraction of the left ventricle of the heart and resulting in the regular expansion and contraction of the caliber of the arteries; it represents the performance of the heartbeat and the adaptation of the arteries. It also provides information on the functioning of the aortic valve.

Body temperature

It is defined as the degree of heat conserved by the balance between the heat generated (thermogenesis) and the heat lost (thermolysis) by the organism. 36, 37, 38

Factors affecting thermogenesis: 1. Basal metabolic rate 2. Muscular activity 3. Adrenaline, noradrenaline and sympathetic stimulation 4. Thyroxine production.
Factors affecting thermolysis: 1. Conduction 2. Convection 3. Evaporation.

Respiratory rate (RR), breathing.

The respiratory cycle consists of an inspiration phase and an expiration phase. The respiratory rate (RR) is the number of times a person breathes per minute. It is usually measured when the person is at rest (and not aware of doing so) and consists of counting the number of breaths during one minute.

Pressure or blood pressure (BP or BP)

Blood pressure is the result of the force exerted by the column of blood propelled by the heart into the blood vessels. The force of the blood against the arterial wall is the blood pressure and the resistance opposed by the arterial walls is the blood pressure. These two forces are opposite and equivalent. Systolic pressure is the pressure of the blood due to the contraction of the ventricles and diastolic pressure is the pressure that remains when the ventricles relax.

Oximetry

It is based on the physiological principles that oxygenated and deoxygenated hemoglobin have different absorption spectra. Deoxygenated hemoglobin absorbs more light in the red band (600 to 750 nm) and oxygenated hemoglobin absorbs more light in the infrared band (850 to 1000 nm). The oximeter test emits light at different wavelengths, covering the two named spectra.

Pupillary light reflex

Reflexes are involuntary actions of the nervous system that occur in an emergency. Dilation of the pupil and the reaction to a sting or touch are examples of them. When a person is in danger of losing his life, his pupils, which normally react to light, remain static. This is a very valuable sign to determine the severity of a sick person or an accident victim.

Bibliography

Google Traductor. (n.d.). Com.Mx. Retrieved October 12, 2024, from <https://translate.google.com.mx/?sl=es&tl=en&text=>

(N.d.). Retrieved October 12, 2024, from <http://file:///C:/Users/josea/Downloads/Semiolog%C3%ADa%20Signos%20Vitales%20Cuadro%20Sin%C3%B3ptico.pdf>