Respiratory alkalosis

RAL:

Tissue carbon dioxide production is relatively constant. Respiratory alkalosis is therefore mainly caused by **increased excretion of CO_2 lungs**. This reduces the pCO_2 and thus the carbonic acid concentration in the system and deviates the ratio of bicarbonate and carbonic acid concentrations in the Henderson-Hasselbalch equation.

Causes

The cause of respiratory alkalosis is **hyperventilation**, which leads to **hypocapnia***:*

- central **breathing center stimulation**- fear, pain, fever, pregnancy, trauma, head injuries, bleeding into the CNS, mental illness;
- peripheral respiratory center stimulation - pulmonary embolization (minor), congestive heart failure, high altitudes;
- liver failure with hyperammonaemia;
- G^- sepsis;
- heart rhythm disorders;
- partial **respiratory insufficiency**, where efforts to maintain hyperventilation oxygenation lead to hypocapnia.

Links

Related Articles

- Acid-base balance parameters
- Acid-base balance mechanism
- Laboratory examination of acid-base balance
- Acid-base imbalances
  - Metabolic acidosis
  - Metabolic alkalosis
  - Respiratory acidosis
  - Combined acid-base imbalance
- Correction and compensation of acid-base imbalances
- Principles of treatment of acid-base balance disorders
- Relationships between acid-base balance and ionogram

Used literature

- SCHNEIDERKA, Petr, et al. *Kapitoly z klinické biochemie.* 2. vydání. Praha : Karolinum, 2004. ISBN 80-246-0678-X.