

Pathophysiology Concept Map

Assigned Alteration: Dehydration

Why Does it Happen? Risk Factors

Dehydration occurs due to the body not having enough water. It can happen due to inadequate intake of water, excessive fluid loss, or a combination. Disease processes, injury, or lack of access to water are also factors.

What is Wrong? Pathophysiologic Alteration

The body is not receiving / does not have an adequate amount of water to maintain homeostasis. The lack of fluid in a body can cause cells to become weakened (via hypertonicity or hypotonicity). Cells that lyse (die) will cause a breakdown of bodily function.

What Other Factors are Involved? Social Determinants of Health

Access to fluids in the built environment. Providing education about the health implications regarding dehydration. Education for what foods can help supplement thirst (fruits and vegetables).

How is it Diagnosed? Laboratory and Diagnostic Tests

Dehydration is diagnosed by blood tests (levels of sodium and potassium i.e. electrolytes). Urinalysis can show if someone is dehydrated and to what degree. Patient signs include dry tongue / lips, no tears, sunken eyes, wrinkled, dry skin, deep rapid breathing, and cold hands and feet.

What Cues Should the Person Have? Expected Findings

Mild Dehydration: thirst, dry or sticky mouth, not much urination, dark yellow urine, dry, cool skin, headache, muscle cramps, and bad breath. Severe Dehydration: not urination or very dark yellow urine, dry, warm skin, feeling dizzy, rapid heartbeat, rapid breathing, sunken eyes, sleepiness, lack of energy, confusion or irritability, and / or fainting.

How can This be Prevented? Disease Prevention

Preventing dehydration means allowing individuals to have access to water. Having access to water can solve most issues. However, some diets can impact whether a person is more susceptible. Having a high sodium diet will make people thirsty, and can cause dehydration in the worst cases. This requires educational help.

Are They Getting Better or Worse? Evaluating Changes in Health Expected Findings

Clients diagnosed with dehydration can fix their issues by intaking the correct amount of fluids, (if dealing with mild dehydration). If severe dehydration is present, an individual may need to go to a hospital. This treatment can take 2-3 days, and can involve providing the client electrolytes.