



Pathophysiology Concept Map

Assigned Alteration: Inflammation Process

Why Does it Happen? Risk Factors

Inflammation is a defense to injury, infection, or an allergic reaction. It is the result of a response against external threats, or tissue trauma. Cellular damage can cause the development of inflammation.

What is Wrong? Pathophysiologic Alteration

Localized inflammation can impact different body systems (heart, lungs, joints). Lungs can no longer perform gas exchange as well. Heart inflammation may induce a heart attack. Joints may not be able to move through a full range of motion. In general, inflammation is a step in the healing process, but can impair quality of life and general organ function. This effect is exacerbated by chronic inflammation, which has a longer duration (months/years/lifetime).

What Cues Should the Person Have? Expected Findings

The most common cues include client stating pain, redness, and heat.

How is it Diagnosed? Laboratory and Diagnostic Tests

Diagnosis of inflammation involves identifying the typical symptoms. They include heat, redness, pain, loss of function, and swelling. The mnemonic, "PRISH," is used to condense the symptoms and differentiate the inflammation from other similar conditions, such as edema. It can be diagnosed via complete blood cell count, with heightened WBC counts indicating inflammation. CRP presence. ESR for plasma proteins.

How is it Prevented? Prevention

Prevention method (rest, ice, heat, elevation). It could also include analgesic drugs. Other forms of prevention include risk factors, balanced diet, and exercise.

Inflammation is part of the healing process. A patient's condition will be highly different depending on if the inflammation is acute (sudden) or chronic (long-term). Acute inflammation is treated as normal. Chronic inflammation can impede the quality of life for the client due to tissue damage.

What Cues Should the Person Have? Expected Findings

The cues for inflammation are the same as some the symptoms (PRISH). Blood tests can reveal the chemical mediators (prostaglandins, kinins, leukotrienes, and histamine).