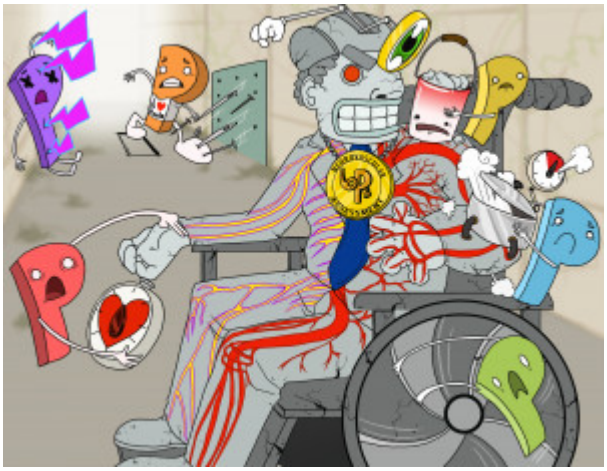
Neurovascular Assessment 6 P's

A neurovascular assessment, which is also called a “circ check” is performed to determine if there is adequate circulation and sensation to an extremity. Following trauma (fractures) and vascular surgery, neurovascular checks are important in monitoring for acute compartment syndrome (ACS). Early recognition of ACS can prevent loss of function or loss of a limb.



PLAY PICMONIC

Pain

Pain-bolt

Pain is the universal symptom in compartment syndrome. It may be related to edema, movement of bone fragments, or muscle spasms, and it increases as the pressure within the limb compartment rises.

Paresthesia

Paris T-shirt (Pins-and-needles)

Paresthesia is often the first sign of an impending problem described as the “pins-and-needles” sensation that may include numbness or tingling as a result of inadequate circulation. It may also be a sign of nerve damage or progressing compartment syndrome.

Pulse

Heart-timer

Pulses should be compared for differences in rate and quality on both the unaffected and injured extremities. A diminished or absent pulse distal to the injury may indicate vascular dysfunction and insufficiency and should be reported immediately to the provider.

Pallor

Pail with Pallor

Pallor refers to the color of the extremity (pink, pale, cyanotic) and should be assessed along with temperature (hot, warm, cool, cold) against the unaffected side. Pale, shiny skin distal to the injury may indicate compartment syndrome, while a warm, cyanotic extremity may point to poor venous return. Normal capillary refill should be within 3 seconds, and anything longer should be investigated for causation.

Pressure

Pressure-cooker

Increased pressure may indicate compartment syndrome and is related to swelling within the cavity. Depending on the severity, this may result in a feeling of numbness or a loss of sensation in the extremity or cause severe pain.

Paralysis

Wheelchair

Partial or full loss of sensation or function may be a late sign of neurovascular damage. The complete inability to move the limb distal to the injury may indicate compartment syndrome, and significant muscle and nerve damage may be present.