Guillain-Barre Syndrome Assessment

Guillain-Barré Syndrome is a rapidly progressing and potentially fatal disorder. This is an autoimmune disorder with segmental demyelination which causes edema and inflammation of the affected nerves (peripheral and cranial). It is usually self-limiting and patients often have full neurologic recovery. This syndrome typically occurs after a variety of events which include: an acute illness like gastroenteritis caused by Campylobacter jejuni, a recent vaccination, surgery or trauma.

PLAY PICMONIC

Assessment

Ascending Paralysis
Up-arrow Wheelchair
Demyelination causes eventual full body paralysis in a characteristic ascending fashion starting in the lower limbs and travelling upward to the trunk and upper limbs. Typically involuntary muscles like the diaphragm are affected later in the disorder. It is important to remember that patients have no cognitive decline or decreased level of consciousness.

Muscle Weakness
Weak-drooping Muscle
Peripheral motor weakness occurs due to demyelination and often patients reports rapid onset of muscle weakness 1-3 weeks after an illness or vaccination. Starting in the lower limbs, patients have an unsteady gait and present with decreased deep tendon reflexes (DTR’s).

Paresthesias (Pins and Needles)
Paris-t-shirt with Pins-and-needles
Patients often present with a sudden onset of weakness with or without paresthesias, which are a burning prickling feeling like pins and needles. This also characteristically occurs in an ascending fashion in the disorder.

Diplopia
Double-vision of eyes
Involvement of cranial nerves may cause double vision in patients due to paralysis of the muscles which have motor control of the eyes, called ophthalmoplegia. Pupillary constriction and dilation are not usually affected.

Difficulty Speaking
Broken Speech-bubble
Involvement of cranial nerve VII the facial nerve often causes difficulty speaking or dysarthria. Ensure to get a proper history of the progression of symptoms to understand progression of symptoms to rule out a stroke.

Dysphagia
Dice-fajita
In early stages the motor function of the muscle of mastication are weakened causing decreased ability to chew foods. Later, involvement of cranial nerves IX the glossopharyngeal and X the vagus are often involved and cause this disorder to present with difficulty swallowing (dysphagia). Be sure to assess the level of dysphagia and adjust the care plan as needed. These patients are at high risk for aspiration and may require special interventions for feeding.

Labile Blood Pressure
Label BP-cuff
If patients have cranial nerve involvement, they may present with a labile blood pressure, which is characterized by episodes of hypertension, as well as episodes of hypotension. These must be managed independently.

Loss of Bowel and Bladder Control

Bowel-bowl and Bladder out of Control

As loss of muscle tone occurs throughout the body these patients present with loss of bowel and bladder sphincter control. Remember careful consideration in maintaining skin integrity in these patients as they will be temporarily immobile.

Considerations

Aggressive Airway Management

Aggressive Airway Manager

Priorities involve continuous assessment and preparation for respiratory emergencies. Considerations include frequent assessments, management of secretions with suctioning if needed, keeping intubation equipment at the bedside, and considering the need for mechanical ventilation.