Guillain Barre Syndrome

GBS - is an AUTOIMMUNE neurologic condition. where the immune system attacks NERVES in the Peripheral Nervous System and Cranial Nerves.

Take Note! this condition DOES NOT occur in the Central Nervous System. (CNS)

Must knows:

1. GBS is idiopathic (unknown origin)
2. GBS is preceded by Viral Infections (Respiratory or Gastrointestinal.)
3. GBS is also known as "Infectious Polyneuritis"
4. GBS is NOT a contagious or communicable disease.
5. GBS is an Ascending Paralysis.

Duration of Guillain-Barre Syndrome?

Onset: Hours or days (Acute)

At 3rd week of the illness 90% of all patients are at their WEAKEST.

Risk Factor of GBS:

Viral Illness (CMV)
Influenza vaccinations (Flu shots)
Respiratory of GI infection (C. Jejuni)
Age: any age (>50 has greatest risk)
LaLake (Male) @ middle ages

Must knows:

The MOST common type of GBS is
Acute Inflammatory demyelinating polyneuropathy (AIDP)

Cytomegalovirus is the MOST common Viral Cause

Campylobacter Jejuni gastroenteritis is the MOST common Bacterial cause.

THE MAIN FEATURES OF GBS:

include Acute, ascending, rapidly progressive, Symmetrical weakness of the limbs.

The FIRST symptoms of weakness are Paresthesia and hypotonia of the limbs.

GBS signs and symptoms will MOST likely start in the Lower Extremities (ex. Feet)

√ Symmetrical and will Gradually spread upward (Ascending) to the head & Ataxia.

MOTOR MANIFESTATION:

ASCENDING motor/muscle weakness or paralysis WITHOUT muscle atrophy.

Flaccid - type of Paralysis

Ataxia

Respiratory compromise (Failure)

Loss of bowel and bladder control.

S/Sx:

Initial: Paresthesias and symmetrical muscle weakness.

Distal Part experiences muscle weakness FIRST.

Take note: Ascending Motor Weakness
is common verbalization of the patient w/ GBS regarding the EARLY ONSET of symptoms.

GBS results in motor weakness in a distal to proximal progression

Cranial Nerve Involvement:
Drooping Face (Facial Weakness)
Difficulty in Speaking
Difficulty in Chewing
Difficulty in swallowing (dysphagia)
Diplopia and blindness (opthalmoplegia)

An INDICATOR of cranial nerve involvement is:
Difficulty of speaking and chewing.

Cranial Nerve VII- effects patient ability to smile, frown,

whistle and Drink from straw.

Cranial Nerve IX (Glossopharyngeal) and Cranial Nerve X (Vagus) affects patient ability to cough, gag and swallow.

① What is NOT affected in GBS?
- Cognition and LOC

② What are MOST commonly affected in patients with GBS?
- muscles, sensory nerves and cranial nerves.

③ Which of the following clinical manifestations would the nurse expect to find when performing admission assessment?
- Ascending paralysis with ataxia

④ Priority nursing diagnosis in Guillain Barre Syndrome is:
- Ineffective Breathing Pattern

⑤ Another MOST APPROPRIATE nursing diagnosis for GBS is
- alteration in nutritional status related to possible choking.

⑥ Priority of care for patient diagnosed with Guillain-Barre Syndrome:

- Maintenance of respiratory function.

⑦ Important nursing intervention a nurse must do in GBS is to

- Assess patient for respiratory distress.

Diagnostic Test:

① Lumbar Puncture

Preprocedure: Void

Postprocedure: Flat in bed and Increase fluid intake

Result: High Protein w/ normal WBC.

② Electromyography - reflects peripheral nerve function.

③ Nerve Conduction Studies.

Take note:

Assessment intervention for the diagnosis of GBS is to Assess Deep tendon reflex.

Hyporeflexia of the lower extremities is the clinical manifestation of GBS.

Progression of GBS:

① Acute Stage

- Ascending Paralysis: 1-3 weeks

Ventilatory support is critical during the acute phase.

Most Essential item in patient room:

- Electrodes and Intubation tray.

Assessment is the Most important aspects of nursing care during the acute phase of GBS.

Assess respiratory and cardiac function.

Monitor ABGs and Vital capacity.

② Plateau stage / stabilizing phase

NO new symptoms occurs, NO changes and NO improvement. last 1-3 wks.

③. Recovery Phase

- Improvement with remyelination of peripheral nerve and axonal regenerations

MOST changes in 6months but
- improvement is up to 2 years.

Rehabilitation prior to discharge is BEST describe as LONG and one requiring involvement of significant others.

Neurological Function returns in
- A proximal to distal pattern

In the recovery phase, remyelination occurs. Slowly.

Best way for a ventilated client to communicate is to instruct client to Blink once for "NO" and Blink twice for "YES"

If the patient is unable to talk, the nurse BEST communicate to the patient by Enunciating the words slowly and well.

Appropriate LONG TERM GOAL is to prevent muscle atrophy

Interventions:

① Plasmapheresis - removes antibody-antigen complexes from circulation.
it is used 5 times either daily or every other day in the first 2 wks

Plasmapheresis:

Before procedure:

✓ Nurses use to determine patency of clients arteriovenous shunt by

Presence of bruit

Check for Bruits every 2-4 hours.

Monitor during procedure: HYPOVOLEMIA
monitor Fluid status, v/s and replaced IVF

Complications of plasmapheresis:

- low platelets, hypocalcemia, clotting, anemia.

Sandoglobulin:

- immunomodulating treatments in the patient with GBS such

as plasma exchange or high dose IVIG are MOST effective if used within the First 2 weeks of symptom onset.

Prognosis:

85% - recovered

10% - have significant residual

5% - die due to respiratory complications.