

Peripheral Neuro

Trigeminal Neuralgia

Bell's Palsy

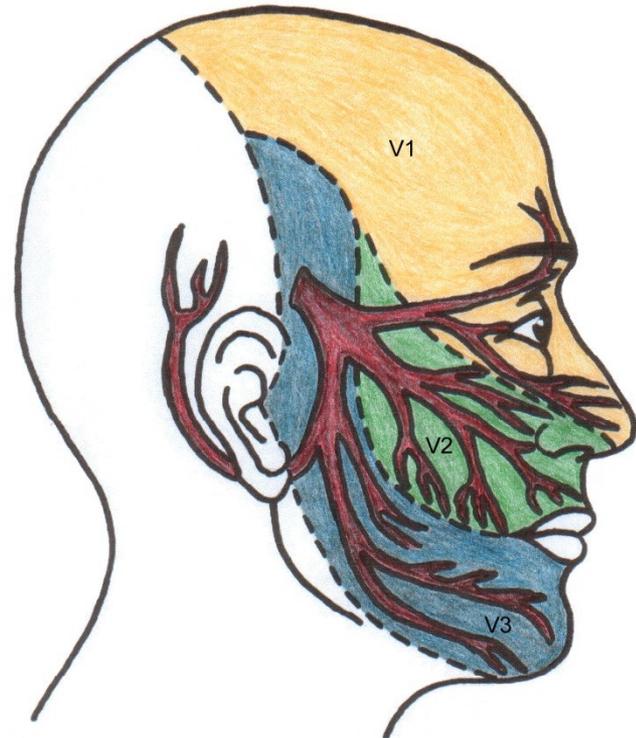
Guillain-Barre' Syndrome

Trigeminal Neuralgia (TN)

- Condition of the 5th cranial nerve
- Causes abrupt, excruciating, unilateral pain to the gums, cheek, forehead, nose
- TN 1- Classic
- TN 2- Atypical
- Risk Factors
HTN, MS, Herpes, dental infection, brainstem infarct

Pathophysiology: Trigeminal Neuralgia

- Unsure of cause
- Irritated fibers
- Superior cerebellar artery
 - Compression causes nerve irritation
- 3 main branches
 - Ophthalmic-orange
 - Maxillary-green
 - Mandibular-blue



Clinical Manifestations:

Trigeminal Neuralgia

- One Sided Pain
- Brief duration seconds-min
- Sharp, piercing, shooting
- Bouts of Pain: weeks -mos
- Trigger Zones
- ADL Impacts?
 - Diagnosis- Rule out other causes such as a tumor or MS= MRI

Treatments: Trigeminal Neuralgia

- Anti-epileptics Drugs
 - Reducing firing of sensory fibers
 - Prevent attacks-doesn't cure

- Nerve Blocking
 - Local anesthetic

- Glycerol Rhizotomy
 - Percutaneous admin of glycerol to damage nerve fibers in trigeminal nerve

Treatments: Trigeminal Neuralgia

- Microvascular Decompression
 - Blood vessels contacting nerve relocated or removed
 - High risk due to proximity of procedure to brainstem
 - Pain relief can be instant with high success

- Gamma Knife Radiosurgery
 - Radiation to nerve causes disrupted pain transmission signals
 - Not as quickly effective

Nursing Management:

Trigeminal Neuralgia

- Acute Pain
- Identify and Avoid triggers
- Hygiene
- Nutrition and Hydration
- Anxiety
- Ineffective Coping

Bell's Palsy

- Facial nerve paralysis due to inflammation of Facial nerve CN VII
- Flaccidity of affected Side, drooping of mouth, drooling
- Sensory/Motor involvement

Incidence: Bells Palsy

- An age
- Any gender
- Any race
- High incidence in pregnancy

Pathophysiology: Bells Palsy

- inflammation of the facial nerve for unknown reason
- inflammation, edema, and ischemia may occur at the facial nerve site due to HSV-1 (Herpes Simplex Virus Type 1) that eventually causes demyelination

Manifestations: Bells Palsy

- Ear pain prior
- Eye doesn't close
- Mask Like
 - No smile or grimace
- Inc or Dec tearing
- May drool
- Taste inhibited
- Tinnitus, fever, hearing deficit

Diagnosis & Treatment: Bells Palsy

- Dx based on S/S
- EMG test

- Analgesics
- Steroids
- Antiviral
- Other
 - Massage
 - Moist heat
 - Electrical stim
 - Face sling
 - Facial exercises

Nursing Management: Bells Palsy

□ Support

- Body image changes

□ Protect Eye

□ Nutrition

□ Prognosis

Prognosis

Guillain-Barre' Syndrome

- An autoimmune attack on the peripheral nerve myelin
- Acute
- Rapid progression
- Potentially fatal
- Gender
- Can occur in any age group

Pathophysiology

- Immune reaction causes edema, inflammation, and demyelination by antibodies
- Precipitating factors
 - Viral infection, trauma, surgery, immunizations, HIV
 - Campylobacter jejuni gastroenteritis
 - 30%

Clinical Manifestations

- Motor weakness
 - symmetrical
 - Ascending begins distally
- Sensory
 - Paresthesia and pain
- Autonomic
 - Cardiac
 - Bp effects
 - Bowel and Bladder
 - Flushing and diaphoresis
- CN involvement
 - Loss of facial motor and sensory function, unable to move eyes, dysphagia, gag, drool

Clinical Manifestations & Diagnosis

- Clinical Presentation
 - What symptoms the patient presents with...
- History
 - Recent viral or GI infection
- CSF analysis
- EMG and nerve conduction studies
 - Gross reduction nerve transmission speed

Guillain-Barre' Complications

□ Respiratory Failure

- Paralysis progresses to involve trunk muscles
- Monitor respiratory status
- Fever signal respiratory infection

□ Immobility

- Paralytic ileus, muscle atrophy, DVT, PE, skin breakdown

Guillain-Barre' Medical Management

- Medical emergency
- Plasmapheresis
 - Temporary decrease in antibodies
 - Start therapy early
 - Decreases hospital stay, ventilator support, and walking rehab
- Immunoglobulin
 - Admin high doses through IV
 - Therapy of choice
 - Patient must have normal hydration and renal function

Nursing Care: Respiratory Support

- Monitor closely- **ASSESSMENT PRIORITY!!!**
- Discuss ventilation
- Assess
 - ABG
 - Muscle weakness
 - RR, pulse ox
 - Respiratory depth
 - Cough, gag, swallow
 - Vital capacity
 - Inspiratory support

Other Nursing Care Issues

- Autonomic Dysfunctions
- Nutrition
- Mobility
- Support