Adult Health Exam 3

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Traction Nursing Care

- T - Temperature
    - Temperature of extremities and body
- R - Ropes hang freely
- A - Alignment
    - Body alignment and realign if necessary
- C - Circulation checks
    - 5 Ps
    - Assess neurovascular status Q1hr for first 24 hours then Q4H after that
- T - Type and location of fracture
    - To provide appropriate care and education
- I - Increase fluid intake
- O - Overhead trapeze
    - Helps patient to pull themselves up in bed
- N - No weight on the bed or floor

When is it appropriate to remove traction?

- When there is a doctor's order or a life-threatening situation

Normal findings of skeletal traction

- Serous drainage is normal at pin insertion site

Amputation Nursing Care

- ROM exercises and proper positioning immediately after surgery
- Elevate extremity 24-48 hours to reduce swelling/discomfort, then no more elevation
- Have the client lay prone 20-30 minutes several times
    - To help prevent hip contractures (permanent tightening of the tissues)
- Keep the skin dry because moisture can lead to skin breakdown
- Dressing changes
- Address phantom pain
    - Mirroring or Gabapentin (Anti-epileptic)
- Address incisional pain
    - Analgesics
- Monitor blood flow
- Assess mental status and address that the limb is gone

Traumatic amputation care

- Gentle handling - This promotes healing process and prevent traumatic damage
- Keep surgical tourniquet at the bedside post-operative
- Frequent inspection of infection

- Compression bandages
    - Helps residual limb prepare for prosthetic device

Complications related to amputations

- Cardiopulmonary complications r/t co-morbid conditions
- DVT
    - Swelling, redness, pain, warmth
- Stump hematoma
    - Drainage of fluids/pus, swelling
- Infection
    - Fever
- Need for re-amputation
- Phantom limb pain
    - Shooting, stabbing, burning pain
- Flexion contracture
    - Bent joint that cannot be straightened

Post-Op amputation care

- Assess surgical site for bleeding
- Monitor tissue perfusion of end of residual limb
- Monitor for manifestations of infection
- Duration of non-weight bearing depends upon level of amputation and whether there are any anticipated would healing issues
- If amputation r/t ischemia = no weight bearing until wound is thoroughly healed (up to 6 weeks or more)

Complications r/t casts

- Compartment Syndrome
- Fat Embolism
- Osteomyelitis
- Avascular Necrosis

Compartment Syndrome s/s

- Manifestations are evaluated by the 5 Ps
- Pain
    - Increased or unrelieved
- Paresthesia
    - Numbness, burning, tingling (EARLY MANIFESTATION)
- Pallor
    - Pale tissue and cyanotic nail beds
- Paralysis
    - Motor weakness or inability to move extremities (LATE MANIFESTATION)
- Pulselessness (LATE MANIFESTATION)

Osteomyelitis s/s

- Infection of the bone that begins as inflammation
- Bone pain that is constant, pulsating, localized, and worse with movement
- Erythema and edema at the site of infection
- Fever
- Increased WBC and increased ESR (Inflammation)

Osteomyelitis Nursing Interventions

- Perform hand hygiene
  - Reduce spread of infection
- Administer antibiotics as prescribed
- Debridement and Dressing changes
  - Conduct neurovascular assessment
  - Use clean technique during dressing changes

Osteomyelitis Treatments

- Long course antibiotics
  - Patients will need a PICC line
- Surgical debridement and possible bone graft
- Hyperbaric chamber
- Amputation (If other treatment options are unsuccessful)

Fat Embolism s/s

- Fat leaking out of bone marrow and traveling to the lungs
- Early Manifestations
  - Dyspnea, increased RR, decreased O2 saturation
  - Headache
  - Decreased mental acuity r/t low arterial O2 level
  - Respiratory Distress
  - Tachycardia
  - Confusion
  - Chest pain
- Late Manifestations
  - Cutaneous petechiae

Causes of Fat Embolism

- Most common in hip/pelvis fractures
- Occurs usually within 12-24 hours post injury of long bone fractures or with total joint arthroplasty

Cast Care

- DO:
  - Ice for first 24 hours
  - Dry cast thoroughly if exposed to water

        - Elevate extremity above the heart for first 48 hours
        - Use hair dryer on cool setting for itching inside the cast
        - Regularly move joints above and below the cast
        - Report signs of possible problems
        - Keep appointments to have fracture and cast checked
- DON'T:
    - Get cast wet
    - Remove any padding
    - Insert any objects inside the cast
    - Bear weight on the new cast for 48 hours (not all casts are made for weight bearing)
    - Cover cast with plastic for prolonged periods
        - Due to moisture build up and skin break down
- Nursing Care:
    - Monitor neurovascular status
    - Handle plaster casts with palms, not fingertips, until cast is dry
        - This prevents denting in the casts
    - Instruct client to not lie on hard surfaces
    - Ensure cast is not too tight; there should be room for 2 fingers between cast and skin
- Client Education:
    - Do not place foreign objects inside the cast
    - Utilize plastic bags to prevent soiling of the cast and during baths/showers
    - Report any areas under the cast that are painful, have increased drainage, warm to touch, or have an odor
    - Report SOB
        - Indicates DVT, PE, FE

Increased Intracranial Pressure (ICP) s/s - there are a few questions on exam

- Severe headache
- Deteriorating level of consciousness = Earliest sign
- Restlessness
- Irritability
- Projectile vomiting
- Dilated or pinpoint pupils
- Slowness to react
- Altered breathing patterns (Cheyne Stokes, Hyperventilation, or Apnea)
- Seizures
- Changes in speech
- Abnormal Posture
    - Decerebrate
        - Head and neck are arched
        - Legs are straight
        - Toes are pointed downward

        - Decorticate
            - Arms are adducted and flexed against the chest
            - Legs are internally rotated
            - Closed hands
- KNOW VS FOR INCREASED ICP
    - Cushing's Triad
        - Increased systolic BP/Hypertension (Widening pulse pressure)
        - Decreased pulse (Bradycardia)
        - Altered respiratory pattern (Irregular respirations)

Increased ICP Nursing Care - there are a few questions on exam

- Maintain patent airway
    - Suction carefully - Suctioning can increase ICP
    - Elevate HOB (30 degrees)
- Optimize cerebral perfusion
    - Keep the head in a neutral position
- Maintain fluid balance
- Maintain normal temperature
- Perform neuro assessment
- Place foley catheter, if necessary
- Prevent infection
- Educate client to avoid coughing, do not strain during bowel movements, avoid neck movements (keep midline)

Treatment for ICP

- MANNITOL
    - Osmotic diuretic
- Dexamethasone

Positioning for ICP

- Keep HOB elevated 30-45 degrees

Increased ICP Complications

- Brainstem Herniation
    - Increasing pressure stops blood flow to the brain leading to brain anoxia and brain death
- Diabetes Insipidus
    - Increased urine output
    - Give fluid, electrolyte replacement
    - Administer vasopressin
- SIADH
    - Decreased urine output (volume overload)
    - Initiate fluid restrictions

Meningitis s/s

- Viral
  - Headache and high fever
  - Nuchal Rigidity - Neck stiffness
  - Positive Kernig's and Brudzinski
- Bacterial
  - Red, macular rash
  - Photophobia
  - Altered Mentation
  - Seizures

Ways to Diagnose and Test for Meningitis

- CT Scan
- MRI
  - Both CT and MRI will inform you of increased ICP as well
- Lumbar Puncture
  - CSF cultures
    - Cloudy = bacterial
    - Clear = viral

Meningitis Interventions

- Administer IV Antibiotics
  - If it's bacterial
- Closely monitor for increased ICP
- Bed rest
- Preventative vaccinations
  - Meningococcal
    - Given between ages 16-18, usually before going to college or military
- Droplet Precautions
  - Initiate until antibiotics have been given for 24 hours and oral/nasal secretions are no longer infectious

Spinal Cord Injury s/s

- Neck or back pain
- Inability to feel light touch
- Bradycardia and asystole/hypotension
  - Because of neurogenic shock
- Muscle flaccidity

Autonomic Dysreflexia s/s

- Occurs after spinal cord injury
- Sudden onset of excessively high blood pressure
- s/s
  - Hypertension
  - Bradycardia

        - Diaphoresis
        - Flushing above lesion/skin flushing
        - Piloerection - erection of body hair (goosebumps)
        - Nasal congestion
        - Headache

Autonomic Dysreflexia Nursing Actions

- Elevate HOB 45 degrees or sit patient upright
    - To decrease the elevated blood pressure
- Remove noxious stimuli
    - Insert catheter as a full bladder is the main cause for noxious stimuli
- Treat the cause:
    - Relieve kinks in catheter, insert a catheter, adjust room temperature

Right Sided Stroke Manifestations (Alterations you will see in your patient)

- Left side will be weak and droopy
- Disorientation to person, place, and time
- Unable to recognize faces
- Loss of judgment and awareness
- Impulsive behavior
- Personality changes
- Tonal hearing loss

Left Sided Stroke Manifestations (Alterations you will see in your patient)

- Right side will be weak and droopy
- Difficulty discriminating between left and right side
- Agraphia (Difficulty writing)
- Aphasia (Difficulty speaking or understanding language)
- Slow performance
- Anxiety
- Depression

Types of Stroke and their s/s

- Ischemic Stroke
    - Blockage in an artery resulting in lack of blood flow and oxygen to the brain causing damage or death of brain cells
    - s/s
        - Sudden, severe headache
        - Trouble walking
        - Trouble speaking
        - Numbness of face, arm, or leg
- Hemorrhagic Stroke
    - Blood from an artery begins bleeding into the brain
    - s/s

        - Severe headache
        - Difficulty walking
        - Numbness in part of the face
        - Difficulty speaking
- TIA
    - Mini stroke
    - s/s
        - Slurred speech
        - Facial drooping
        - Vision problems
        - Symptoms do not last as long as other strokes

Dementia and Delirium s/s

- Dementia
    - Patient gets lost in familiar places
    - Disorientation to person, place, and/or time
    - Loss of recent memory, language, problem-solving skills, and social skills that affect daily living
- Delirium
    - Mental confusion and emotional disruption
    - Difficult to think, sleep, remember, and pay attention
    - Confused thinking and reduced awareness of surroundings

Dementia and Delirium Nursing Actions

- Assess cognitive status, memory, judgement, and personality changes
- Provide a safe environment
    - Frequent visual changes
    - Keep client away from exists
- Maintain sleep schedule
- Provide cognitive stimulation
    - Walking, music, or crafts
- Be consistent and repetitive

Difference between dementia and delirium

- Dementia
    - Irreversible, progressive, and downhill
    - Onset is slow
    - Last for 2-20 years
- Delirium
    - Reversible with treatment
    - Rapid, acute onset
    - Last 1 day to 1 month

Glasgow Coma Scale

© Eye opening Response	© Spontaneously © To speech © To pain © No response	© 4 © 3 © 2 © 1
© Verbal Response	© Oriented x4 © Confused © Inappropriate words © Incomprehensible © No response	© 5 © 4 © 3 © 2 © 1
© Motor Response	© Obey commands © Moves to pain © Flexion withdrawal © Decorticate © Decerebrate © No response	© 6 © 5 © 4 © 3 © 2 © 1
© Total Score	© Best response © Comatose client © Totally unresponsive	© 15 © 8 or less © 3 or less

Thrombolytic Therapy Uses and When Not to Use

- tPA must be given 3 to 4.5 hr of the initial symptoms unless contraindicated by factors such as presence of active bleeding - For treatment of stroke
- Do not give: Hx of bleeding, hemorrhagic stroke, patients who take anticoagulants (warfarin, heparin)

Cushing's Triad

- Hypertension
- Bradycardia
- Irregular Respirations (Cheyne Stokes Breathing)

Traumatic Brain Injury Nursing Actions

- s/s
    - Changes in LOC
    - Personality changes
    - Amnesia
    - Increased ICP
    - Diplopia

    - Posturing - Decorticate and Decerebrate
    - Risk for intracranial bleeding
- Monitor ICP
- Monitor for bleeding
- Maintain airway
- Monitor VS
- Neurological assessments/ monitor for changes in LOC

Normal ICP

- 10-15

Normal CCP

- 70-100