

NURSING CARE FOR A PATIENT WITH TETANUS, RABIES AND BOTULINUM

Nakiganda Catherine

RN, BSN, MSN-CC

General overview

- Tetanus, Rabies and Botulinum all affect nerves system.
- Interfering with impulse transmission leading to spasms, seizures and respiratory complication.
- Severely affected patients may need supportive care and other interventions as the disease progresses

Nurses considerations

- Wound care
- Nutritional support
- Airway management
- Analgesia, patient positioning
- Cardiorespiratory considerations
- Prevention of complications
- Physiotherapy

Nursing care of a Tetanus Patient

- Tetanus is acquired by contamination of the wound with clostridium tetani spores.
- A tetanus infection is characterized spastic jerky movements of the skeletal muscles which are very painful.
- These movement can be very severe that can lead to injuries; eg Fractures of bones and spine.
- Can also lead to Asphyxia and aspiration pneumonia.
- As Nurse; prevention occurrence these complications.

Nursing care of a Tetanus Patient

- Wound care and debridement.
- Dim, Quiet environment and well ventilated.
- Minimize external stimuli by Clustering of nursing procedures, eg; suctioning, turning, feeding.
- Nutrition- high calorie feeds.
- Administer tetanus immunoglobulin: it kills the bacteria but its short lived.
- Administer Anti biotic therapy.
- ❖ Anti convulsants eg. Diazepam and phenobarbital
- ❖ Muscle relaxants ,eg; baclofen, dantrolene
 - Patient should have a NG tube

Nursing care for Tetanus Patient

- Ventilator support for severely affected patients
- VAP-prevention
 - Head of bed
 - Sedation vacation
 - PPI prophylaxis
 - Thromboembolic prophylaxis
 - Oral care
 - Spontaneous breathing trails
- Air way suctioning to ensure patency and prompt oxygen administration
- Fluid and electrolyte balance should maintained
- Fever management
- Regular monitoring of vital signs
- Two hourly turning and treatment of pressure areas

Tetanus care cont'd

- **FAST HUGS IN BED**

- F- feeds and
- A- analgesia
- S- sedation
- T-thromboembolic
- H- head of bed 30-45 degrees
- U- ulcer prophylaxis
- G- glycemic control
- S- spontaneous breathing trail

- B- bowel care
- I- indwelling care
- D- descalation of anti biotic

Health education

Prevention

- It can be prevented through Vaccination
- Tetanus vaccine covers an individual for 10years with booster doses there after.
- Wounds should be cleaned properly with hydrogen peroxide

Nursing care of patient with Rabies

Goal of care

- Patient displays improvement in breathing pattern
- Patient takes adequate amounts of calories
- Patient maintain body temperature below 39 degrees

Nursing care of patient with Rabies

- Patients with rabies disease may present Neurological symptoms, Eg; aggressive behavior, twitching muscles, hallucinations and seizures.
- Difficulty swallowing
- Hydrophobia and aerophobia
- May also have a paralytic form of rabies with; ascending muscle weakness, loss of sensation and eventually paralysis, coma and respiratory arrest.
- Rabies has been associated with 100% mortality; **There is no effective cure for rabies**
- Health workers should adhere to standard precautions when managing these patients including wearing gowns, gloves, face mask and eye protection

Rabies management cont'd

- Admit patient in an isolation room in an intensive care setting.
- Wash hand before and after patient contact to prevent spread of disease.
- Darken the room and provide a quiet environment
- Provide continuous cardiac and respiratory monitoring
- Ensure a patent airway
- Administered prescribed medication; **Rabies immunoglobulin, Analgesia and sedatives.**
- For intubated and ventilated patients suction should be done.
- Provide emotional and spiritual support to the family.

Nursing care for patient with botulinum poisoning

- Rigorous and supportive care
- In case of wound botulism, the wound should be cleaned thoroughly with hydrogen peroxide and debridement done.
- Should be hospitalized for close monitoring; **monitor the vitals signs**
- Ensure a patent Airway and adequate oxygenation
- Administer the prescribed medication timely.
- Nasal gastric tube should be placed for patients with dysphagia
- Foley catheter to treat bladder incontinence

Nursing care for patient with botulinum toxin

- Spirometry, pulse oximetry and arterial blood gases should be evaluated sequentially
- Intubated and mechanical ventilated patients should be suctioned regularly.
- Enteral or parenteral nutrition should be given
- Administered enema if bowel sound are present
- Nasal gastric suction incase of GIT paralysis
- Intravenous fluid are helpful supportive measures.
- Institute the FAST HUGS BID for all admitted patients

Prevention

- Ensure good hand hygiene
- Proper food handling; Follow the WHO keys to safer food: keep clean, separate raw and cooked food, cook thoroughly, keep food at safe temperatures, use safe water and raw materials.
- Avoid contamination of food by soil or other sources likely to harbor bacteria.
- Preserved home-made food and ensure it is well handled to destroy spores
- Proper wound care with antiseptic and Hydrogen peroxide.

MCQ

QN.1: Nursing consideration when managing botulism toxicity include the following except

- A. Monitoring for respiratory complication
- B. Preventing spasms
- C. Enteral and parenteral nutrition
- D. Mechanical ventilation

• QN.2: What isolation precautions should be considered when managing a patient with Rabies.

- A. Standard precautions
- B. Droplet precautions
- C. Airborne precautions
- D. Contact precautions

QN.3. What intervention should the nurse consider in the plan of care for a tetanus patient?

- A. Dim, quiet well ventilated environment
- B. Bright, Noisy environment
- C. Fragmented nursing care

References

- <http://google.com/tetanus>
- <http://www.mayoclinic.org/disease-conditions/tetanus/basic/>
- http://www.webmd.com/a-to-z_guide/ tetanus-topic review