HOME MANAGEMENT OF THE CHILD WITH CEREBRAL PALSY

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DEFINITION
Cerebral palsy is a non-specific term applied to disorders characterized by early onset and impaired movement and posture. It is non-progressive and may be accompanied by perceptual problems, language deficits and intellectual involvement. It is the most common permanent physical disability of childhood. (Marlow)

INCIDENCE
2-4/1000 live Births, since mild cases are likely to be missed in survey, the prevalence may well be higher than the estimation (Marlow).

ETIOLOGY
- Developmental and structural disorder of brain or injury to the brain
- Petal asphyxia and hypoxia
- Acid base imbalance
- Indirect hyper-bilirubinemia
- Metabolic disorder and Intra-uterine or acquired infection
(These factors may operate Pre-natally, during delivery or in the post-natal period)

CLASSIFICATION OF CP
1. Spastic: May involve one or both sides
2. Hypertonicity with poor control of posture, balance and coordinated movement
   Impairment of fine and gross motor skills
3. Athetoid: Abnormal involuntary movement
   Athetosis - Slow, Worm like, Writhing neck
   Leads to drooling and dysarthria
   Involuntary, irregular, jerking movement and disorder of muscle tone
4. Ataxic: Wide based gait, rapid repetitive movement performed poorly
5. Mixed: Combination of Spasticity & Athetosis

PATHTOLOGY
Wide Spread Cerebral Atrophy Cavity Formation in Sub Cortical White Matter- Atrophy of Basal Ganglion and Porencephalitis Severe Cerebral palsy

General Therapeutic Interventions:
- Physical Therapy
- Occupational Therapy
- Speech/Language therapy
- Special Education
- Surgical Intervention
- Medication Therapy

Associated Problems / Needs:
1. Self care deficit: Skin care, Dental/oral care, Feeding and eating, Bowel and Bladder, Safety, Locomotion
2. Communication: Language

Speech, Vision and Hearing
5. Parents and family Anxiety: Diagnosis & Prognosis, During Crisis

HOME MANAGEMENT OF CHILD WITH CEREBRAL PALSY
1. Self Care Deficit
   a) Self Care Support related to Skin Care
   Objective: a) Maintain Skin Integrity
   Management
   - Maintain skin hygiene
   - Reposition every 2-3 hrs, if needed
   - Keep skin dry and clean
   - Use lotion for dry skin
   - Use special mattress and pillows
   b) Prevent contractures
      - Maintain good alignment with pillows
      - Use high back chair with chest strap
      - Place a foot rest under the feet
      - Apply braces in day times and splints at night
      - Perform active and passive stretching exercises
   ii) Self Care Support related to Dental/Oral Care
      a) Prevention of Dental caries
Teach correct technique
Advice brushing twice a day
Watch for loose teeth
Give calcium rich food

b) Maintain oral Hygiene
Mouth rinse after each feed
Avoid sweets after brushing
Watch for oral infections
Watch gums for any bleeding

iii) Self Care Support related to feeding and Eating
a) Identify problems associated with feeding and eating
Assess for:
- Difficulty in sucking & swallowing
- Persistent bite reflex
- Hyper active gag reflex
- Poor lip and tongue control
- High arched palate
- Chewing difficulties
- Abnormal intra oral sensation
- Delayed hand to mouth co-ordination and self-feeding
- Refer the child for further management

b) Maintain adequate nutrition and hydration
- Recognize calorie needs in spastic, athetoid, and ataxia
- Provide oral care frequently
- Offer foods that child can eat
- Serve food in attractive manner
- Maintain food hygiene
- Small and frequent food
- Allow long time period for meal
- Reduce stress during mealtime
- Maintain intake/output chart

iv) Self Care Support related to Bowel and Bladder functioning
a) Maintain normal bowel and bladder pattern
   - Take child to bath room every 2-3 hrs
   - Diaper the child if needed
   - Use intermittent catheterization
   - Encourage the child to maintain bowel and bladder habits
   - Evaluate the possibility of bowel / bladder training programme
   - Maintain hygiene
   - Provide perennial care
   - Encourage sitting, crawling
   - Provide incentives to get up
   - Incorporate play into motor
   - Have supportive aids available to encourage locomotion

2. FACILITATING COMMUNICATION
a) Develop skill in communication with limitations
   - Talk slowly to the child
   - Ask one question at a time
   - Use signals
   - Find out the signals which the child uses
   - Provide an opportunity for initiation in communication
   - Allow time for child to express ideas
   - Explore other non verbal methods
   - For vision/hearing/language/speech problems refer to specialists

3. BEHAVIORAL AND EMOTIONAL CARE
a) Build a positive self-concept
   - Accept the child as an individual
   - Understand child's strengths and competencies
   - Expect best possible response
   - Provide feedback
   - Give support and encouragement
   - Adhere to the limits
   - Keep records of child's progress
   - Recognize the child's needs
   - Encourage child to use his own thoughts, and attitude
   - Recognize problems with self-concept
   - Adjust to psychosocial problems related to limitations
   - Parents need to be supported for care
   - Recognize child's skills and abilities
   - Acknowledge limitations
3. Seizure Care
   a) Prevent injuries during seizure
      Child need to be aware of the aura
      Place the child on flat surface
      Be with the child throughout
      Turn the head of the child to one side
      Observe and prevent tongue bite
      Do not hold the child too tightly
      Avoid over crowding
      Good ventilation
      Provide calm and quiet environment

3. Supporting the family members for home care
   a) Help the parents and the family to accept the diagnosis
      Allow family members to express feelings and emotions
      Explain the nature of the illness
      Remember that coping styles vary
      Be patient in clarifying doubts
      Reassure the parents

4. Educating the parents for early detection and care for anticipated crisis
   a) Early detection and care for anticipated crisis
      Recognize the four common crisis periods
      time of diagnosis
      child starting time of school
      child leaves school
      needs to achieve independent role
      Provide anticipatory guidance
      Help in decision making

5. Assist the family for identifying the community resources
   a) Assist the family identify and use the community resources
      Arrange meetings with good coping parents of children with CP
      Explain parents about the benefits available for handicapped children
      Inform about educational options available

4. Educating Parents About Signs of CP for Referral
   Physical Signs:
   Poor head control after 3 months
   Stiff or rigid arms or legs, pushing way or arch back
   Floppy or lip body posture
   Cannot sit up without support by 8 months
   Use only one side of the body or only the arms to crawl
   Behavioural Signs:
   Extreme irritability or crying,
   Failure to smile by 3 months
   Feeding difficulties

CONCLUSION
The goal of nursing care for the child with cerebral palsy should be developed in consultation with the family. For home care the nurse reinforce the therapeutic plan and assist the family in designing and modifying equipments and activities to continue the therapy programme at home.

Reference: