

PAEDIATRIC DYSPHAGIA: CLINICAL ASSESSMMENT

CHRIB 2010 Presenter: Mrs Mari Viviers

Introduction:

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- Defining feeding disorders: Problems in a broad range of eating activities that may or may not be accompanied by a difficulty with swallowing food and liquid.
- Characteristics of feeding disorders: food refusal, disruptive mealtime behaviour, rigid food preferences, less than optimal growth, failure to master self-feeding skills expected for developmental levels.

(Arvedson, 2008)

Introduction (cont'd):

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- □ Incidence of feeding disorders is estimated to be 25
 − 45 % of typically developing children
- Up to 80 % of children with developmental disabilities
- The incidence of dysphagia (swallowing disorder) is unknown, although it seems clear that the incidence of swallowing dysfunction is increasing
- Reasons for increase: Improved survival rates of children with history of prematurity, low birth weight & complex medical conditions

Introduction (cont'd):

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- An interdisciplinary approach is essential for coordinated service delivery and Evidence based practice (EBP), which focus on the whole child and caregivers/parents, who may have multiple interrelated health and developmental issues.
- An overview of 1997 2007 by Bell & Alper (2007) indicated that assessment & intervention for feeding & swallowing problems in infants and children have attracted international research attention.

Introduction (cont'd):

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□ Miller & Willging (2003) concur that a steady increase in research in the field of paediatric dysphagia is noted, however, the efficacy of commonly employed diagnostic & treatment strategies have been largely unexplored. Thus a need for evidence based assessment methods exist



Introduction (cont'd):

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- □ Dearth of research in the field of paediatric dysphagia
- Rapidly evolving field for slt's working in medical settings especially
- Undergraduate training not adequate for slt's to go out and confidently assess premature babies, high risk neonates and infants
- □ Very few slt's working in this exciting yet precarious field

Assessment: Role of slt (ASHA, 2000;2008)

- - □ Clinical swallowing & feeding evaluations
 - □ Instrumental assessment of swallowing function
 - □ Identifying normal & abnormal swallowing anatomy & physiology
 - □ Identifying possible signs of disorders in the upper aero-digestive tract
 - □ Making appropriate referrals

Assessment:

- $\hfill \square$ GOAL=identification of swallowing and feeding difficulties + forms foundation for developing management strategies
- □ Why different measures? Provides different kinds of information, one type of assessment does usually not provide complete diagnostic information, reassessment through course of treatment

Important considerations for assessment: (Arvedson, 1993; Swigert 1998):

- During the assessment of infants & young children with feeding disorders it is important to consider the following factors:
- □ Oral-motor development
- ☐ Ability to maintain nutrition and hydration
- □ Relationship and interaction between the caregiver and the child
- $\hfill \Box$ Medical &/or neurological problems affecting the

Why is oral-motor development important?

- □ Essential for the child to achieve adequate abilities for eating & drinking by mouth
- □ Depending on age of child: assess oral-motor skills in isolation and during feeding/only during feeding
- □ Slt's understanding of the development of these skills are crucial



Why is nutrition and hydration status important?

- □ Perform in consultation with dietitian
 - □ Specific information needed: growth needs, nutritional needs, weight gain, fluid balance
 - ☐ If a child is growing appropriately changes should occur in all body components and not just in weight gain
 - □ The child thus needs to be growing in skeletal, brain & fat components

Why is the care-giver-child relationship important?

- ☐ Crucial relationship between child & primary feeder
- □ Children with oral-motor difficulties may require more time for safe feeding & this can contribute to feeder frustration
- $\hfill\Box$ Inform feeder why extra time is needed
- □ Feeder should be able to accommodate the needs of the child
- □ Negative behaviour interaction during feeding can lead to failure to thrive



Why is it important to know about medical & neurological problems?

- □ Related to feeding disorders
 - □ Cause feeding disorders
 - □ Slt should understand medical condition
 - ☐ SIt should understand the treatment of specific conditions & how it may impact on feeding



Multi/Interdisciplinary team work:

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- Variety of healthcare professionals usually involved in assessment of infant or young child with feeding disorder
- Paediatrician or family doctor usually the first to notice a problem or the problem is reported to them first
- □ Common referral criteria that indicates the need for team assessment

Referral criteria:

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The most common criteria is indicated by Arvedson (1993):

- □ Sucking and swallowing incoordination
- □ Weak suck
- □ Breathing disruptions or apnea during feeding
- $\hfill\Box$ Excessive gagging or recurrent coughing during feeding
- $\hfill\Box$ New onset of feeding difficulty
- Diagnosis of disorders typically associated with dysphagia or failure to thrive
- Severe irritability or behaviour problems during feeding
- □ History of recurrent pneumonia & feeding difficulty
- □ Concern for possible aspiration during feeding

Referral criteria (cont'd):

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Referral criteria (cont'd):

- □ Lethargy or decreased arousal during feeding
- \Box Feeding periods longer than 30 40 minutes
- □ Unexplained food refusal and failure to thrive
- \square Vomiting
- □ Nasal regurgitation
- □ Increased drooling

<u>Signs & symptoms indicating a need for CLINICAL</u> assessment:

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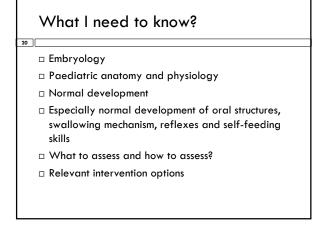
- □ Sucking and swallowing incoordination
- □ Weak suck
- □ Breathing disruptions or apnea during feeding
- □ Excessive gagging or recurrent coughing during feeds
- □ New onset of a feeding difficulty
- ☐ Diagnosis of disorders associated with dysphagia or undernutrition

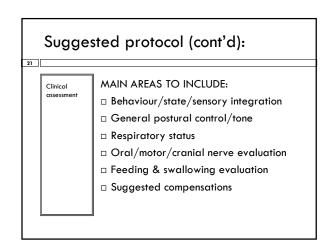
Our focus today:

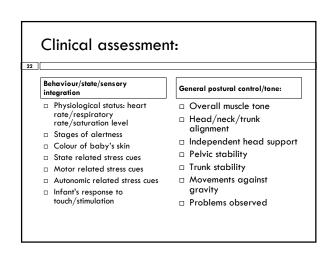
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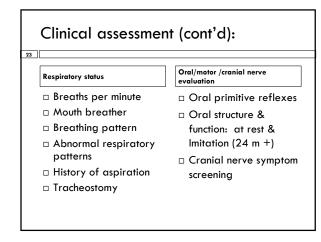
- □ Clinical assessment of high risk neonates and infants
- □ We will be discussing:
- Holistic factors to be considered
- Assessment areas
- Assessment procedures
- Format to structure observations
- □ Today's information sharing session is also based on my preliminary work for my doctorate
- The doctorate will focus on developing a validated clinical assesment instrument for paediatric dysphagia

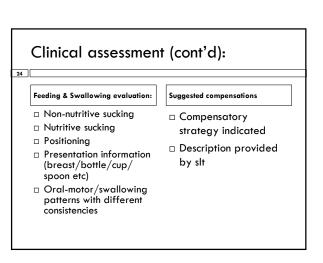
Suggested clinical assessment protocol Case history areas: Case history areas (cont'd): □ Personal information □ Feeding & swallowing □ Current diagnostic status history □ Pre-, peri- & postnatal □ Broad environment history (birth history) □ Parental concerns □ Neonatal period □ Family & social history □ Medical history □ Speech & Language □ Developmental history development



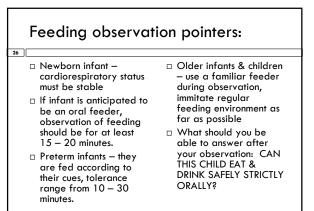


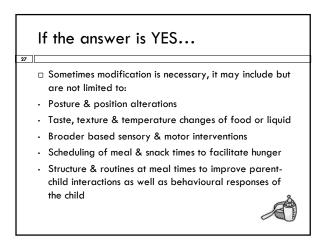


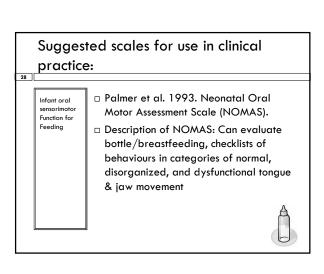


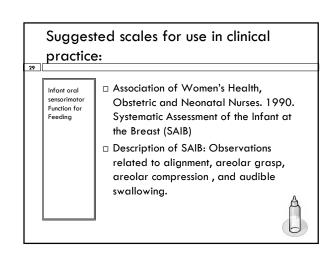


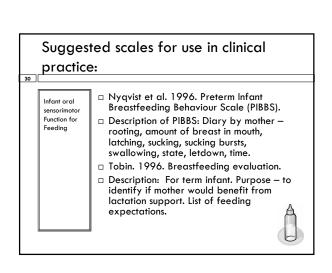
Clinical assessment (cont'd): Recommendations Other considerations for slt: □ State □ Somatic growth □ Positioning patterns $\ \square$ Presentation □ Neurodevelopmental □ Feeding schedule □ Environment □ Cardiopulmonary □ Stress signals □ Further evaluations □ Gastrointestinal recommended function











Suggested scales for use in clinical practice:

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Infant oral sensorimotor Function for Feeding

- □ Vandenberg. 1990. Bottle feeding: Feeding flow sheet.
- Description: Observations for state, respiratory rate, heart rate, nipple, form of nutrition, position, coordination, support quantity, and duration changes over time.



Suggested sources for use in clinical practice

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- □ Hall, K.D. 2001. Pediatric Dysphagia: Resource guide. Singular-Thomson Learning: Canada.
- □ Rosenfeld-Johnson, S. 2007. A 3-Part Treatment Plan for Oral-Motor Therapy. Talk Tools.
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- $\hfill \Box$ Swigert, N.B. 1999. The source for paediatric dysphagia. Linguisystems

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- □ Hall, K.D. 2001. *Pediatric Dysphagia: Resource Guide*. Singular Thomson Learning.
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