Feeding and Swallowing Difficulties in Infants and Children with HIV

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UCT
Feeding and Swallowing Difficulties

• Feeding disorders:
  – difficulty with any aspect of eating or drinking
  – including caregiver-child interaction, appetite, swallowing, food refusal, food preferences, disruptive mealtimes

• Swallowing difficulties
  – problem in 1 or more phases of swallowing
  – Including poor sucking, poor co-ordination of swallowing and respiration, aspiration
So, what can go wrong?

Oral phase:

- Poor latch
- Absent / weak suck
- Spillage
- Poor bolus formation & control
- Increased oral transit time
- Aversion / hypersensitivity
Pharyngeal phase

- Delayed / absent swallow response
- Aspiration – material enters airway below vocal cords *
- Nasopharyngeal reflux

Signs of possible problem:
Coughing, choking, spluttering, wet/gurgly voice, apnoea, hoarse voice

* Aspiration may be silent
Typical reasons for referral

- Absent / weak suck
- Suck-swallow incoordination
- Coughing associated with feeds
- Gurgly / wet voice during / after feeds
- Vomiting / GOR
- Not completing feeds
- Increased feeding times
- Hoarse voice
- Feeding induced apnoea
- Excessive spillage
- Recurrent LRTI
- Excessive gagging

- ?Aspiration
- Breathing disruptions
- Diagnosis of disorders associated with dysphagia
- Food refusal and FTT
- Irritability with feeding
- “Behaviour problems” with feeding
- New onset of feeding problem
- Transition from tube to oral feeds
- Delayed feeding milestones / failure to progress

Arvedson & Brodsky, 2002; Hall, 2001

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Consequences of dysphagia

• Growth faltering
• LRTI / respiratory compromise (due to aspiration)
• Reduced social interaction & communication
• Increased stress for caregivers
• Pain / discomfort
• Constipation
• Dental problems

Andrew & Sullivan, 2010; Reilly et al., 2011
Prevalence of feeding & swallowing difficulties

• 20 - 45% typically developing children
• 30 - 40% children with neurological involvement & others report 80%
• 40 - 70% infants / children with chronic medical problems

Arvedson, 2008; Calis et al., 2008; Lefton-Greif & Arvedson, 2007; Reilly et al., 1996; Rudolph & Link, 2002
Prevalence in infants and children with HIV and AIDS

USA:
• 45% (N=55) – before ARVs
  – Pressman & Morrison, 1988
• 20.8% (N=96) – screening only
  – Pressman, 1992

UK:
• 50% (N=42) – feeding problems reported
  – Melvyn et al., 1997

SA:
• 12.5% (N=446) – of sample of dysphagic caseload
  – Unpublished data: Oosthuizen, 2011
Reported feeding and swallowing difficulties in HIV

• Slow feeding
• Aspiration
• Coughing
• Growth faltering
• Gags with solids / textures
• Odynophagia
• Food refusal
• Behavioural feeding problems
• Delayed feeding milestones
• Nausea & vomiting
• GOR
Reasons for dysphagia in infants and children with HIV / AIDS

• Feeding difficulties associated with chronic illness
  – Psychological and emotional effects on feeding
  – Hospitalizations
  – Tube feeding
  – Caregiver factors

Schwartz & Rothlingova, 2011
Reasons for dysphagia in infants and children with HIV / AIDS

• HIV-related
  – Structure may be affected e.g. oesophageal abnormalities
  – Function may be affected e.g. encephalopathy
  – Medications may cause nausea, vomiting, and reduce appetite
  – Candidiasis (oral, pharyngeal, laryngeal, oesophageal)
  – Odynophagia

Halvorsen et al., 2003; Pressman, 2010; Rabie et al., 2007
What to look out for...

- Coughing with feeding
- Frequently does not complete feeds
- Frequently takes longer than 30 minutes to complete feeds
- Caregiver reports of feeding difficulty
- Tires with feeding
- Changes in breathing during feeding
- Changes in voice
- Excessive drooling
- Gags with feeds
- Spits out milk / food
- Chokes with feeding
- Not eating age / developmentally appropriate foods
- Complain of pain with swallowing
Role of Speech-Language Therapist

• Clinical assessment
  – Skill
  – Safety

• Instrumental assessment if indicated e.g. modified barium swallow

• Referral for other investigations if indicated

• Part of team management of feeding and swallowing
Benefits of MBS

• Defines oropharyngeal & oesophageal anatomy & function

• Determines reason for difficulty e.g. aspiration due to pooling, fatigue

• Assesses treatment strategies e.g. changes to position, consistency, rate, utensils

• Aspiration may be silent or occur with fatigue

• Safest consistency that is developmentally appropriate

• Low clinical reliability in determining aspiration of solids when compared with VFSS
Management of infants and children with dysphagia

• SAFE

• Optimal nutrition

• Facilitates development

• Multidisciplinary team which includes the FAMILY

Andrew & Sullivan, 2010; Reilly et al., 2011
Management may include

- Consistency modification
  - NB to remember to thicken medications too in consultation with doctor
- Positioning & seating
- Techniques / programme for oral sensorimotor difficulties
- Utensils
- Supplementing intake
- Caregiver counselling and training
- Alternative feeding e.g. gastrostomy

Arvedson & Brodsky, 2002; Reilly et al., 2011
GORD and dysphagia

• Frequently co-occur

• Impact of GORD on swallowing

• Intervention may affect feeding and swallowing

• Managed by medical team
Monitoring and review

• SLT should monitor feeding and swallowing in terms of safety and skills
• Determine need for ongoing modifications or new intervention
• Facilitate development of feeding skills


