Dysphagia

Definition / Supporting Information

Dysphagia is the medical term for swallowing difficulties. It is rarely seen in paediatric practice in the UK and requires a full history and a complete physical examination with a focus on neurological and neuromuscular disorders. A full swallowing assessment should be conducted with the assistance of a speech and language therapist.

Early referral to paediatric and specialist services is advised.

A complete nutritional assessment with plots on the centile chart is essential for assessment of any child with dysphagia.

Keywords / also known as: swallowing difficulties, coughing, choking, weight loss

Essential History

Ask about:

- General symptoms
  - Feeding difficulties
  - Food refusal
  - Faltering growth
  - Sensation of food stuck in the throat or chest
- Additional symptoms
  - Drooling
  - Difficulty initiating swallowing
  - Change in dietary habits
  - Aversion to certain food textures
  - Unexplained weight loss
  - Change in voice
  - Recurrent coughing
  - Noisy breathing during feeding
- Detailed feeding history
  - Current diet
    - Texture
    - Route of administration
    - Meal duration
    - Specific food aversions
  - Age at which oral feeding started
  - Exposure to taste and textures during weaning and solid intake

  - Aversive experiences
  - Method of delivering tube feeds
    - Prolonged tube feeding in infancy or childhood can lead to long-term feeding difficulties.
- Symptoms of specific dysphagias
  - Oral phase
    - Failure to initiate or maintain sucking
    - Prolonged feeding time
    - Drooling
  - Pharyngeal phase
    - Coughing
    - Choking
    - Noisy breathing during feeding
    - Nasopharyngeal reflux
  - Oesophageal phase
    - Spitting up or vomiting
    - Irritability or arching during feeding
    - Preference for liquid food
    - Sensation of food stuck in the throat
- Birth history
- Neurodevelopmental history
- Medical co-morbid conditions

‘Red Flag’ Symptoms and Signs

Ask about:

- Faltering growth
- Drooling and choking
- Change in voice
- Abnormal neurodevelopmental history
- Unexplained weight loss

Look for:

- Poor parent–child interaction
- Features of pneumonia on auscultation
- Cardiovascular signs
  - Tachycardia / gallop rhythm / hepatomegaly
- Abnormal neurological examination
- Orofacial malformations
  - Cleft palate

- Signs of systemic disease
  - Fever / weight loss

Differential Diagnosis / Conditions

- Gastro-oesophageal reflux disease
- Behavioural causes / aversion
- Structural
  - Cleft palate
- Neurological disorder
  - Cerebral palsy
- Infections
  - Thrush
- Autoimmune conditions
  - Scleroderma / systemic sclerosis
  - Myasthenia Gravis
  - Multiple sclerosis
- Congenital heart disease
- Achalasia
- Foreign body
- Oropharyngeal dysphagia should be considered in young children with:
  - Recurrent aspiration
  - Unexplained respiratory symptoms
    - Coughing
    - Chronic congestion
    - Recurrent choking
    - Acute life-threatening events
    - Recurrent pneumonia

Investigations

Children with dysphagia should be referred to secondary care for assessment and investigations.

To be undertaken by specialist practitioners (eg, Emergency Department / General Paediatric / Paediatric Gastroenterology Team(s)):

- Full blood count
  - Useful as a screening test for infectious or inflammatory conditions
- Liver function tests including serum protein and albumin
  - Useful for nutritional assessment
- Consider screen for autoimmune conditions

- Paediatric radiology
  - Chest radiography
    - Suspected pneumonia or chronic lung disease
  - Imaging / head scans
  - Videofluoroscopy and barium should be decided in conjunction with SALT.

Treatment Approach

Role of health visitor is instrumental in diagnosing and managing feeding difficulties as a result of behavioural causes / aversion.

To be undertaken by specialist practitioners (eg, Emergency Department / General Paediatric / Paediatric Gastroenterology Team(s)):

- Detect and treat:
  - Surgically or endoscopically treatable structural abnormalities
  - Inflammatory conditions
    - Reflux oesophagitis
    - Eosinophilic oesophagitis
  - Infections
  - Underlying systemic conditions such as autoimmune, neurological, and neuromuscular conditions
- Management of associated disorders
  - Associated disorders may also need to be specifically managed.
  - Previous surgery (may not be treatable)
- Management often involves a multidisciplinary approach

Specific Treatment

- Depends on the underlying diagnosis.
- Normalisation of posture and tone
  - As a basis for improved oral motor function, occupational and physiotherapy can be used to improve:
    - Head control
    - Neck and trunk tone
    - Posture
- Adaptation of food and feeding equipment
  - Change the attributes of food and liquids
    - Bolus volume
    - Consistency
    - Temperature
    - Taste

  - Adjustments in feeding schedule
    - May be beneficial for children receiving continuous tube feeds with supplemental food orally
    - The feeds can be changed gradually to bolus feeds to stimulate the child's appetite.
  - Rate of feeding
    - Should be paced to allow sufficient time to swallow before giving another bite
  - Bottle or utensils
    - May be changed according to the child's needs
- Oral motor therapy
  - Focuses on improving the oral phase of feeding
  - May include stimulation with:
    - Stroking
    - Stretching
    - Brushing
    - Icing
    - Tapping
    - Vibrating areas of the face and mouth
- Nutritional support
  - The child's nutritional needs must be met for adequate growth.
  - Supplemental feedings through a nasogastric tube or a percutaneous endoscopic gastrostomy may be necessary.
    - The presence of a feeding tube is not a contraindication to therapy.
    - Many children with feeding disorders have neurological or anatomical abnormalities that cannot be corrected, making oral feeding difficult or unsafe.

When to Refer

- Refer urgently to specialist practitioners (eg, Emergency Department / General Paediatric / Paediatric Gastroenterology Team(s)) a child with any red flag signs or symptoms.
- True dysphagia is rare in children, and early referral to paediatric services from primary care is advised.
- A referral to a Paediatric / Paediatric Gastroenterology / Feeding Team should be considered.
  - Such a team should have access to speech and language, psychology, neurology, cardiology, and infection / rheumatology specialists.

‘Safety Netting’ Advice

- Patients who are undergoing therapy for dysphagia should have a full nutritional assessment and be continually monitored for growth as well as resolution of symptoms (if treatable).

Patient / Carer Information

Please note: whilst these resources have been developed to a high standard they may not be specific to children.

- Dysphagia (swallowing problems) (Web page), the NHS website
- Difficulty Swallowing (Dysphagia) (Web page), Patient

Resources

Suggested Resources

Please note: these resources include links to external websites. These resources may not have national accreditation and therefore PCO UK cannot guarantee the accuracy of the content.

Cleft Palate: Examination in the Newborn (eLearning - requires log-in), RCPCH Compass

Miller CK, Willging JP. Advances in the evaluation and management of pediatric dysphagia. Curr Opin Otolaryngol Head Neck Surg. 2003;11(6):442-446. [PubMed]

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Cowpe Jebson E, Hanson B, Smith CH. What do parents of children with dysphagia think about their MDT? A qualitative study. BMJ Open. 2014;4(10):e005934. [PubMed]

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Morgan AT, Dodrill P, Ward EC. Interventions for oropharyngeal dysphagia in children with neurological impairment. Cochrane Database Syst Rev. 2012;(10):CD009456. [PubMed]

Tack J, Blondeau K, Boecxstaens V, Rommel N. Review article: the pathophysiology, differential diagnosis and management of rumination syndrome. Aliment Pharmacol Ther. 2011;33(7):782-788. [PubMed]

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