Women and Children's Services

NHS Greater Glasgow and Clyde

ENT

Prominent Ears

Management

Recommendation - Consider use of ear splint if <6 months

There is some evidence, in the form of case series, that ear splinting may work with fair-to-excellent results being reported in 70-100% of cases. These splints are not available on the NHS. There is only one commercial supplier at present:

http://www.earbuddies.co.uk/pws/Content.ice?page=to-splint-or-not-to-splint&pgForward=content

http://www.earbuddies.co.uk/

Non-surgical correction of congenital deformities of the auricle: a systematic review of the literature. van Wijk MP, Breugem CC, Kon M. J Plast Reconstr Aesthet Surg. 2009 Jun;62(6):727-36.

Recommendation for Referral for Surgical Correction

Children with prominent ears **should not be referred until they are at least 5 years of age** for consideration of surgical correction. This is for two reasons

1. Children should be involved in the decision making process as this purely a cosmetic procedure.
2. There is some evidence to support that children who are involved in the decision making and who are older have better outcomes.

Patient information

http://www.entuk.org/patient_info/ear/surgery_prot_html

http://www.baaps.org.uk/procedures/setting-back-prominent-ears

Acute Otitis Media ("ear infections")

Management

This is usually a self resolving condition. Management is as recommended by SIGN Clinical Guidelines 66. In the initial period recommended treatment is with simple analgesics/antipyretics. Antibiotics are not routinely recommended, but if prescribed a 5 day course is recommended. If the affected ear is discharging and this fails to settle after 7 days - please refer to section on "discharging ear" below. If a diagnosis of **mastoiditis** is considered please refer **urgently**.

http://www.sign.ac.uk/pdf/qrg66.pdf

Recommendation for Referral

If there have been **4 or more episodes of acute otitis media in 6 months.**

Other factors that may influence referral include

- severity and length of symptoms
- previous episodes of
- febrile convulsions
- mastoiditis
- intra-cranial (VP) shunts

Management options include

1. Watch and wait
2. Surgery - Grommet insertion
3. Six week course of Amoxicillin & review

Patient information

http://www.patient.co.uk/health/Ear-Infection-(Otitis-Media).htm

Discharging ear (Otorrhoea)

Management

A 10-14 day course of antibiotic/steroid eardrops is recommended

> "ENT-UK recommends that when treating a patient with a discharging ear, in whom there is a perforation or patent grommet: if a topical aminoglycoside is used, this should only be in the presence of obvious infection. Topical aminoglycosides should be used for no longer than 2 weeks. The justification for using topical aminoglycosides should be explained to the patient. Baseline audiometry should be performed, if possible or practical, before treatment with topical aminoglycosides."

Oral antibiotics are NOT routinely recommended.

Ear swab for M,C & S is NOT recommended at initial presentation, however may be considered if there has been a failed trial of topical treatment.

Quinolone and Quinolone/steroid drops although proven to effective in treating aural discharge are not licensed in the United Kingdom for the treatment of otorrhoea but are available in the form of eyedrops and may be considered for use off licence use.

References

Evidence review and ENT-UK consensus report for the use of aminoglycoside-containing ear drops in the presence of an open middle ear. Phillips JS, Yung MW, Burton, MJ, Swan, IRC: Clinical Otolaryngology, Volume 32, Number 5, October 2007 , pp. 330-336(7)

http://www.entuk.org/news/news/attachments/eardrops

Macfadyen CA, Acuin JM, Gamble CL. Topical antibiotics without steroids for chronically discharging ears with underlying eardrum perforations. *Cochrane Database of Systematic Reviews* 2005, Issue 4. Art. No.: CD004618. DOI: 10.1002/14651858.CD004618.pub2.

http://onlinelibrary.wiley.com/o/cochrane/clsysrev/articles/CD004618/frame.html

Macfadyen CA, Acuin JM, Gamble CL. Systemic antibiotics versus topical treatments for chronically discharging ears with underlying eardrum perforations. *Cochrane Database of Systematic Reviews* 2006, Issue 1. Art. No.: CD005608. DOI: 10.1002/14651858.CD005608.
http://onlinelibrary.wiley.com/o/cochrane/clsysrev/articles/CD005608/frame.html

Recommendation for Referral

Otorrhoea has been unresponsive to a course of topical antibiotic/steroid eardrops and/or has recurred following cessation of treatment.

If a diagnosis of Acute Mastoiditis is considered – please refer urgently.

Grommets/ventilation tubes

Advice for swimming

There is no evidence to support regular use of ear plugs/protection when swimming if a child has grommets.

Reference

Ventilation tubes after surgery for otitis media with effusion or acute otitis media and swimming. Systematic review and meta-analysis.Carbonell R, Ruíz-García V.Int J Pediatr Otorhinolaryngol. 2002 Dec 2;66(3):281-9.
A meta-analysis of swimming and water precautions. Lee D, Youk A, Goldstein NA.Laryngoscope. 1999 Apr;109(4):536-40.

Patient information

http://www.entuk.org/patient_info/ear/surgery_grommets_html

Otitis Media with effusion "OME", "Glue ear", "Serous Otitis Media"

Management

This is usually a self resolving condition. Management is as recommended by SIGN Clinical Guidelines 66. No treatment other than surgery has been proven to be effective.

Recommendation for Referral

If a child has OME this may manifest itself as

1. A hearing loss
2. Poor attention and/or behaviour
3. Concerns with speech
4. Delayed educational progress

If these symptoms persist for more than eight weeks, with a clinical diagnosis of glue ear, and do not appear to be improving spontaneously, referral to your **local Community Audiology Service** is recommended.

Management options include

1. Watch and wait
2. Surgery – grommets with or without adenoidectomy

http://www.sign.ac.uk/pdf/qrg66.pdf

http://www.nice.org.uk/nicemedia/live/11928/39564/39564.pdf

Reference

Clinical practice guideline: Otitis media with effusion. Rosenfeld RM, Culpepper L, Doyle KJ, Grundfast KM, Hoberman A, Kenna MA, Lieberthal AS, Mahoney M, Wahl RA, Woods CR Jr, Yawn B; American Academy of Pediatrics Subcommittee on Otitis Media with Effusion; American Academy of Family Physicians; American Academy of Otolaryngology--Head and Neck Surgery.Otolaryngol Head Neck Surg. 2004 May;130(5 Suppl):S95-118.

Patient information leaflets on "glue ear"

English http://www.ndcs.org.uk/document.rm?id=2624

Bengali http://www.ndcs.org.uk/document.rm?id=4499

Punjabi http://www.ndcs.org.uk/document.rm?id=4496

Urdu http://www.ndcs.org.uk/document.rm?id=4497

Welsh http://www.ndcs.org.uk/document.rm?id=4498

http://www.rnid.org.uk/VirtualContent/101700/Glue_ear_September_2009.pdf

Patient information leaflets on surgery

http://www.entuk.org/patient_info/ear/surgery_grommets_html

http://www.entuk.org/patient_info/throat/adenoid

Suspected Hearing Loss

Recommendation for Referral

Children with a suspected hearing impairment **should initially be referred to the local Community Audiology Service**. Children identified as having a problem requiring further investigation or intervention will have a fast-tracked referral from Community Audiology to the Otolaryngology clinics. Referrals to Otolaryngology purely for a hearing test will be redirected to the community. Children who have other otolaryngological problems in addition to the hearing impairment may be referred directly to Otolaryngology. The departments of Audiology and Otolaryngology at Yorkhill have worked closely with Community Paediatrics to streamline referral pathways.

Some children who have passed their hearing screening will develop hearing loss. If there is any parental concern, referral is required.

Recommendation for Referral

Referral if hearing loss suspected.

Organise Practice Nurse to syringe the ear/s prior to referral, if possible.

Wax

It is extremely uncommon for wax to cause a hearing loss. Wax in itself is protective. If a hearing loss is suspected please refer as above.

Throat

Recurrent tonsillitis

Management

Management is as recommended by SIGN Clinical Guidelines 117. In the acute period recommended treatment is with simple analgesics/antipyretics. Antibiotics are not routinely recommended. Throat swabs should not be carried out routinely in primary care.

http://www.sign.ac.uk/pdf/qrg117.pdf

Recommendation for Referral

1. sore throats are due to acute tonsillitis
2. the episodes of sore throat are disabling and prevent normal functioning
3. seven or more well documented, clinically significant, adequately treated sore throats in the preceding year **or**
4. five or more such episodes in each of the preceding two years **or**
5. three or more such episodes in each of the preceding three years

Patient information

Sore throats	http://www.sign.ac.uk/pdf/pat34.pdf
Tonsillectomy	http://www.entuk.org/patient_info/throat/tonsil_html

Snoring/Obstructive Sleep Apnoea (OSA)/Sleep Related Breathing Disorder

The duration and severity of symptoms required to produce long term irreversible changes (neurocognitive and/or cardiovascular) in children.

This is an area of clinical debate at present. It is unknown how long for and how severe OSA has to be in children to produce long term irreversible changes (neurocognitive and or cardiovascular). Polysomnography is the gold standard investigation, but its routine use is extremely limited due to resource availability. Home pulse oximetry is used by some clinicians, where available, but will fail to identify some of the children with moderate to mild OSA. Although there has been a poor correlation reported between symptomatology and polysomnography, most surgeons continue to rely on symptoms as their primary means of diagnosis.

Nocturnal Symptoms can include

- Snoring
- Witnessed apnoeas
- Restlessness
- Frequent arousal
- Enuresis
- Sweating

Daytime Symptoms can include

- Hypersomnolence
- Hyperactivity
- Poor concentration/Neurocognitive changes
- Low energy levels
- Failure to thrive
- Cor pulmonale - rare

References

Tonsillectomy and adenoidectomy in children with sleep-related breathing disorders: consensus statement of a UK multidisciplinary working party.Robb PJ, Bew S, Kubba H, Murphy N, Primhak R, Rollin AM, Tremlett M. Ann R Coll Surg Engl. 2009 Jul;91(5):371-3.
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2758429/pdf/rcse9105-371.pdf

http://onlinelibrary.wiley.com/o/cochrane/clsysrev/articles/CD003136/frame.html

Recommendation for Referral

At present there are no recommended clinical guidelines for referral.

Referral is at referrer's discretion.

Management options include

1. Watch and wait
2. Adenotonsillectomy – reported success in 79-92% of cases
3. CPAP

Patient information

OSA http://www.patient.co.uk/doctor/Obstructive-Sleep-Apnoea-in-Children.htm

Tonsillectomy http://www.entuk.org/patient_info/throat/tonsil_html

Adenoidectomy http://www.entuk.org/patient_info/throat/adenoid

Tongue Tie

Tongue tie in the majority children is of no clinical significance. There remains debate as to whether or not frenulectomy will improve either feeding in neonates or speech in older children.

For poor feeding in neonates with associated tongue tie NICE recommends:

"Current evidence suggests that there are no major safety concerns about division of ankyloglossia (tongue tie) and limited evidence suggests that this procedure can improve breastfeeding. This evidence is adequate to support the use of the procedure provided that normal arrangements are in place for consent, audit and clinical governance."

http://www.nice.org.uk/guidance/IPG149

http://www.nice.org.uk/nicemedia/live/11180/31411/31411.pdf

There are no recommendations or guidelines for tongue tie with presumed associated speech difficulties.

Recommendation for Referral

Neonates with feeding difficulties and a tongue tie should be considered for referral after review by Breastfeeding Clinical Nurse Specialist/Midwife.
At present there are no recommended clinical guidelines for referral for tongue tie and speech difficulties. Referral is at referrer's discretion.

Patient information

http://www.nice.org.uk/nicemedia/live/11180/31410/31410.pdf

Drooling

In children with no neurodevelopmental problems, drooling is normal up to the age of 4 years. Oral awareness should be encouraged.

Recommendation for Referral

Neurodevelopmentally normal children aged 4 years or over who have significant drooling problem should be referred to a **General Paediatric ENT Clinic**.
Children who have neurodevelopmental problems and have significant oral/saliva control issues should be **referred directly to the Saliva Control Clinic**.

Management options include

- Speech and language therapy review
- Physiotherapy review
- Anticholinergic medications
- Botox injections to salivary glands
- Adenoidectomy/adenotonsillectonsillectomy
- Salivary gland surgery

Stridor

The majority of infants with stridor will have laryngomalacia. This in itself is usually self limiting although up to 10% will require surgical intervention.

Warning signs

- Failure to Thrive
- Feeding Difficulties
- Stridor severity or frequency worsening over time
- Severe GORD
- Work of breathing – high rate
- Chest anatomical changes (Pectus Excavatum/Carinatum)
- Hoarseness
- Cyanotic episodes
- Apnoeic episodes

Recommendation for Referral

Any infant/neonate that has stridor and any of the above "warning signs", or any other overriding clinical concern, should be referred. A trial of anti-reflux medications (Gaviscon and Ranitidine) should be initiated at time of referral, as gastrooesophageal reflux disease (GORD) is associated with worsening symptoms. All these neonates/infants and children should be **referred directly to the Complex Airway Clinic**.

Voice/Hoarseness

Hoarseness/voice problems are uncommon in children, with most causes being benign. Hoarseness that is due to voice strain will tend to fluctuate over time.

Warning signs

- Stridor

Recommendation for Referral

Urgent referral is recommended if there is associated stridor.

Persistent isolated hoarseness

Children with isolated hoarseness that is constantly present for 6 weeks should be considered for **direct referral to the Voice Clinic**.

Nose

Nasal Obstruction

Nasal obstruction in children is common. After recurrent URTIs, the most frequent causes of this are either adenoidal hypertrophy (usually <6years of age) or allergic rhinitis (usually >6 years of age). The natural history of adenoidal tissue is that it will atrophy over time. Consider the possibility of Obstructive Sleep Apnoea (please section above).

Warning signs

- Bloody discharge
- Unilateral discharge
- Foul smell
- Facial Swelling
- Protruding polyp/s

If atopic history or allergic rhinitis is suspected please follow ARIA (Allergic Rhinitis and its Impact on Asthma) Guidelines for management Flow Chart on page 6 of ARIA Pocket Guide.

http://www.whiar.org/docs/ARIA_PG_08_View_WM.pdf

Recommendation for Referral

If the child demonstrates any of the above "warning signs" – urgent referral is recommended.

If there is snoring and clinical suspicion of OSA/SRBD, please see section related to this.

http://www.whiar.org/docs/ARIA_PG_08_View_WM.pdf

Patient information

Allergic Rhinitis http://www.cks.nhs.uk/patient_information_leaflet/rhinitis_allergic

Adenoid surgery http://www.entuk.org/patient_info/throat/adenoid

Epistaxis/Nose bleeds

Nose bleeds are common in children and are usually self limiting.

There is a growing body of evidence to implicate low grade *Staphylococcus aureus* infection as a contributory factor to ongoing epistaxis and that treatments designed to reduce carriage of this organism lead to resolution of symptoms.

Warning signs

- Bloody discharge
- Unilateral discharge
- Foul smell
- Facial Swelling
- Protruding polyp/s
- Epistaxes lasting more than 30 minutes. Recommend ask for Family History of Bleeding diathesis and check FBC and coagulation screen

Recommendation for Referral

Epistaxes that have been unresponsive to a course of topical Naseptin cream or Bactroban ointment used twice daily in both nostrils for one month and/or the epistaxes that have recurred following cessation of two courses of this treatment.

http://www2.cochrane.org/reviews/en/ab004461.html

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2908001/pdf/2008-0311.pdf

Cervical Lymphadenopathy

Palpable lymphadenopathy is common in children. The majority of palpable nodes are reactive and serious pathology is rare. Reactive nodes will frequently fluctuate in size and will often increase in size with subsequent URTIs.

Warning signs

- Nodes > 2-3cm in size
- Nodes in the supraclavicular region
- Associated groin or axillary lymphadenopathy
- Hepatosplenomegaly
- Nodes increasing rapidly in size over time
- Night sweats
- Weight loss
- Recurrent fevers

Reference

A child with cervical lymphadenopathy. Kubba H. Clin Otolaryngol. 2006 Oct;31(5):433-4.

Recommendation for Referral

Any infant or child who presents with lymphadenopathy and any of the above "warning signs" requires urgent referral.
Any infant or child that has cervical lymphadenopathy for more than 6 weeks that is not following the standard course of reactive nodes.

Foreign Body

Recommendations for Referral

Ear

Non-urgent referral for syringing

Nose

Urgent referral – may require removal under anaesthetic

Throat

Urgent referral – may require removal under anaesthetic