

Audiology

G248 TRANSITION FROM PAEDIATRIC TO ADULT AUDIOLOGY SERVICES: A PILOT STUDY IN BATH

A Reid, A Dighe. *Royal United Hospital NHS Trust, Bath, UK*

During 2007, it was decided to run joint meetings with local representatives from RNID, NDCS, Social Services, Education and Health (Adult Audiology and Community Paediatrics). In addition, there was input from a Deaf Adult Link Worker. The purpose of the meetings was to respond to the NDCS document "Transition from Paediatric to Adult Audiology Services in England" in a positive manner and take forward the suggestions outlined in that document and to develop the concept of a "transition clinic". The purpose of the clinic is to assist/coach the child through the process of transferring to the adult department over a period of time. At the clinic there would be a professional with the appropriate skills to enable the child to come to their own conclusions and make their own, informed decisions. A resource pack was developed at the meetings and makes use of materials from several agencies. We are currently trialling the resource pack at the newly introduced "transition clinics". Early results will be reported.

G249 IS "FAIR HEARING" (INTEGRATED CARE PATHWAY FOR GLUE EAR) WORKING?

T Williamson. *Child Health Department, Bath and North East Somerset PCT, Bath, UK*

Aims: (1) To establish and introduce an integrated care pathway for glue ear, and (2) to monitor the effectiveness and impact of the pathway.

Methods: The Fair Hearing pathway was established in consultation with the numerous key stakeholders, including parents. The pathway was to address three major concerns: equity of access, informed choice for families and evidence-based interventions. An assessment of the impact of the pathway on service take-up is needed to plan for future provision. The pathway is monitored as follows:

1. Annual measures of the distribution of clinic attendees in terms of the deprivation index of their postcode.
2. Annual "focus groups" for families to feedback their experiences.
3. Measurement of the use of the evidenced-based form OM2-9.
4. Measures of which management choices families have made for glue ear.

Results:

1. The clinic attendees are fairly distributed across the range of deprivation.
2. Families report difficulty getting access to key clinicians for the management of glue ear. They lacked information about hearing aids. The services lacked co-ordination, and management plans differed according to which clinician they saw.

The results of 3 and 4 will be available by the end of March 2009.

Conclusions: Fair Hearing is functioning in terms of equity of access, and clarity of the pathway. The new service is family centred, and families can shape the service. A new family information pack has been introduced. Plans to extend to monitoring to include deviance from the pathway will be discussed.

G250 IMMUNE-MEDIATED AUDIOVESTIBULAR DISORDERS IN THE PAEDIATRIC POPULATION

C Agrup. *The National Hospital for Neurology and Neurosurgery, London, UK*

Recent studies show that several audiovestibular pathologies in the paediatric population may be immune-mediated. This is even more probable if the pathology is associated with a coexisting systemic

autoimmune disorder. At this time, however, the current literature is limited to a few case reports, and little is known with regard to prevalence, diagnosis and management of immune-mediated inner ear disorders in children. This paper aims to shed some light on clinical presentation, diagnosis and treatment of paediatric immune-mediated inner ear disorders. Sudden and progressive sensorineural hearing loss will be discussed, in addition to some of the systemic autoimmune disorders commonly associated with immune-mediated audiovestibular pathology, such as Cogan's syndrome, systemic lupus erythematosus, Behçet's disease, Sjögren's syndrome and juvenile idiopathic arthritis.

G251 A STUDY OF HYPERACUSIS IN 100 NORMALLY-HEARING CHILDREN

N Sattar. *East Lancashire Hospitals Trust, Burnley, UK*

Introduction: There has been a significant increase in the number of children presenting with intolerance to certain sounds. The triggers seem to be consistent in almost all cases. Some of the typical sounds are; electrical machines, eg, vacuum cleaners and hand driers, drills, loud music, heavy vehicles traffic, sirens, people shouting, dogs barking and fireworks. The typical response of the children is covering the ears with their hands, sometimes crying and even running away. Hyperacusis in William's syndrome and other conditions were reported and the phenomenon of recruitment in some children with sensori-neural hearing loss was well recognised. However, in a District Paediatric Audiology Service, it was uncommon to see cases with hyperacusis so frequently until the turn of this century.

Method: The first 100 patients seen by the author between January 2000 and April 2006 with no hearing losses were studied. Audiological assessment included hearing thresholds, tympanometry in all cases and transient evoked oto-acoustic emission (TEOAE) test whenever possible.

Results: All cases have no significant hearing loss and normal tympanometry. In the majority (56%) where the TEOAE test was possible, emissions were present confirming normal cochlear function. The male to female ratio was 2:1. The majority of children presents at a young age with a peak at 3–4 years and the symptoms seem to ameliorate with time. 72 cases were referred because of hyperacusis with different presentations. In a quarter of cases, concern about hearing, speech or behaviour was the main reason for referral. Health visitors and parents were the largest source of referral contributing to 65% of cases. In a significant number of cases there were one or more associated conditions such as autistic spectrum disorder (ASD), attention deficit hyperactivity disorder, meningitis, migraine, perinatal problems usually related to prematurity, etc.

Conclusions: Over the study period, there was an increase in the number of children presenting with hyperacusis. The commonest associated condition was ASD. The fact that all cases included showed no evidence of peripheral auditory lesion, suggests strongly that these cases of hyperacusis are central in origin, probably due to imbalance in brain transmitters. Serotonin seems to be the most likely transmitter involved in this phenomenon.

G252 SPECIALIST DEAF CHILD AND ADOLESCENT MENTAL HEALTH SERVICES: THE NEW NATIONAL SERVICE—WHO IT WILL SEE AND HOW IT WILL WORK

S Roberts. *Hull York Medical School, York, UK*

This will describe the newly commissioned National Deaf Children's' child and adolescent mental health service. It will

outline where the teams will be based, what referrals will be accepted and what type of work will be undertaken. It will aim to demonstrate how professionals can access the service.

G253 PAEDIATRIC TINNITUS: AN OVERVIEW AND PRACTICAL MANAGEMENT APPROACH

V Kennedy. *Bolton NHS, Bolton, UK*

Tinnitus in children is an often overlooked but not uncommon symptom. There is a reported prevalence of up to 29% in children with normal hearing and up to 66% in children with hearing impairment. It is important to ask about the presence of tinnitus in children attending for hearing assessment as it may underlie speech perception difficulties in noise and in quiet. It may also be a presenting feature of psychosocial problems at home or school. It may be a factor behind difficulties in sleep, concentration, listening and attention skills as well as behavioural problems. For some children, clear triggers precipitating or aggravating the tinnitus may be apparent on discussion of the tinnitus with the child and his/her carer. Not all children with tinnitus will spontaneously discuss it. Some children may be reluctant to volunteer that they have tinnitus or talk about it because of being frightened of the tinnitus itself, or, being aware that it is not a "real" sound, may worry about what it could signify. The apparent reluctance of adults to discuss it may compound this worry. After excluding any pathological cause for the tinnitus and treating any existing hearing loss, a reassuring explanation to the child who has tinnitus may prevent it from becoming troublesome or worsening. It is important to explore if there are any associated problems provoking or caused by tinnitus as tinnitus symptoms often decrease when other presenting or co-existing symptoms are addressed. Although many children with tinnitus adopt successful strategies to enable them to cope with the

tinnitus, exploring psychosocial elements may help guide the child in developing successful strategies and minimise the negative impact of tinnitus. As with adults, a child is likely to habituate to tinnitus if there are no negative associations or if he has reassuring or positive support. A small number of children require formal psychological input to help them manage intrusive tinnitus. A narrative, child centred approach, which includes the carers/family, has been successful in helping children manage troublesome tinnitus. The presence of tinnitus in a child may also impact on the carers. Their worries and concerns about it also need to be addressed as these may have a negative impact on how the child perceives the tinnitus. The presentation of paediatric tinnitus, factors influencing it and strategies to manage it are discussed in this presentation.

G254 THE ROLE OF SPEECH DISCRIMINATION TESTS IN PAEDIATRIC AUDIOLOGICAL ASSESSMENT

R Aylett. *British Association of Paediatricians in Audiology, London, UK*

Introduction: Informal discussions with paediatricians working in audiology have shown that speech discrimination tests are used for a variety of reasons in audiological assessment of children.

Aims:

1. To document current practice.
2. To develop clinical protocols for use across the region.
3. To list value-added elements of the speech discrimination tests.

Method: A questionnaire-based study was carried out by the South Thames Audiology Audit and Governance Group.

Conclusions: Findings confirming the range of value-added elements that speech discrimination tests bring to audiometric testing and the variation in practice will be discussed with recommendations for developing standardised practice.