The Assessment and Management of Children with Tinnitus

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Your confidence levels
An introduction to draft guidelines

Tinnitus in children and teenagers
Guidelines for good practice
Workshop Aims

• Practical tips on assessment
• How to explain tinnitus to a child
• A taster of the BSA guidelines
• Case studies
Current Service Provision

- 19% always asked
- 33% asked based on criteria
- 44% offered service
- 73% unhappy with current service level
Development of the Project

• 2011

— Priority Setting Partnership, National Survey

[Logos of BTA, The University of Nottingham, MRC Institute of Hearing Research, and British Society of Audiology]
Tinnitus Myths and Facts

• Children aren’t affected by tinnitus.

• Asking children about tinnitus will unnecessarily increase their concern or even their experience of tinnitus.

• In fact:
  – Tend not to report unless asked
  – Whilst evidence for paediatric tinnitus management is scarce there is evidence for adult tinnitus management and paediatric anxiety management
Key Recommendations

Seen in a paediatric setting by those with paediatric skills
• Environment must be child friendly
• Familiar with working with families
• Familiar with working with MDT
• Skills for mild/moderate distress available within most services
• Need for specialist centres for those with severe distress or complex presentation

Ask EVERY child
• Yep, everyone...

Involve children
• Whenever possible
• Directly
• In assessment
• In symptom management
• Key aspect to management – talking with children about what tinnitus is and how it affects them

Focus
• On the child
• Not the ear or tinnitus
• Holistic (child and family)
• Multidisciplinary approach
Signs of tinnitus in clinic

• Avoidance or distress in anticipation of PTA
• Unreliable PTA, suggestion of non-organic
• Dislike of one ear
• Unexplained difficulties with h/aid
• Sleep difficulties
• Unexplained listening difficulties in school
• Difficulties in listening in noise AND quiet with normal thresholds
Assessment

• Key points:
  – Child friendly environment with age appropriate techniques
  – Tinnitus should be considered in the context of other signs and symptoms
  – Utilize play and drawing to gather information
  – Flexible approach needed for audiological testing
  – Red Flags for onward referrals
**Patient interview:**
- Tinnitus characteristics
- Noise exposure
- Family history (tinnitus, hearing loss)
- Medical history (meningitis, head injury)
- Annoyance / distress
- Impact
- Otology (hearing loss, dizziness, vertigo, hyperacusis, ear infections)
- Neurological (headache, facial nerve palsy)
- Drugs (chemotherapy, antibiotics, all other medications)
- Alcohol / recreational drugs
- Social / psychological (school performance, bullying, family break-up)
- Mental health issues
- Current coping strategies

**Examination:**
- Otoscopy

**Tests:**
- Audiometry
- Tympanometry
History taking

- Ringing
- Buzzing
- Whooshing
- Peeping
- Swishing
- Choo choo
- Rustling leaves
- Ghosts
- Singing

Picture courtesy of Rosie Kentish, Clinical Psychologist, RNTNE UCLH
Audiological assessment

- Children with tinnitus can get very stressed about audiometry
- Need plenty of time and flexible approach
- Keep a close eye on child throughout test
- The 4-6 kHz dip, real or artefact?
- Need good otoscopy and tympanometry
Red Flags

- Ear discharge
- Persistent earache or headache
- Dizziness/vertigo
- Unilateral/pulsatile tinnitus
- Head injury
- Middle ear myoclonus
- Abnormal findings in otoscopy
- OME with severe distress normal hearing
- Progression of known hearing loss
- Identification of unmanaged hearing loss
- Signs of depression/severe anxiety/self harm
- Reluctance to attend school/socialise with friends
- Significant family issues
Tinnitus management

• Managing tinnitus *distress*

• Holistic and inclusive approach – families, home, school and activities

• Flexible management tool-kit – variety of strategies that address physiological and psychological aspects to child’s care

• High levels of distress can sometimes simply need good information counselling
Child Friendly Tinnitus

Emond & Kentish adapted from McKenna, Baguley & McFerran, 2010
Why is counselling important?

- Children want to be heard and believed
- May have false beliefs about tinnitus e.g. bees, will lose hearing
- Reduces worries, anxiety
- Reduces tinnitus distress
- Increases child’s sense of control
- Enables child to find creative solutions and strategies to managing tinnitus
Child friendly practice

- listening to the child
- Allowing adequate time
- Age appropriate language and setting
- Informal, playful and fun
Tinnitus model

- Random electrical Activity in ear or brain
- Filters fail to block electrical activity
- Conscious Awareness and dislike
- Concern
- Increase in autonomic nervous activity

McKenna, Baguley & McFerran (2011) Living with Tinnitus and Hyperacusis
Child Friendly Tinnitus Model Emond and Kentish 2013
Traffic lights let through sounds that are important, scary or interesting.

What sounds can we hear now?

What noises will the traffic lights let through?
A lion roaring behind you?
Tinnitus, ear pain?
The sound of your breathing, tummy
Child Friendly Tinnitus Model Emond and Kentish 2013
"I don’t like this noise!"

Or: “It’s just the noise of my ears working. I don’t have to listen to it. Instead I can I hear my ear noises
Thoughts and feelings

The noises make me feel

(sad, angry, scared, I worry I am going to lose my hearing, it’s not fair, there’s nothing I can do about these noises)
When I feel scared or worried

My body

(headaches, clenched fists, tense, butterflies in my tummy etc. I want to run away!)
Ear noises

Noise traffic light

I hear my ear noises

Emotions

Body Alarm

Child Friendly Tinnitus Model Emond and Kentish 2013
Breaking the cycles

Understanding the cycle is the first step to breaking it!

• Relaxation
• Positive coping thoughts
• Coping with worries
• Coping with stresses
Strategies

• Sound enrichment
• Relaxation
• Narrative therapy
• Mindfulness techniques
• Cognitive behavioural therapy techniques
• Sleep advice and management

• School environment
• Managing quiet
• Counselling
• Coping strategies for everyday living and managing anxiety
Case Studies

• Some of our experiences:
Your confidence levels