

# Tinnitus Series

## Part Three: Helping Your Tinnitus Patient

In the first part we defined tinnitus and discussed the mechanisms which generate it. In the second part we outlined assessment through relevant history and examination. In part three we summarise management options through which the family doctor can help their patient with tinnitus.

### Aims of treatment

- Correct the correctable.
- Eliminate concern that the tinnitus may have serious clinical implications.
- "Demystify" the tinnitus with explanation & understanding.
- Reduce abnormal neural activity "tinnitus signal" arriving at the primary hearing centres.
- Encourage the primary hearing centres to focus on neural activity generated by external sound and arriving through the direct hearing pathways and in doing so reduce the attention paid by them and their association areas to the tinnitus signal.

### Managing your tinnitus patient

Appropriate management options will depend on the situations identified during assessment.

- 1. Ear disease.** Treat ear canal obstruction and external & middle ear disease.
- 2. Sudden sensorineural hearing loss accompanying a sudden onset or increase in subjective tinnitus.**
  - Urgent referral is required irrespective of whether there has been associated trauma or not. If you anticipate a delay before your patient receives specialist assessment then commence prednisone 60mg daily and betahistine 16 mg bd. If possible get a diagnostic audiogram first as a baseline.
- 3. Sudden onset or increase in subjective tinnitus which is not associated with ear disease or sudden change in hearing.**
  - If there has been recent change in drug therapy consider readjusting it.
  - If there has been recent acoustic shock, neck trauma or dental treatment and your patient is very distressed consider a very short course of a benzodiazepine as well as appropriate physical treatment.
  - Identify and address any recent episode of acute stress, anger, fear, depression or pain.
- 4. Pulsatile tinnitus.**
  - If no readily managed source has been identified then, based on your assessment, refer to a cardiologist, neurologist or otologist. Each of these can, if appropriate, arrange MRI with or without angiography.
- 5. Patulous eustachian tube.**
  - Cause of weight loss may require treatment. Excessive distension of the drum, a sensation of blockage and the irksome awareness of breath sounds themselves may justify review by an otologist.

## **6. Troublesome tensor palati or tensor tympani contractions.**

- These may respond to treatment of the jaw and chewing muscles which share the same Vc nerve supply. If they don't, and provided there is no generalised neurological disease, then rapid contractions/fasciculation of tensor palati or tensor tympani will usually respond to an anticonvulsant such as carbamazepine.

## **7. Problems with the jaw and neck.**

- These not only contribute to troublesome tensor palati or tensor tympani contractions but also to development and persistence of subjective tinnitus. Postural and dental factors should be identified and minimised. Dental treatment/bite plate, physiotherapy and/or neck exercises may be appropriate.

## **8. Unilateral subjective tinnitus.**

- Especially when unilateral tinnitus accompanies unilateral hearing loss and impaired balance, referral is required to exclude a vestibular schwannoma (acoustic neuroma), except in the very elderly and/or infirm in whom any intervention would be out of the question.
- Ménière's disease/cochlear hydrops is a much more common cause of unilateral symptoms but the symptoms are usually recurrent rather than persistent.
- Unilateral tinnitus may occur without asymmetrical hearing loss especially when accompanying neck and/or jaw problems.

## **9. Bilateral subjective tinnitus.**

- Most often tinnitus is bilateral though not necessarily symmetrical. Usually there is associated bilateral hearing impairment and often a history of longstanding noise exposure, increasing age and/or a family predisposition. Occasionally drugs, foods and drinks may be contributing and very occasionally metabolic and neurological conditions. You as the family doctor are in an excellent position to decide if any of these needs to be excluded with appropriate tests.

## **10. Explanation and reassurance.**

- Except when referral to a colleague is required you can usually reassure the patient on the strength of the history and your examination that you have excluded any conditions with serious implications.
- You can explain that their tinnitus is due to abnormal awareness and increasing focus by their hearing centres on brain activity which was not caused by sound but which the hearing centres are inevitably interpreting as sound.
- You can explain that the aim of further management is to reduce the attention being paid to the tinnitus, disassociate negative memories and emotions and to help the hearing centres refocus on nerve activity generated by external sound. This may involve managing their sound environment and sometimes carefully selected amplification.

## **11. Referral for counselling, sound therapy, amplification & other specialised help.**

Some audiologists have specialised training and experience in understanding tinnitus, providing appropriate counselling, using sound and when appropriate carefully selected hearing aids. For most patients such an audiologist is the best person to provide further management. There will be occasional patients who require additional assistance with cognitive behavioural therapy, social help, peer support in a tinnitus support group and very rarely psychiatric care.

In our fourth and final part we shall look in detail at the help available through specialised counselling, sound therapy and amplification.

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