

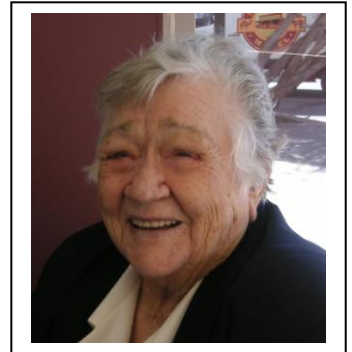


Hearing Happenings In the Hill

The official newsletter of the
Broken Hill & District Hearing Resource Centre Inc.
Edition 3
July 2011

Social Morning Cath Bonnes AM - Voluntary Coordinator

On the 6th of March, the Centre held a social morning. This was a chance for clients, family, carers or people within our community interested in hearing loss to mix with others for a informal gathering. Tea and coffee was served along with pancakes. Although this was a informal social gathering, we covered topics such as; social exclusion, Tinnitus and encouraged people to look more closely at their own hearing loss and ways to help supplement.



We would like to thank all the people who contributed to the morning, a special thank you goes out to Lia Staker for the delicious pancakes. If you would like to join us for our next Social morning, please contact us at the Centre.

Upcoming Events

Broken Hill Disability Expo

Broken Hill Entertainment Centre

Wednesday 8th June 2011- 10am - 4pm

For further information please contact the Centre

Please note: The Hearing Centre will be closed on Wednesday the 8th June for the Broken Hill Disability Expo

The Hearing Centre will be holding the next social morning on **Tuesday 28th June** at 10.30am till 12 noon, please let us know in advance if you would like to attend. This is for catering purposes. Thank you.

General meetings for 2011 are to be held on the following dates;

7th September 1pm

All meeting will be held at 187 Argent St Broken Hill

The **2011 AGM** will be held on the 24th November 2011 at 11am – 187 Argent St, with a light luncheon to follow. All members will be notified prior to the AGM by mail.

Annual Membership Fee is now due for 2011/2012

If you would like to renew your membership and have not received a notification by mail or would like to become a new member, please drop into the Centre for a renewal or new membership form, alternatively phone the Centre and we will post a Membership form out to you.

Membership subscriptions will be accepted up until the 30th of June.

Membership Subscription (Individual) \$5.00 annual fee

Tinnitus - Professor William Gibson AM



Professor Gibson is currently head of the Ear, Nose and Throat Unit within The Department of Surgery at The University of Sydney. He is the head of the ENT Department at The Royal Prince Alfred Hospital and works also at The Children's Hospital at Westmead and at The Mater Hospital, Crows Nest. He is the director of The Sydney Cochlear Implant Centres at Gladesville, Newcastle and Canberra.

The following information is small excerpt from Prof Gibson's presentation at the "Hearing in the Hill" Silver Jubilee Seminar, Oct 2010. For a full copy of Professor Gibson's presentation, please contact the Hearing Centre.

Tinnitus is a perception of sound even when no sound is entering the ear. It can be momentary- a sudden ping which quickly fades away. This is caused by sudden change of pressure within the middle ear and almost everybody has experienced it. Tinnitus can be pulsatile, which means the person is hearing a blood vessel in the ear. However, the commonest form of tinnitus is a constant 'cicada' sound all the time. How many people have it? Just about everybody! This is the form of tinnitus that I am going to talk about today.

What is the usual site that initiates tinnitus? I believe it almost always begins in the cochlea or inner part of the ear. If some damage occurs within the cochlea, this starts the tinnitus, even though later on tinnitus is perpetuated within the brain.

Let us consider how we hear. Sound enters the ear and the vibrations stimulate the hair cells within the cochlea, which in turn activates the hearing nerve and sends the appropriate signals along the auditory pathway towards the cortex of the brain where the person 'hears' the sound. The auditory pathway passes through relay stations in the mid brain where various interactions occur influencing the way the signal is perceived. Tinnitus occurs when no sound comes from outside and yet a signal passes along the brainstem, through the mid brain to reach the auditory cortex where it becomes a conscious signal.

The activity which initiates the tinnitus is known as the tinnitus generator. I believe the usual site of the tinnitus generator is initially within the cochlea. Sufferers may worry that the tinnitus is generated by a tumor or something nasty in the head, but the commonest site is in the hair cells within the cochlea. The cochlea is composed of two types of hair cells; the inner hair cells and outer hair cells. The outer hair cells have a motor function and continuously tune the cochlea amplifying the vibrations caused by the sound waves. These outer hair cells consume more energy than virtually any other cell in the body, and unfortunately, they may only survive for three score years and ten. As we can now live longer than 70 years, we may become hearing impaired in older age because our outer hair cells may not survive as long as the rest of our body.

Damaged hair cells in the cochlea are the commonest tinnitus generator. Kids who listen to their iPods or drive along with their radios blaring, will damage their hair cells and later in life suffer from hearing loss and tinnitus. Other causes of outer hair cell damage include excessive noise from shooting guns, blast injury, industrial noise, etc. The outer hair cells are fragile and easily injured.

Almost everybody over the age of 25 years has a tinnitus generator because hair cell damage is very common. If people are placed in a totally sound proof chamber, over 90 per cent of people will hear some tinnitus. Fortunately most people are unaware that they have tinnitus unless they are put in a soundproof chamber. What are the causes that damage hair cells and cause them to become tinnitus generators? There are very many different causes: these include genetic problems; noise damage; medications; infections, and Meniere's disease, and

many others. All these causes and many others result in a tinnitus generator. Once there is a tinnitus generator, other factors can aggravate the situation.

There are two popular theories as to why there is tinnitus. One is that the brain is trying to 'fill in' areas where there is a loss of hearing. The other is that the ear generates a sound initially which is perpetuated in the brain. I favor the second theory. Tinnitus occurs when no sound comes from outside and yet a signal passes along the brainstem, through the mid brain to reach the auditory cortex where it becomes a conscious signal.

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These are the tinnitus aggravators. Anything that blocks your ear preventing sound entering or leaving the ear will aggravate tinnitus. For instance, if you put your finger in your ear, your tinnitus will get worse. People who try to lessen their tinnitus by putting cotton wool or something else in the ear canal will make tinnitus worse. The ear canal needs to be open so that the unwanted signal can pass out of the ear rather than only inwards towards the brain. Furthermore outside sounds help to cover up the tinnitus.

One thing that can aggravate tinnitus is wax. Removal of the wax may make the tinnitus unnoticeable.. Other aggravating factors are: a middle ear effusion; otosclerosis; a blocked Eustachian tube, and temporo-mandibular (jaw) joint dysfunction. The jaw joint is in the front of the ear canal and, if it gets swollen and inflamed, it changes the shape of the ear canal. Jaw dysfunction does not cause tinnitus but aggravates it and makes the tinnitus generator noticeable in some people.

How can a person with distressing tinnitus be helped? Too many people have it! It's not a rare disease. The role of the family practitioner or ENT surgeon is to diagnose the most likely cause, exclude serious causes such as a brain tumor, allay the fears and engender a positive outlook. Usually treatment is the role of the audiologist.

How can the doctor make tinnitus worse? By promoting negative beliefs by saying, 'nobody knows what causes tinnitus' - or, 'there is no cure' - or, 'you must learn to live with it'. Such doctors are not helping their patients.

How can the doctor help their patients so that the tinnitus adapts and fade away: A diagnosis is always reassuring? For example; when the doctor says, 'your tinnitus is due to wearing your iPod too frequently'. Next the doctor can say, 'You do not have a dangerous disease' or '95 per cent of patients are able to adapt and the tinnitus fades away and becomes insignificant' and, 'for those who cannot adapt, treatment is available'. So what is the treatment if the tinnitus does not adapt? Previously tranquilizers or sleeping pills were often used. These medications suppress activity within the limbic system and reticular system. People become very 'phased out' - not a good treatment.

Masking the tinnitus has lost favor recently. Masking is when a sound is introduced to the ear which is louder than the tinnitus. Often the masking noise is as irritating as the tinnitus and, worse, when the masking noise is switched off, the tinnitus returns and may even seem louder. Nowadays cochlear implants can restore hearing and often alleviate tinnitus.

For anyone who is suffering from intolerable tinnitus – don't despair there is help.

Help is available from your local support group; we recommend that you consult your General Practitioner or ENT for advice.

NEW PERSONAL HOSPITAL KIT

Better Hearing Australia Canberra Group has developed a new **Personal Hospital Kit** for use by people with a hearing loss who have to go into hospital. The kit is designed to make them feel safer in hospital by providing **signage** to identify them as a person with special communication needs. It will also provide **advice** in preparing for a hospital visit, what to expect in hospital and contains a trouble shooting guide for hearing aids that might be playing up.

The Kit has been designed for people with a hearing loss by people with a hearing loss. The Kit was launched by Mr John Sykes, President of the Deafness Resource Centre at the Hearing Expo in Canberra on the 25 August 2009.

The best news is that the Kit is only \$20. It would make a suitable gift for a hearing impaired person on a special occasion. The real advantage is having one ready in case you are admitted to hospital at short notice.



Here is the Kit made up into an A5 resealable bag ready to go with you to hospital. As you can see the container when packed is designed so that it can be used as a sign that the owner has a hearing loss.

You can obtain the [Personal Hospital Kit](#) through the Broken Hill & District Hearing Resource Centre or from Sue Daw on 02 62514713 or by emailing sdaw@bigpond.com

Would you like to contact us?

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We are open Monday to Friday 10am - 4pm Central Standard Time
Other times by Appointment

The Broken Hill & District Hearing Resource Centre Inc. is a Non Profit organization with gift tax exemption. All donations over \$2.00 are tax deductible.

This newsletter was compiled and edited by Anne Woods on behalf of The Broken Hill & District Resource Centre Inc. Contributions to our newsletter are welcome. The editor reserves the right to use or edit as necessary.

Ideas and opinions articulated in "Hearing Happenings in the Hill" are those of the authors and not necessarily of the Broken Hill & District Hearing Resource Centre Inc.