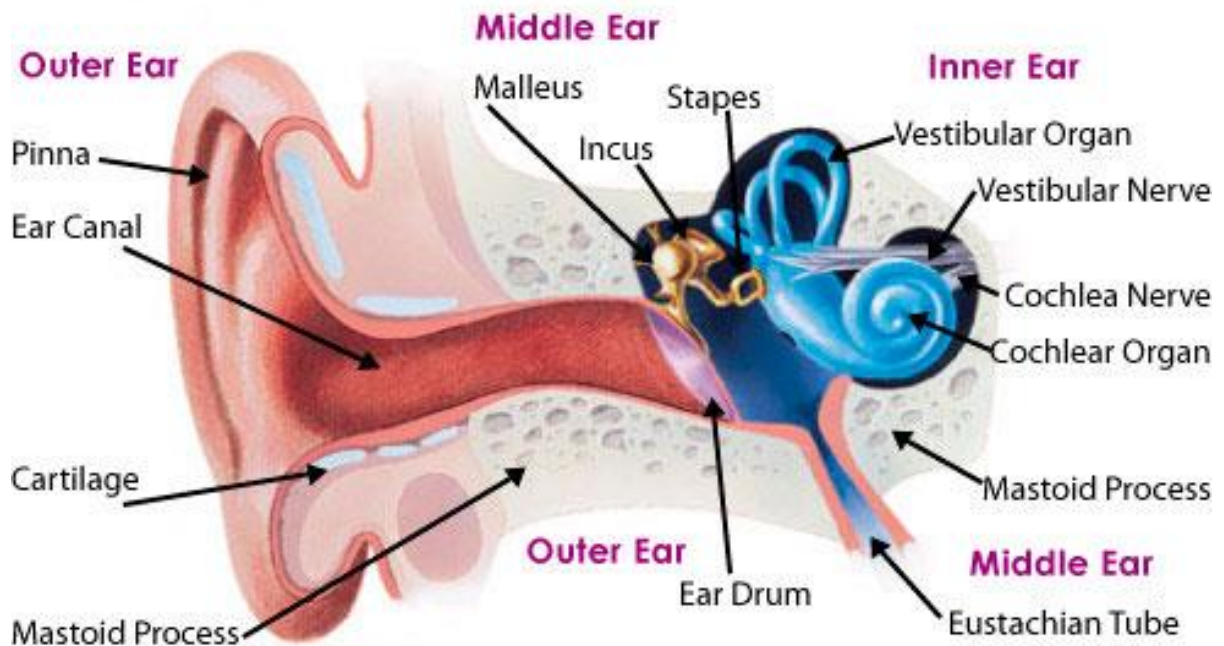


Organisation for Anti-Convulsant Syndrome

Hyperacusis

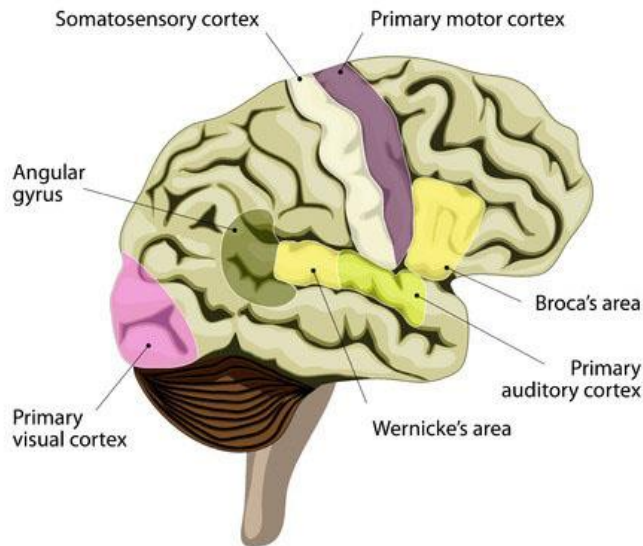
Hyperacusis is a hypersensitivity of hearing; this does not mean having the hearing of superman; but sensitivity to the sound around them. This might be the cry of a baby, the sound of a small child shouting even the sound of traffic, turning the page of a newspaper or a washing machine may be too much for them. If you think about how some sounds set you on edge when you are stressed, hyperacusis is worse but this will give you a small window into the world of perpetual hypersensitivity to noise. Sounds interfere with their ability to concentrate, a few might experience distress and pain to some noises. There are many theories about why some people experience hyperacusis, but to date it is not really properly understood, however it is clearly due to problems within the auditory system rather than just possible damage to the inner ear. People with hyperacusis often do not have hearing loss.



Organisation for Anti-Convulsant Syndrome

Hyperacusis

A symptom associated with Hyperacusis is Tinnitus. Studies suggest that possibly 40% of people with hyperacusis also have tinnitus. A person experiencing the two together is going to be in some distress. The auditory system could be likened to a system of filters, that organisation from the most important, to those that are just 'background



associated with Hyperacusis is Tinnitus. Studies suggest that possibly 40% of people with hyperacusis also have tinnitus. A person experiencing the two together is going to be in some distress. The auditory system could be likened to a system of filters, that organisation from the most important, to those that are just 'background noises'. A good example is when you are out shopping and a friend calls your name. This is the sound that will be most recognised by these filters as someone's voice that you recognise calls out your name; this immediately prioritises that sound. On the other end

of this spectrum is when someone is so focused upon a task that all sound is filtered into the background in order to strengthen your ability to concentrate.

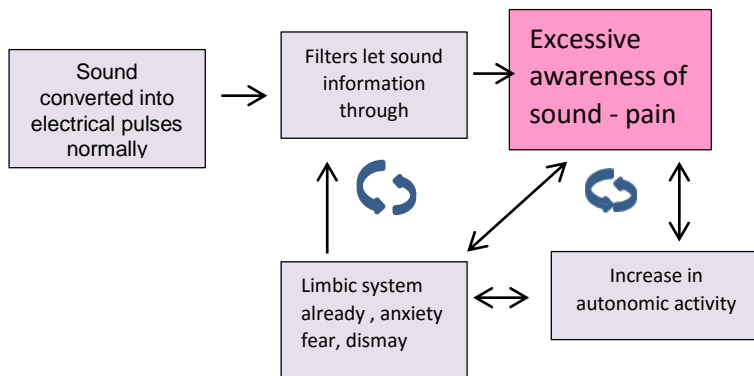
Sound is then passed through the filters to the auditory complex. This filtering system can also pass this onto other parts of the brain such as the limbic system which deals with emotions. This pathway can then be expanded to other parts of the brain such as the sympathetic section of the nervous system – generating a fight or flight response when the brain interprets the sound as fear is just one example.

There are two mechanisms by which hyperacusis can develop:

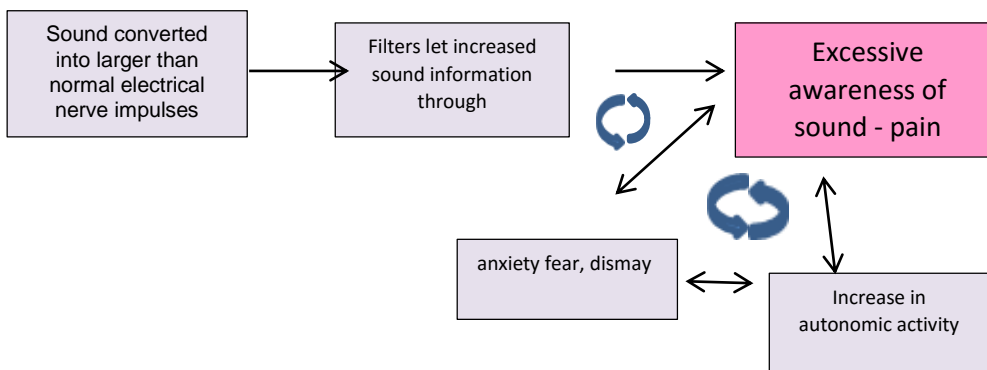
- If the brain is emotionally over active it can react excessively to sound.

Organisation for Anti-Convulsant Syndrome

Hyperacusis



- If the auditory system is overactive it can enhance sound, which in turn creates ore sound.



Therapy is widely available privately; sometimes this may be available on the NHS for people with very severe or persistent hyperacusis. It should only be carried out by someone specially trained in the technique. Treatment can differ, with differing forms of therapy being utilised It can take years to be retrained successfully. Therapies that are recommended include:

Retraining counselling teaches patients how emotions and the nervous system may play a role in hyperacusis. Acoustic therapy is often used to decrease a patient's sensitivity to sound. With this they are introduced to ways in which they can reclassify sound in order to develop a positive attitude to sound.

Sound therapy helps this process by temporarily desensitising the hearing system. Sound exercises he ears muscles, unblocking pressure within the ears and improve the

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Hyperacusis

functioning of the auditory pathways. The patient can tolerate noisy places without being constantly affected by them. "Desensitising" means listening to and gradually getting used to the sound, which is achieved through the use of noise generators.

Noise generators are small devices worn like hearing aids. They produce a steady, gentle noise with a volume control, allowing the noise level to be turned up or down. This treatment approach uses the sound of music or noise which producing steady, gentle sounds. The theory is that by listening to a sound at a low level for a certain amount of time each day, the auditory nerves and brain centres will become desensitized and able to tolerate normal environmental sounds again. In most cases, the treatment is successful, but takes anywhere from three months to two years for improvements to be made. This is an established method of treating hearing oversensitivity and is used in many audiology departments in the UK.

There are some lifestyle changes that can be made:

Relaxation – stress can make hyperacusis worse, so regular exercise such as yoga may help

Listening to Music – calming music and sounds may also be relaxing, especially at bedtime

Support Groups – sharing experiences with others who have hyperacusis may be helpful (see Useful Links on this page)

You know what it is like to go out into the sun after being in a darkened room; you cannot see because the sun immediately blinds you. It is the same experience for someone with hyperacusis except they experience this with sound.

Avoid wearing earplugs or muffs – these won't allow the ears to become accustomed to the noise, and may actually make a person more sensitive to noise.

Recommended reading: Living with Tinnitus and hyperacusis:

Dr Laurence McKenna, Dr David Baguley and Dr Don McFarren.