

3 Ear

Ear is a very important organ of human body which has two important roles comprising our organ of hearing and organ of balance.

Common diseases of the ear

In this chapter we will cover different kinds of diseases and how we can cure them. The most common diseases of ear are given

- tinnitus (sensation of ringing sound in the ears)
- vertigo
- Hearing Loss or Deafness
- motion sickness
- wax

Later in this chapter you will see how to cure these diseases through the best methods used in reflexology to cure them.

Ear is made up of three different parts.

Structure of Ear

- **Inner Ear:** Here sound waves are changed into electrical impulses and sent to the brain. The electrical impulses are carried by the auditory nerve. The brain then translates these electrical impulses as sound.
- **Middle Ear:** Middle ear is separated from the outer ear by eardrum and consists of tiny bones. These amplify the sound waves.
- **Outer Ear:** Outer Ear forms the visible part. Its shape helps to collect sound waves.

Inside the inner ear is a series of canals filled with fluid. These canals are positioned at different angles. When the head is moved, the rolling of the fluid inside the canals tells the brain how far, how fast and in what direction head is moving. The brain coordinates this information with information from your eyes and from the muscles (called muscle sense or kinaesthesia). The brain uses the inner ear, the eyes and muscles to pinpoint the position of the body at all times.

Common Diseases of Ear Explained

a) Tinnitus

Tinnitus is defined as a sensation of a sound in ear or head not due to a source outside the body. It may be a buzzing, ringing, roaring, whistling or a hissing sound. Sometimes it involves more complex sounds that vary over time. It may be there all the time, or come and go. An associated hearing loss is usually present. Unfortunately, in most cases, no underlying cause can be detected.

A wide variety of treatments have been tried. These include masking the bothersome sound by continuous playing of more acceptable sounds (white noise), hypnotherapy, counselling and use of hearing aids.

b) Vertigo

Vertigo is a false sense that either you or your surroundings are spinning around. Vertigo often causes loss of balance. It is a common symptom of inner ear disorder, which is where the organs of balance are situated. Osteoarthritis of the neck, which is very common in older people, can squeeze the major arteries to the brain in certain neck positions. The resulting fall in blood flow causes dizziness. Vertigo may accompany an ear infection or congestion of the ear.

c) Hearing Loss or Deafness: Hearing loss or deafness is a partial or total inability to hear sound in one or both the ears. In adults, the most common cause of hearing loss is prolonged exposure to loud noise. Excessive noise levels over a long period of time will damage your hearing.

One's hearing gradually becomes less acute as we age. This is normal and rarely leads to deafness. Age related hearing loss typically begins with loss of higher frequencies so that certain speech sounds such as s, f, t end up sounding very similar. This means that older person can hear, but not always understand.

The loudness of the noise is measured in decibels (db). Sensitivity of the sound differs from one individual to another, but experts believe that damage to hearing occurs when noise levels are higher than 85 db. For most cases of noise

induced hearing loss, there is no cure. Hearing aids only amplify sounds and cannot replace normal hearing.

Relative magnitude of common sounds:

• Human breathing at 3 metres	: 10 db
• Whispering	: 20 db
• Inside Office or restaurant / Normal conversation	: 60 db
• Busy traffic	: 70 db
• Food blender / Vacuum cleaner at 1 metre	: 80 db
• Inside discotheque	: 100 db
• Gun shot fired at 1 metre	: 140 db

Other causes of hearing loss include:

- Ear wax build up or an object in the ear
- Injury to the head or ear can cause hearing loss.
- Ototoxic medicines : Certain drugs are known to be toxic to ears. These are amino-glycosides (streptomycin, gentamycin) and drugs for malaria (quinine and chloroquine).
- Tinnitus is often associated with deafness.
- Ear infection such as middle ear infection (otitis media) or infection of the ear canal (otitis externa). Ear infection is very common in children and can cause considerable pain. The outer ear can easily pick up infection while swimming, particularly in unclean water. The middle ear can get infected as a result of upper respiratory tract infection-cold or flu.
- Decreased blood flow to the inner ear or parts of the brain that control hearing may lead to its loss. This may be caused by heart disease, stroke, high blood pressure or diabetes.
- Diseases: Viral infections e.g. mumps, measles, pertussis (whooping cough) and rubella (German measles) can cause hearing loss. These types of infections are more common in childhood. Bacterial diseases such as meningitis and syphilis can also target and harm the ears.

Prevention

1. Do not self-medicate especially with antibiotics.
2. Reduce exposure to excessive noise in the workplace. Use personal hearing protection such as ear plugs.
3. Reduce the risk of ear infections by treating upper respiratory tract infections promptly.
4. Don't try to clean your ear by poking anything into it. It may injure the delicate skin or impact earwax. Ear produces wax (cerumen) to protect itself. Wax and tiny hair inside the canal prevent small objects getting down inside the ear. Ear has a clever mechanism for clearing itself. There is a natural movement of wax and dirt away from the ear drum. All you need to clean the ears is to wipe around the outside of the ear with a damp cloth. Ear buds are unnecessary, rather can be harmful as they can push wax towards the ear drum.
5. Avoid swimming in dirty water.

d) Motion Sickness

Motion sickness is the unpleasant sensation of nausea and dizziness that some people experience when riding in a moving vehicle. Motion sickness can be brought about on by travelling in cars, ships, airplanes, trains, by riding amusement rides that spin and even when using a swing at a playground.

Our primary sense of balance is a series of fluid filled canals inside the inner ear. Motion sickness may occur when the fluids in the semicircular canals are in a sustained state of turbulence. Symptoms can range from mild to serious. Frequent vomiting can lead to dehydration and low blood pressure, so it is important to seek prompt medical attention if you are severely affected.

Reflexology Treatment

Reflexology can stimulate the ears to maintain their health and cure many ear related diseases and in some cases, can alleviate motion sickness. Since there are two ears, the reflex points are located on the palms of both hands and the soles of both feet.

Principal Reflex Centres Related to the Ears

The principal reflex centres related to the ears are located on the base of fourth and fifth fingers on the palm and sole (fig. 73 & 75) of both hands and feet. The method of applying pressure is shown in fig. 74 and fig. 76. Pressure can also be applied with a

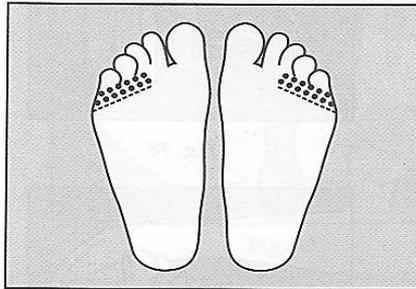


Fig. 73

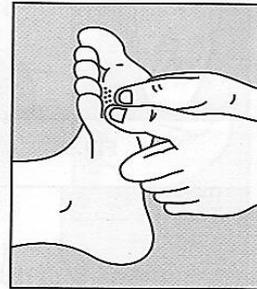


Fig. 74

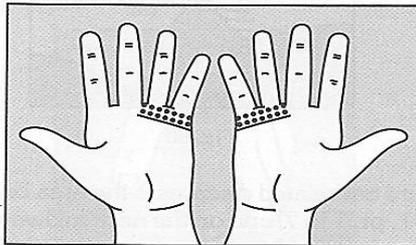


Fig. 75

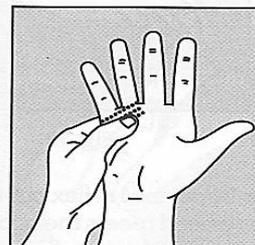


Fig. 76

rubber or a wooden instrument. For detailed description on the method of pressure application please refer to chapter 1.

Secondary Reflex Centres

Apart from the above mentioned reflex centres, there are a few other important reflex centres. Applying pressure on all or some of the secondary reflex centres is helpful in speedy recovery from ear diseases.

Neck nourishes the entire head. Therefore, it is necessary to apply pressure on all reflex centres related to neck. These centres are located on the inner and outer parts of the toes and thumbs of feet and hands (fig. 77). The method of pressure application is shown in fig. 78, 79 & 80,

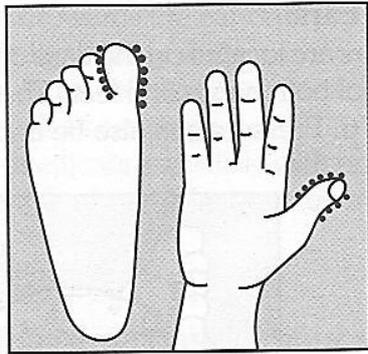


Fig. 77

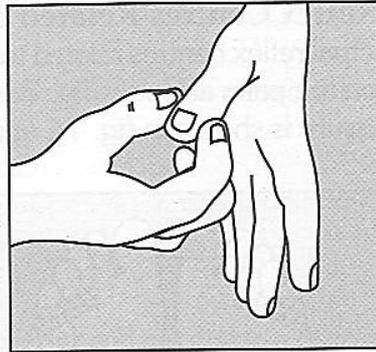


Fig. 78

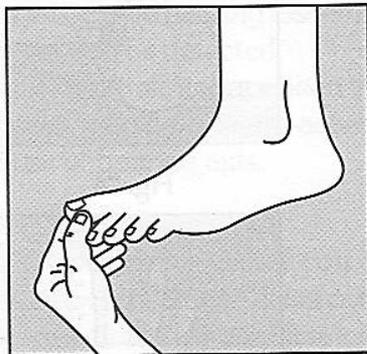


Fig. 79

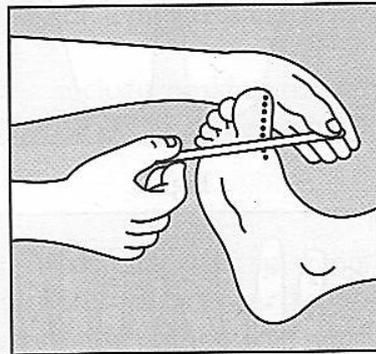


Fig. 80

Another important reflex centre to cure ear related diseases is the area on the back of neck where head meets the neck (fig. 81, pt. 1 to 7) and on the neck midway between pts 1-2 and 3-4. You can easily put your hands behind and give pressure with the thumb (fig. 82). At each reflex point, pressure is to be given for 23 seconds. Repeat this twice

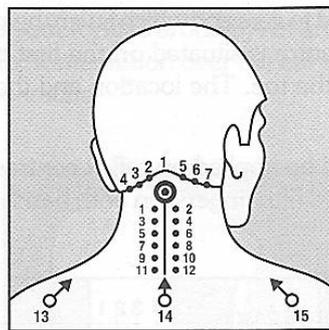


Fig. 81

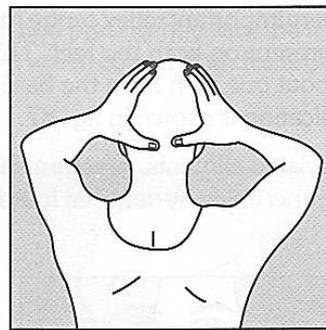


Fig. 82

Massaging and giving pressure on the ring and the little finger of both the hands is very helpful in curing ear ailments (fig. 83). The method of giving pressure at these areas is given in fig. 84.

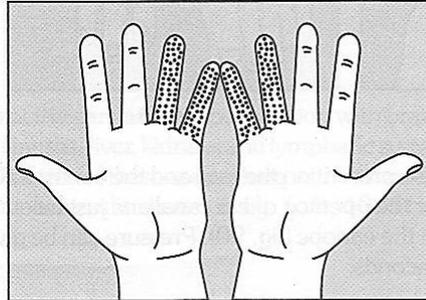


Fig. 83



Fig. 84

Other secondary reflex centres are present on both the hands in the triangular area (web) between the thumb and the index finger as shown in fig. 85. Pressure technique for the area is shown in fig. 86.

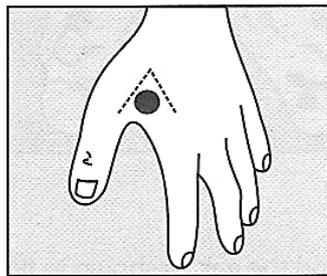


Fig. 85

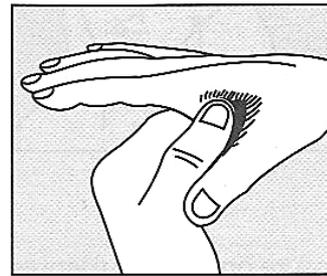


Fig. 86

Another very important reflex centre related to ears and which is very helpful in curing deafness, is present on both the feet. This centre is situated on the first channel at a distance of about one inch from the base of the toe. The location and the method of pressure application is shown in fig. 87.

In all ear related ailments, pressure should be applied on reflex centres located on the fourth channel (midway between fourth and fifth fingers) on both hands and feet, as shown in fig. 88.

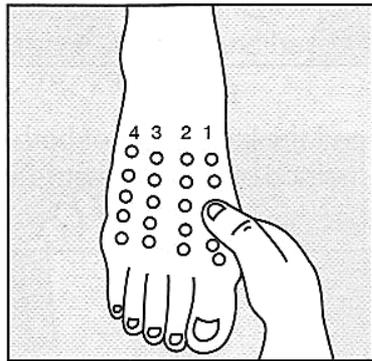


Fig. 87

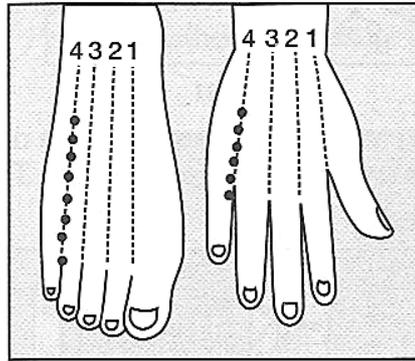


Fig. 88

Ear related reflex centres are also present on the face and the ear itself. On the face, the reflex centre is located just near the opening of ear canal and just below the earlobe (fig. 89). On the ear it is located on the earlobe (fig. 90). Pressure can be given with the thumb or finger, 2-3 times for 2 seconds.

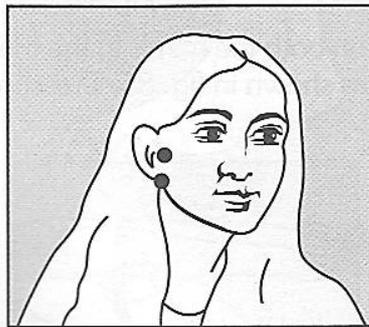


Fig. 89

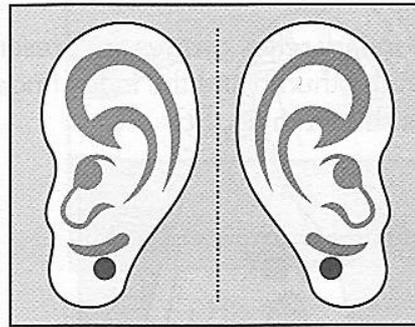


Fig. 90

Apply pressure on the bony depression behind the ear, as shown in fig. 91. This very important area to cure loss of hearing and tinnitus. Protrude your tongue around ½ of an inch and press gently with the teeth as shown in fig.92. Hot fomentation over the ear with a warm cotton cloth for around 5-10 min helpful in earache.

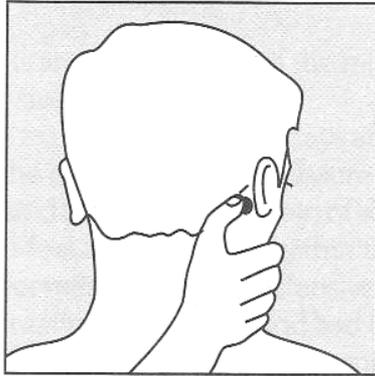


Fig. 91

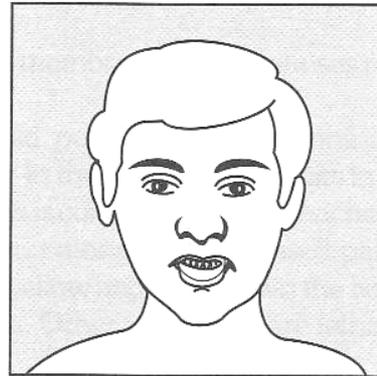


Fig. 92

Diseases of the ears have a close relation with brain, cervical vertebrae, solar plexus, diaphragm sinuses, liver, kidneys and lymphatic system. Therefore, pressure is applied at the reflex centres of these areas along with the ear related reflex centres. The location reflex centre is shown in fig. 5, 9, 10, 41 & 64.