

K. SENSES, FOREIGN BODIES IN EYE, EAR, NOSE OR SKIN AND SWALLOWED FOREIGN OBJECTS

In this chapter you will learn about:

- Senses.
- Foreign objects in the eye, ear, nose or skin.
- Swallowed foreign objects.

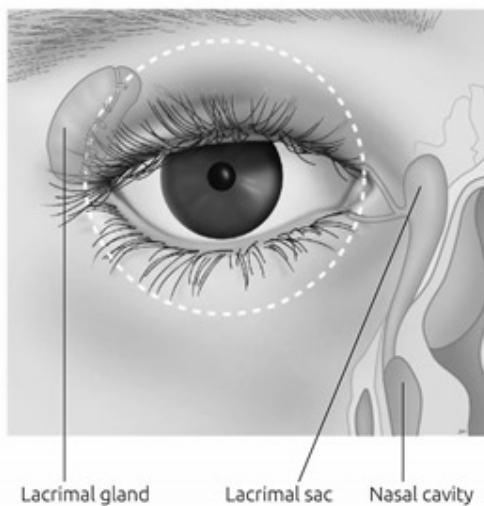
K.1 THE SENSES

The human body exchanges information with its environment via five senses:

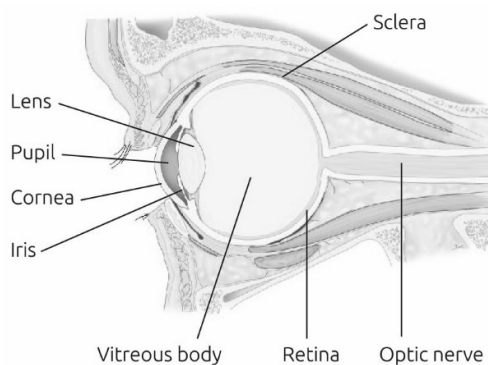
- Sight (the eyes).
- Hearing (the ears).
- Smelling (the nose).
- Tasting (the tongue and nose).
- Touching (the skin).

In addition to these five senses, the human body senses heat and cold (*thermoception*), balance and acceleration (*vestibular sense*), the relative position on its body parts (*kinaesthetic sense* or *proprioception*), feels pain (*nociception*) and can perceive time (*chronoception*).

K.1.1 EYE



The eyeballs are covered with folds of skin (the eyelids) from which the eyelashes project. The outermost parts of eyes are covered by a smooth membrane (*conjunctiva*) and are kept moist by tears produced by the tear-glands.



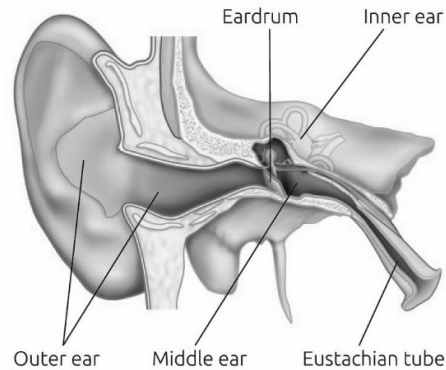
The transparent portion of the eye is called *cornea* through which the light from the object passes and forms the image at the back of the eye. Behind the cornea is seen a coloured

circular diaphragm (*iris*) with a round opening (hole), the pupil. The latter varies in size with the amount of light passing through it.

Behind the pupil is the lens of the eye which focuses rays of light on to the light sensitive part of the eye (*retina*).

Both eyes move simultaneously.

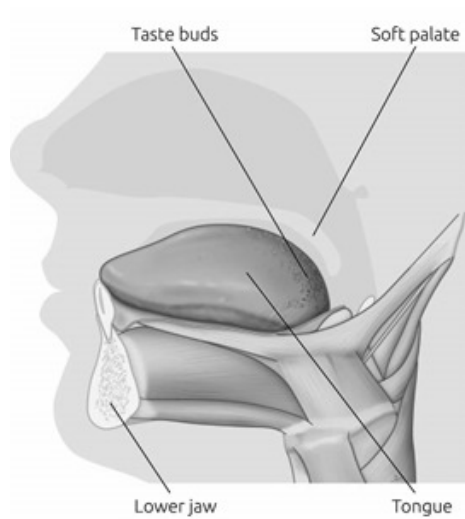
K.1.2 EAR



The ear consists of three parts:

1. The outer ear is that part which can be seen projecting from the side of the skull, together with the canal which leads to the eardrum.
2. The middle ear, situated inside the skull, receives and transmits sound waves concerned in hearing to the inner ear. It also communicates with the back of the nose and throat through the Eustachian tube, which opens during swallowing.
3. The inner ear is embedded inside the skull and is concerned with the sense of balance in addition to the sense of hearing. The outer ear is separated from the middle ear by the eardrum.

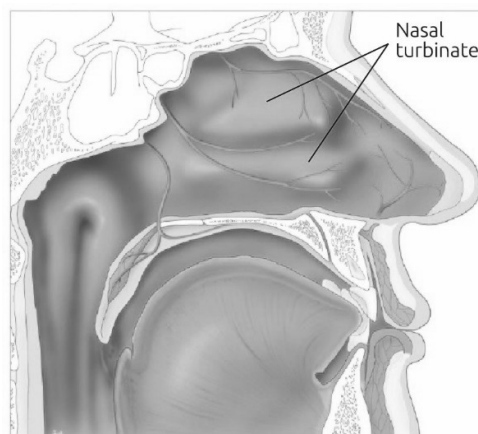
K.1.3 TONGUE



The tongue is the muscular organ which lies on the floor of the mouth; it assists in tasting, mastication and swallowing of food.

In an unconscious casualty, the tongue tends to obstruct by falling back in the throat and prevents breathing.

K.1.4 NOSE



The nose is organ of smell and also functions as part of the body's respiratory system. Air enters into the body through the nose. As it passes over the specialized cells of the *olfactory system*, the brain recognizes and identifies smells. Hairs in the nose clean the air of foreign particles. As air moves through the nasal passages, it is warmed and humidified before it goes into the lungs.

People may not taste anything without some help from the nose: the ability to smell and taste go together because odours from foods allow to taste more fully.

K.1.5 SKIN

The pain and touch receptors in the skin allow us to feel touch, pressure, heat, cold and pain. See also the chapter on 'The skin' for more detail.

K.2 FOREIGN OBJECTS IN THE EYE, EAR, NOSE OR SKIN

K.2.1 FOREIGN BODY IN THE EYE

Wings of insects, dust, coal, metal particles from lathes and loose eye-lashes are common objects which get lodged under the eyelids. They cause pain and later redness if they are not removed at-once.

Sometimes iron particles and wood splinters get lodged in the cornea causing severe trouble.

All penetrating foreign bodies are a danger to the eye itself.

K.2.1.1 WHAT DO I SEE AND ENQUIRE?

Following signs or symptoms may be observed:

- The person complains of pain or discomfort in the eye.
- Redness and watery eyes.
- The person complains of a blurred vision.
- Eyelids are screwed up in spasm.

K.2.2 WHAT DO I DO?

1. Ask the casualty not to rub into the eye.
2. Ask the casualty to sit. Pull the lower lid down to inspect.

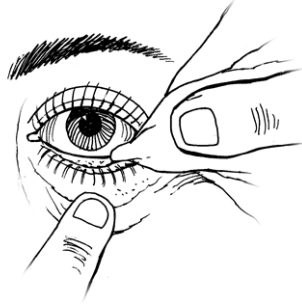


3. Rinse the eye immediately with plenty of water for 10-15 minutes, preferably from the nose outwards. Use clean water or water that has been boiled and cooled.

Be careful:

- Water at room temperature is more comfortable than cold water.
- Very warm water might burn the eye.

Make sure no liquid or rinsing water runs into the other eye.



4. If washing of eyes did not work, you may try to remove foreign object with a narrow moist swab or a twisted corner of a clean handkerchief.

If foreign body is not visible it may be under the upper eye lid. Ask the casualty to grasp his upper lashes and pull the upper eyelid over the lower lid. The lower lashes may brush the particle clear.

If this did not work, you may ask the casualty to blink under clean water. You can also use an eye cup to blink the eye in it.

5. If something is sticking to or embedded in the eye, the eyeball or pupil, do not try to remove it.
6. Cover the eye and transport the casualty to the nearest healthcare facility for further care.
7. Do not put medication into the eye.
8. Wash your hands after taking care of the patient. Use soap and water to wash your hands. Alcohol-based sanitizers can also be used, if available.

K.2.2.1.1 WHAT DO I DO WHEN THERE ARE BURNS TO THE EYE?

Provide first aid as described in the section on burns to the eye.

K.2.2.1.2 WHAT DO I DO WHEN THERE ARE HARMFUL LIQUIDS SPILLED INTO THE EYE?

Provide first aid as described in the section on chemical burns to the eye.

K.2.3 WHEN TO REFER TO A HEALTHCARE FACILITY?



Eye injuries have to be managed always with great care. Always refer these victims to the nearest healthcare facility.

K.3 FOREIGN BODY IN THE EAR

Sometimes foreign objects become lodged in the ear. The object might even damage the drum.

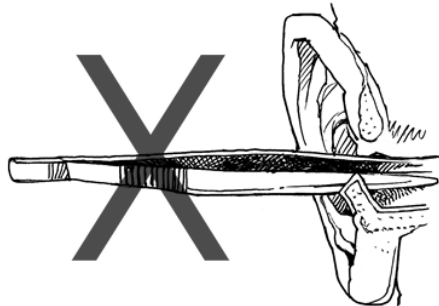
Children often push objects into their ears. Cotton wool may get stuck in the ear while cleaning it. Insects may crawl or fly into the ear.

K.3.1 WHAT DO I SEE AND ENQUIRE?

Following signs or symptoms may be observed:

- The person complains of pain or itching in the ear.
- The person complains of worsened hearing.
- There may be damage to the drum if:
 - the person hears a constant noise;
 - the person complains of ear pain;
 - blood comes out of the ear, or
 - the person feels dizzy.


K.3.2 WHAT DO I DO?



Never try to get lodged objects out of the ear and always refer the person to a healthcare facility for further treatment.

In case of an insect, you may fill the ear with tepid clean water so the insect can float out. If it does not come out refer the person to a healthcare facility for further treatment.

K.3.3 WHEN TO REFER TO A HEALTHCARE FACILITY?

 A casualty with an object lodged into the ear has always to be referred to a healthcare facility.

Also refer the casualty to a healthcare facility in case of an insect that flew or crawled into the ear and did not come out.

K.4 FOREIGN BODY IN THE NOSE

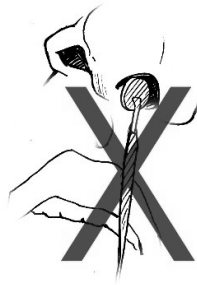
Children sometimes push objects into their nose. These objects may get stuck and may damage the nose tissue.

K.4.1 WHAT DO I SEE AND ENQUIRE?

Following signs and symptoms may be observed:

- The breathing through the nose is impossible or difficult.
- The nose may be swollen or have a deformed shape.
- The eyes may tear.
- The nose may bleed.
- The person may complain of pain.

K.4.2 WHAT DO I DO?



1. Do not put something into nose
2. Do not fiddle with the foreign body. Make casualty breathe through the mouth.
3. Transport the casualty to a healthcare facility for further treatment.

K.4.3 WHEN TO REFER TO A HEALTHCARE FACILITY?



A casualty with a foreign object in the nose is always to be transported or referred to the healthcare facility.

K.5 FOREIGN BODY IN THE SKIN

Glass, thorns, pieces of iron, wood or stone, needles, etc. may get stuck under the skin.

Unless it is very easy to deal with (e.g. a wood splinter), do not fiddle with objects stuck under the skin.

Treat the wound as described in section 'Bleeding', dress the wound and refer the casualty to a healthcare facility for further treatment.

K.6 SWALLOWED FOREIGN OBJECTS

Small objects as coins and buttons may be swallowed by children. Most objects will follow the digestive track without issues. But they can also lead to choking.

In some cases the swallowed object may cause internal damage. This is specifically the case for swallowed batteries (containing corrosive and poisonous material), cigarette stubs, cosmetics, medication, poisonous plants, poisonous berries or fruits, or sharp objects (e.g. fish bones, partial dentures...). In these cases medical assistance is always required.

K.6.1 WHAT DO I SEE AND ENQUIRE?

Except if the person is choking, you may not observe any signs or symptoms at first and it is the person himself who reports you that he swallowed something.

Sometimes the swallowed object may cause choking; this can result in a life threatening situation and has to be taken care of immediately (see section on 'Choking' for more detail).

In some cases the casualty may complain of pain in the throat, food pipe (*oesophagus*) or stomach. Also vomiting is possible. At a later stage blood may appear in the faeces.

K.6.2 WHAT DO I DO?

In case the person is choking, treat as described in the section on 'Choking'.

In case a small harmless object has been swallowed, the object will follow the normal track and be expelled via the faeces. In case of even small doubt, contact a healthcare facility.

In case of dangerous objects (batteries, cigarette stubs, cosmetics, medication, poisonous plants, poisonous berries or fruits ...), sharp objects or when the person complains of pain, stomach ache, always refer the casualty to the nearest healthcare facility.

K.6.3 WHEN TO REFER TO A HEALTHCARE FACILITY?



In case a person swallowed dangerous objects (as batteries, cigarette stubs, cosmetics, medication, poisonous plants, poisonous berries or fruits ...), sharp objects; or when the person complains of pain, stomach ache or blood loss in the faeces, he should be transported to the nearest healthcare facility.