

2. On the 3rd day, the dressings are opened and the eye carefully cleaned with sterile pellets and guttae atrophine 1% is instilled to dilate the pupil.

3. On the 6th day, the stitches are removed. The treatment remains the same.

Full diet is now given.

4. On the 14th day after operation one drop of Dionine 2% is instilled into the eye to keep the graft clear and prevent it becoming hazy.

The patient's vision gradually increases, he begins to see more light and distinguishes colours and objects.

This operation may lead to the Hindu-Moslem unity, for we have the Hindu looking through the Moslem's eye, a man through a woman's eye and vice-versa.

E. LANGAN,
Student Nurse,
Eye Infirmary,

12-8-37.

Medical College Hospitals, Calcutta.

SNAKES

How to know the Poisonous Kinds and What to do when they Bite You

India has a *great variety* of snakes, and despite the honoured place of the serpent as an object of respect and veneration, many a person meets his doom at the fang of the 'god' he trusts; and so one must be conversant with a few rudimentary facts concerning snakes and the treatment of their stings.

There are *two* classes of snakes:

- (a) *Poisonous.*
- (b) *Non-poisonous.*

Harmless snakes generally have the following characteristics:

- 1. The head is oval in contour.
- 2. There are two rows of teeth and no fangs.
- 3. They move with speed.
- 4. If their underside is examined they are found to have several rows of scales posterior to the anal opening or vent.

The *poisonous species* among the snakes in India are mainly of *two* varieties:—

- A. *Colubrine*—the Cobras and Kraits represent this class.
- B. *Viperidae*—the Russel's Viper.

All are deadly and to be feared.

Their chief characteristics are as follows:

- 1. The head is broad and the neck narrow, especially the vipers'.
- 2. The upper jaw is shorter than the lower one.
- 3. They have two fangs; and these lie vertical or horizontal according to the species
- 4. Expansion of the neck; this among cobras.
- 5. Sluggish in movement, except cobras.
- 6. Examination of the under surface reveals one row of scales posterior to the anal opening or vent.
- 7. The tails are less tapering.

The chief difference between the Colubrine and Viperidae reptiles lies in the arrangement of fangs, the former having large horizontal ones, and the latter's being more vertical and smaller.

The venom of the colubrine type of snake affects the nervous mechanism, and death is due to respiratory and cardiac failure. The nerves

carrying the stimuli to these organs have the supply of impulses cut off due to the action of the toxin or poison. Death may occur almost instantaneously if the venom be injected into a vein or artery. There is very little pain at the location of the bite. The victim gets sleepy and lethargic.

In the viperidæ type the venom causes hæmorrhages into the surrounding tissue. The toxin attacks the lining of the blood vessels and sets up inflammation which causes them to rupture. The site of the bite is very painful, and as the venom spreads the pain becomes intense. Destruction of the larger arteries and veins occurs, with consequent death, due to a thrombus, or embolus passing to the brain or heart.

Treatment

1. Local.

(a) Tie a tourniquet above the wound, and against a single bone, if the wound is on an extremity. The tourniquet should not be applied too long as it might cause gangrene of the limb below it.

(b) Make multiple incisions about the bitten area and rub Permanganate of Potash into the incised wound. Let the wound bleed freely. If the case is seen within ten minutes of the bite, and if the latter is in a suitable place, amputation is the safest remedy.

(c) Suck out all the venom possible.

(d) Do everything possible to promote the flow of blood from the wound.

2. Specific Treatment.

(a) Antivenin for the particular type of snake. 50 c.c. to 100 c.c. is given either intra-venously or intra-muscularly, after which the tourniquet should be released.

3. General Treatment.

(a) Keep the patient awake if it is a cobra bite. Give stimulants like black coffee or tea, hot.

(b) Rest if bitten by a viper.

(c) In cobra-bite poisoning if the breathing fails give artificial respiration.

(d) In viper-bite poisoning, Calcium Chloride and other hæmostatics to arrest the bleeding.

When a person is bitten by a snake the wound should be examined to see if it was a poisonous one. The venomous kind will always show two puncture marks where the fangs have entered a little in front of the teeth, and more widely apart. The harmless species generally show two rows of teeth. The size of the snake can be ascertained by the distance between the fang punctures. All cases must be treated speedily, because the penalty for not treating the bite of a venomous snake is DEATH !!

*Student Nurse Gibbon,
Medical College Hospitals, Calcutta.*