



# DEPARTMENT OF ZOOLOGY

# SNAKE VENOM, EFFECTS AND SYMPTOMS

- The Snake poison or venom is the secretion of the poison glands which are situated in the head.
- The poison is temporarily stored in the gland and it is injected in the body of bitten prey through the fangs which serve as hypodermis needle.
- The Snake venom or poison is evolved in snake as an aid for capturing and subduing pr

- When it is injected in sufficient quantity in the human body, it may kill the person.
- The amount of venom required for killing human being varies in different types of poisonous snake.
- E.g. 12mg poison of Cobra, 15mg poison of Russel's viper and 6mg poison of krait.

# ENZYMES PRESENT IN SNAKE VENOM

- **Proteases** : This is an endopeptidase which is similar to trypsin and it is responsible for killing the cells. These enzymes are useful for the digestion of cells.
- **Phospholipase A** : This enzyme dissolves erythrocyte and converts lecithin to lysolecithin.
- **Nucleases** : Ribonuclease and Deoxyribonuclease enzymes of snake venom are effective in breaking bonds of phosphodiesterase.

## EFFECTS OF VENOM

- **Neurotoxin** : When after snake bite nervous system is affected, then this venom is called **neurotoxin**. E.g venom of cobra, krait and sea snake.
- **Haemotoxins** : When there is effect of venom on the circulatory system of the person then it is called haemotoxin. E.g. Venom of viper.

# SYMPTOMS OF SNAKE BITE ON MAN

- Visible symptoms seen within ten to two hours.
- Burning sensation on the spot bitten, pain and numbness.
- Inflammation and swelling occurs, oozing of blood coloured fluid.
- Patient feels drowsy, can't stand and paralysed.

# SYMPTOMS OF COBRA BITE ON MAN

- Patient is unable to move, speak or swallow. Saliva comes out from mouth.
- Due to effect of venom on optic nerves causing blindness.
- Vomiting and convulsions may occur.

# SYMPTOMS OF COBRA BITE ON MAN



The background is a gradient of blue, transitioning from a lighter shade at the top to a darker shade at the bottom. In the four corners, there are decorative white line-art patterns resembling circuit traces or neural network connections, with small circles at the end of the lines.

**Thank you**