

## TREATING A VIPER AMIDST MEDIAMEN

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We, the vets in Thiruvananthapuram D.V.C. got curious on seeing the volunteers of 'Zoo Watch Snake Rescue' along with a fully equipped media people in the O.P. on one fine morning. Three of the volunteers were carrying a P.V.C. tube which was covered by a cloth on one end. Pets under treatment and their owners who were already been there started their queries. Our curiosity turned out to perplexity within a short time when the volunteers explained about the snake inside the tube. It was a Viper injured at the tail region by a J.C.B. while demolishing a hill in Kuttiyani near Vattappara and was rescued by this people.

Seeing the media men focusing on to us we masked our feelings, raised to the situation and asked the volunteers to keep the patient on the examination table. It was safe for us to examine the special patient who had been restrained by "tube restraint method" which is a standard method for the handling of venomous snakes.

Basic steps in this restraining method is to choose a tube preferably a transparent one, with an inside diameter that will not allow the snake to turn around i.e, inside diameter should be less than the length of the snake's head or slightly larger than the snake's mid body girth. Cover one end of the tube using a pouch made of cloth which will allow trouble free breathing. Secure the pouch on the tube tightly. Use tongs that are longer than snake's striking range to hold the tube. Grasp the tube in the middle with the tongs and slowly bring the open end of the tube towards the snakes head. Using hooks that are longer than snakes striking range gently hook the animal and manipulate it into the tube. Thanks to the volunteers who had already restrained our patient!

The injured tail was kept outside the tube which made our examination easier. To add to our curiosity we saw a paired spiny pouch like structure outside which had attachment to the injured tail region. It

took a short while for us to realize that it was the hemipenis- the paired copulatory organ of a male snake. A quick search in the internet confirmed our diagnosis. So the one in the table is a male with a prolapsed hemipenis.

Each hemipenis consist of a tube of erectile tissue that can be everted like the finger of a glove. These lie on either side of the base of tail forming distinct thickenings and with a little practice the sex can usually be determined, however it is not wise to fully rely on this method. The distal end of the organ is attached to a long retractor muscle. During copulation only one organ is inserted at a time but which one is immaterial and depends upon the side the male happens to be at that time. Prolapse of this organ occur as a result of infection, forced separation during copulation or as a result of swelling secondary to probing for sex determination. Here the probable reason may be the second one as the volunteers told that there was another snake at the site which had escaped. In addition to the prolapsed hemipenis the tail of our patient was also severely injured.

Arrived the time for surgical judgement - whether to replace the prolapsed hemipenis to the cloaca and to treat the injured tail to heal or to amputate the tail along with prolapsed hemipenis. In case of replacement of prolapsed hemipenis organ should be cleaned, gently lubricated and can be replaced into cloaca. After replacing the organ a purse string suture can be placed in the cloaca tight enough to prevent further prolapse. Suture can be made with chromic catgut. Surgical removal is indicated in cases in which the organ is severely swollen and damaged. In this particular case the hemipenis was gangrenous, swollen and had offensive smell. Tail injury was such that the articulation of tail vertebrae was disrupted. So our decision was to amputate the tail and hemipenis.

Surgical technique- First step is to anaesthetise

the snake. General anaesthesia in snakes can be effected with inhalant anaesthetic like Isoflurane at a concentration of 5% or dissociative anaesthetic like Ketamine HCl @ 30mg / kg body weight i/m or tranquilizer like Diazepam @ 0.1- 0.2 mg / kg body weight i/m. The available one with us was Ketamine. Induction of anaesthesia in snakes is indicated by loss of righting reflex. This can be assessed by gently moving the box or tube upside down where the snake is kept. If the animal no longer moves it has lost its righting reflex and can be manipulated. After anaesthetizing the viper the site around the injury was painted with Tr.iodine. Proapsed mass of hemipenis was ligated with catgut. Afterwards it was cut and removed using scissors. The amputation of tail was much easier as it got detached when we made a cut with scissors. So the complicated procedure turned out to be a simpler one. Skin at the site was sutured by horizontal mattress suture using nylon. Applied Tr.benzoin at the sutured site and bandaged with gauze.

Postoperative medication was done with Meloxicam –'Melonex' @ 0.2mg / kg body weight i/m and Amoxycillin sulbactam 'Amoxirum forte' @ 20 mg / kg body weight i/m. These drugs were continued for five more days. The wound was cleaned with povidone iodine and metronidazole liquid and dressed regularly.

On completion of the surgical procedure we relaxed a little bit. The people around us seemed to be satisfied with our service. The viper was kept in the Zoo Watch Snake Rescue at Thirumala till he had recovered fully. He was kept in an empty glass fish tank amidst polythene bags filled with water at 45°C that was changed frequently. After about five days he was weak so a raw egg was mashed and forced fed using a tube and syringe. One week apart he had devoured three live mice, by that time the wound healed completely. The sutures were removed

and he was set free into the forest in Neyyar.

As veterinarians, we are bound to treat any animal species – whether domestic or wild. In a society with a great number of animal lovers and media channels sometimes we may find ourselves in hard situation like this, which is mentioned here. So our approach should be a combined effort to confront any such case with the available resources. The purpose of this article is to draw attention to such an instance.

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