

PARALYSIS OF THE TRUNK IN ASIAN ELEPHANTS

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Paralysis of the trunk in Asian elephants, either partial, complete and sometimes transient was observed in both male and female elephants. The occurrence of this condition, though infrequent, may be due to any one of the following reasons :-

1. Trauma: as a result of
 - (a) awkward fall landing on the face of trunk, sustaining serious injury to the nerve
 - (b) fight between the animals,
 - (c) gun shot injuries,
 - (d) mishandling by the mahouts or indiscriminate use of the hook or the spear.
2. Exposure to severe cold.
3. Heat stroke.
4. Brain lesions, such as meningitis, brain tumours etc.
5. Due to toxæmia, either endotoxins of bacteria or phytotoxins.
6. Specific diseases such as Tetanus, Rabies, Anthrax, Trypanosomiasis (*Trypanosoma evansi*, casual agent).
7. Rarely due to hypoglycaemia.

Fortunately the incidence of trunk paralysis in captive elephants has been observed only on rare occasions and occurrence was not confined to any particular age, class and sex. In the case of captive elephants, I have come across this condition (over a period of 30 years) only on a very few occasions, viz. in two young calves, two cow elephants, one tusker and one sub adult male. One of the calves died due to snake bite (*Vipera russeli*) in which paralysis of the trunk was observed. Another calf died due to hypoglycaemia in which the first symptom observed was partial paralysis of the trunk. One of the cow elephants belonging to the Palani temple developed paralysis of trunk after being sick for some time.

Another departmental cow elephant 'Bommi' used to develop partial paralysis of trunk, apart from bilateral opacity of cornea and suspected for trypanosomiasis, on treatment totally recovered from the condition.

One sub-adult tusker '*Ashoka*' developed this condition and subsequently followed by paralysis of the throat muscles and later on paraplegia. This was diagnosed as a case of Tetanus. This animal died within three days after developing the symptoms. One of the truskers in Mudumalai, named '*Arjun*' had paralysis of the trunk after accidentally chewing a *Tapioca* tuber in which a country bomb was concealed (meant for killing wild pigs). The animal suffered severe burn injuries in the buccal cavity apart from paralysis. The animal was lucky enough to survive after prolonged treatment and the animal recovered. It is also seen in the case diary of an elephant named '*Sarder*' an outstanding tusker from Wynaad died of rabies in 1949. The first symptom to be observed along with salivation was paralysis of the trunk. Subsequently the animal developed paraplegia. Laboratory findings confirmed the disease.

In wild elephants, several cases of animals suffering from gun shot wounds have been observed and some of them were showing symptoms of paralysis of the trunk, and in such cases gun shot wounds were observed at the base of the trunk. Many instances, where serious fights have developed between wild tuskers, the animals were observed moving in the forests exhibiting deep multiple gored wounds. In some cases where the animals have shown such injuries in the head, face and the base of the trunk have developed paralysis of the trunk. Many of them have succumbed due to the severity of the injuries.

In 1970 a report was received from the District Forest Officer, Madurai informing about the death of a large number of elephants within a short period in Gandamanur valley. On investigation into the cause of death involving 17 elephants of various age classes and sex, the death was found to be due to consuming ergot infested millet crops - '*Paspalum scrobiculatum*'. Most of the animals died after lingering for two or three days. In many of these cases, paralysis of the trunk was observed. In 1952 a herd of 6 elephants died near Surulipatti village in Cumbum valley of Madurai District as a result of consuming the ergot infested plant locally known as "*Varagu*" a kind of millet. Since the animals which consume this grass like plants exhibited nervous symptoms (including paralysis of trunk) the plant is locally known as "*Kirukku Varagu*" (the millet that causes lunacy). Forensic laboratory findings confirm the cause of death of these animals due to ergot poisoning (*Claviceps purpurea*).

In all the above mentioned cases, paralysis of the trunk had been one of the symptoms. It has also been reported that in some cases where elephants are exposed to malicious use of electricity for killing the crop raiding elephants, animals which do not die instantaneously develop symptoms of paralysis including the trunk and such animals had to be euthanised. In captive elephants, timely diagnosis and subsequent veterinary care have shown good results and the animals have recovered completely after treatment.