

Tail Gangrene Management of Leopard

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Leopard is the most common large Feline in the jungles of India and adjoining countries. These are medium sized feline, and its size and body colour helps in hiding even in small grassland. The breeding history of the Kanpur Zoological Park is outstanding. Almost all the species have bred in Kanpur Zoological Park producing numbers of offspring. Kanpur Zoo is presently housing twelve leopards; many of them are zoo born. Among them leopard named Saddam, born to dam Mona and Wild Sire, is very ferocious and having well-built body. The animal was quite healthy up to the age of nine but then it got its tail tip injured which slowly developed into Gangrene. Sastry (1983) defined gangrene as necrosis of the tissue with putrefaction by saprophytic bacteria.

The leopard was treated with antibiotics and other prescribed methods but the recurrence of the disease could not be prevented due to leopard's tendency to keep its tail on surface. Owing to continuous rubbing of the tail and wild animal managerial constraints it was not possible to dress the tail daily and the only possible successful treatment advocated for the tail gangrene is said to be the amputation from one uninfected coccygeal vertebrae above the gangrene. Kumar (1997) described site of operation of gangrenous tail at above the injury or seat of infection at the intervertebral articulation.

According to Radostits *et al* (1994) the basic cause of gangrene is interference with local blood supply which is often brought about by severe damage to the skin due to severe or continued trauma.

Among wild felids only known case of tail gangrene is in a lioness of Jasadhar range of Gir east where a lioness was seen with swollen tail and a foul smell was always enveloping her. When the lioness was rescued, lower portion of her tail was missing; she had injured herself in the territorial infighting and had developed gangrene. She was treated with antibiotics but the treatment did not stop the advancing gangrene therefore the affected part of the tail of the animal was amputated. (Times of India, 09 may 2012).

Operation of tail usually necessitates a large wound, encroaching on the vertebrae, which is slow to heal (O'Connor 2005) and due to importance of tail in leopards and its decorative value for the wild zoo animal, it was decided not to cut the tail of the animal. But in such case there was fear of spreading gangrene in upper part of the tail and generalised septicaemia in due course of time. The case was very challenging for the zoo vets as there was every possibility of developing septicaemia. As the case

was not responding to the treatment, ultimately it was decided to remove the affected portion of the tail, as described by Tyagi and Singh (2010) the incision should be placed in the healthy zone proximal to the necrosed area. At once the treatment seemed proving but few months later the animal again began to show the symptoms of necrosis at the tip of the tail even after full course of antibiotics and supportive treatment. Further amputation of tail could have resulted in loss of pride beauty of the tail.

Authors observed that the main reason behind contracting the infection was continuous contact of the tail with ground. Hence because of the severity of the infection and unavoidable recurrence it was decided to confine the animal in the feeding cum night shell with regular washing of the cubicle with glutaraldehyde and sprinkling of the floor with turmeric and an ayurvedic antimicrobial spray with intermittent course of antibiotics keeping in mind the thumb rule of wild animal treatment "when in doubt, treat the animal" and was given regular supportive treatment of vitamins and probiotics. Apart from this homeopathic medicine Heparsulph was also administered in the meat of the animal. Meanwhile the leopard was allowed to roam in all of the three cubicles of the same side in order to provide exercise to the animal. The process was kept continued for months till the tail tip of the animal developed hairs and normal colour. The possible reasons behind successful treatment of the case was prevention of infection by confinement of the animal and by making a coating of turmeric and ayurvedic antimicrobial agent which further prevented residual infection and helped in healing of the tissue. Turmeric is a natural antiseptic and antibiotic and has historically been used to treat wounds in addition to disinfecting and preventing infection, it also helps to stop pain and swelling while stimulating the healing of skin wounds. Heparsulph is well known healing agent in homeopathic medicine for unhealthy skin condition and authors have well documented experience (Singh and Srivastava 2013) in treating wounds by using it. After a thorough and efficient monitoring leopard was again released in the enclosure after a long period and has not shown any sign of infection in tail in last more than one year.

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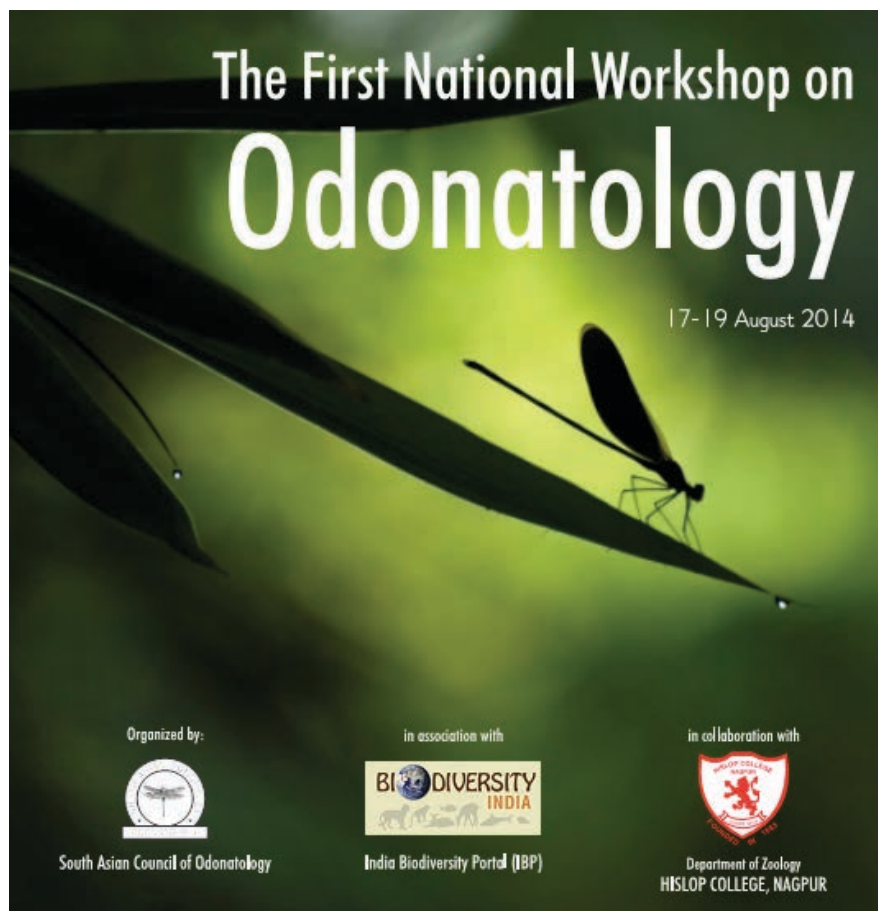
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The South Asian Council of Odonatology is organizing **First National Workshop on Odonatology (16-19 August 2014)**. The workshop will be an extension of **DragonflyIndia Meet 2014**. DragonflyIndia is a part of DiversityIndia - a system of web-portals created to report and assimilate data on Indian fauna. The workshop will run in parallel with the 8th Indian Symposium on Odonatology & Tropical Biodiversity. Workshop participants will have access to the talks in the symposium. Workshop will feature talks on **biology and taxonomy of odonates, field identification, laboratory and survey techniques, spatial data collection and its use in science**.

Interested candidates kindly send filled registration form to Mr. Pankaj Koparde (<dragonflyindiameet@gmail.com>). The deadline for submission of registration form and abstract is **3 August 2014**.

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