Health care and treatment of zoo animals

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Wild animals in zoos are prone to various health problems. These might be physical, mental, or behavioural diseases, both infectious and non-infectious.

Broadly animal health care can be classified in two major groups. 1. Prophylactic measures i.e. preventive treatment and 2. Therapeutic measures i.e. Curative treatment

I. Prophylactic measures:-

1. Maintenance of good hygiene in and around cages

2. Proper and timely disposal of waste, left over food, animal excreta, effective sanitation.

3. Cleaning, washing the food places with proper disinfectants, periodical fumigation of enclosure and paddocks.

4. Regular supply of clean, potable water for drinking purpose

5. Timely supply of wholesome food with sufficient quantity as per the requirements of the individual animals.

6. Checking of parasitic load by regular stool examinations and giving required treatment to the infected ones - preparation and implementation of deworming schedule is important. It is also important that a particular wormicide is not used repeatedly as the repeated and continuous use of the same drug develops immunity in the parasites and the same dung is found ineffective.

7. Birds particularly need more precautionary and prophylactic measures to protect them from getting infections.

8. Regular vaccination programme for birds is essential and also for animals where ever it is feasible to vaccinate the animals in small groups or pairs. Vaccination of deer in herds is a difficult task.

II. Therapeutic treatment:-

In captive wild life management, in zoos we encounter various health problems which can be classified as - a) Symptomatic or b) Infectious.

a) Symptomatic:- In these conditions the lesions are visible. Accidential fractures, trauma, injuries in fight or due to sharp objects, abscess and various skin diseases. These visible elements can be treated immediately by using appropriate medicines as well as preventive medicines to avoid secondary complications.

Wild animals do not co-operate while rendering the requisite treatments. They become frightened and go into stress and shock. As such it is very important to handle the animals with due comfort, reduce the stress, reassuring the animals by friendly patting and tones. The concerned caretaker of the particular animal needs to be present to calm the animal by making his usual sound/call to the animal.

b) Infectious diseases:- In spite of taking various precautionary measures it is exprienced that zoo animals are prone to various infections through air, water, food and other sources. There are also certain predisposing factors which reduce the immunity, resistance power of animals like stress, excitement, parasitic load, pollution, authracosis etc. These factors create favourable conditions for propagation/ multiplication of causative organisms viz bacteria and viruses.

Mostly in zoos outbreaks of epidemic/endemic diseases are rarely recorded. However incidences of pasteurellosis are more common among the bacterial diseases the incidences of tuberculosis, pasteurellosis, salmonellosis, enterobacterial infections, aspergillosis in birds are more common. However, it is noticed that during the initial phase of infection the animals appear apparently normal in paracute and acute forms of infections. The symptoms are noticed when the disease goes in septicaomic form when animal is either in the last stage or do not respond to treatment. It is also observed that in certain paracute forms of infections, even though the requisite antibiotics are immediately administered, the bacterias in the blood circulation are killed but the toxins liberated by them are lethal to the patient, ultimately resulting in the death of the animal.

In the chronic forms of diseases there is time to get the detailed clinical examinations. In many cases we come across such cases where there is such poor response to the treatment that even higher doses of antibiotics do not show fruitful results. In such cases one has to go for sensitivity tests, which clearly indicates that the invaded bacteria are sensitive to particular antibiotics only. Accordingly proper antibiotics can be selected.

Today, an important aspect of infectious disease is that the resistance power of animal is reduced due to various predisposing factors. Instead of one specific infectious organism invading the system, it is more likely that multiple forms of infectious organisms can invade and propogate in the animal body system. During the chronic form of such diseases, the sensitivity test is the proper guide for effective line of treatment.

In many zoos in India it is oberved that the keeper attending the particular animal enclosure is the key person to be closely attached to the animals in his charge. As such, he is the only person who can note any change in the day to day behaviour of animals and differentiate and identify the changes in normal behaviour and health of the animal. Unfortunately, however, a majority of the keeper staff in zoos in India are not vigilant to the required extent with the result that those slight but significant changes in behaviour, food intake, stool, urine consistancy are not noted by the keeper staff resulting in advanced stages of infections and diseases in animals. It is, therefore, essential to have a daily health monitoring programme for zoo inmates to enable to render immediate treatment to the sick animals.

One must appreciate that the veterinarians in zoos in India are doing their best inspite of various odds and lack of facilities compared to zoos abroad.

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