

## Management of Recurrent rectal prolapse in a leopard (*Panthera pardus pardus*)

Tapan Kumar Pattanaik\*<sup>1</sup> and Subharaj Samantara<sup>2</sup>

Department of Surgery,  
Orissa Veterinary College, O.U.A.T., Bhubaneswar – 751 003, Orissa, India.

\* Corresponding author

### Introduction

Rectal prolapse is the protrusion of one or more layers of the rectum through the anal orifice (Ettinger and Feldman, 1995). In complete rectal prolapse all the layers of the rectum (Ettinger and Feldman, 1995) and mostly the posterior portion of the rectum, which does not have the outer peritoneal covering is involved (O'Connor, 1980 and Venugopalan, 2005). It is also known as "Prolapsus ani et recti". Persistent tenesmus secondary to urogenital incidents like parturition, abortion, endometritis, dystokia etc. and gastrointestinal tract diseases like diarrhoea, constipation, rectitis, typhlitis, colitis, proctitis etc. are the most common exciting causes of rectal prolapse (O'Connor, 1980; Strombeck and Guilford, 1990; Ettinger and Feldman, 1995; Tilley and Smith, 1997; Shuttleworth and Smith, 2000 and Venugopalan, 2005).

### Case History and Clinical Observation

A leopard named "Enka" aged 16 years old was showing symptoms of persistent tenesmus and on the next day found with a bright red coloured, elongated cylindrical mass of nearly 6 inch length protruding from the anus at the "Nandankanan Zoological Park" of Orissa state and suspected for rectal prolapse.

### Treatment and Discussion

The animal was restrained properly in the squeeze cage and tranquilized by injecting 0.24 milligram of Atropine Sulphate, 80 milligram of Xylazine hydrochloride and 100 milligram of Ketamine hydrochloride intramuscularly and was carried to the zoo hospital. The prolapsed mass was washed and cleaned with normal saline and povidone iodine solution. A well lubricated blunt probe was passed between the protruding bowel and anal sphincter. The probe did not pass more than half inch. So, it was differentially diagnosed from colorectal prolapse and confirmed to be rectal prolapse (Strombeck and

Guilford, 1990; Ettinger and Feldman, 1995; Tilley and Smith, 1997; Shuttleworth and Smith, 2000 and Venugopalan, 2005). The viability of the prolapsed mass was accessed by its appearance (fig.-1) and tissue temperature. The organ was swollen, hyperemic and bright red coloured which confirmed the viability of the tissue (fig.-1) which corroborates with the observations of Tilley and Smith, 1997. As the volume of the prolapsed mass was indurated, reduction was attempted by application of ice to the prolapsed mass. The hindquarters were raised keeping the animal in dorsal recumbency. The mass was anointed with 2% lignocaine hydrochloride jelly and reduced and retained by placing a purse string suture using a nylon suture. The suture was loosely tied leaving an orifice sufficiently enough for the passage of faeces as advised by O'Connor, 1980; Shuttleworth and Smith, 2000 without allowing the prolapse to recur. The suture was left in position for a period of 10 days with periodic examination to ascertain that faeces do not collect in the rectum. Post-operatively the animal was kept on semisolid, fibre rich diet and laxatives to soften the faeces. Faecal sample was collected and sent to the Centre for Wild Life Research of Orissa Veterinary College laboratory which revealed no parasite.

After 15 days of suture removal the animal suffered from recurrence of the prolapse. As per the zoo veterinarian the animal was in estrous. Hence, again the same procedure was repeated to correct the rectal prolapse. But in an addition to the above treatment depot form of hydroxy progesterone caproate was administered intramuscularly for 3 consecutive days. The animal is performing well and there is no recurrence of prolapse since last 3 months after removing the purse string suture after 15 days of second surgery. Therapy and prognosis of rectal prolapse depends on the identification and treatment of the underlying etiology (Ettinger and Feldman, 1995 and Tilley and Smith, 1997). In the present case the recurrence of prolapsed might have been due to



Figure-1. Prolapsed mass



Figure-2. Prolapsed mass



Figure-3. Application of ice on prolapse mass



Figure-4 Mass was anointed with 2% lignocaine hydrochloride jelly

concomitant estrous and old age.

#### Acknowledgements

The authors thank Dr. P.K.Roy, S.V.O., Dr. R.K.Samantaray, V.A.S., Dr. A.K.Das, L.R.V.A.S. and Sri A.K.Mishra, Asst. Director, Nandankanan Zoological Park for their kind help.

#### References

1. Ettinger, S.J. and Feldman, E.C. (1995): Textbook of Veterinary Internal Medicine, Vol-II, 4th Edition. W.B.Saunders, Philadelphia. Pp 1403-1404.
2. O'Connor, J.J. (1980): Dollar's Veterinary Surgery, 1st Edition. CBS Publishers and Distributors, NewDelhi. pp. 699-705.
3. Shuttleworth, A.C. and Smith, R.S. (2000): Clinical Veterinary Surgery, Vol-II, 1st Indian Reprint, Greenworld Publishers, Lucknow. Pp 224-225.
4. Strombeck, D.R. and Guilford, W.G. (1990): Small Animal Gastroenterology, 2nd Edition. Stonegate Publishing Company, California. Pp 410.
5. Tilley, L.P. and Smith, F.W.K. (1997): The 5 minute Veterinary Consult (Eds) Cann, C. and Vonderhorr, Williams and Wilkins, Baltimore. Pp 1010.
6. Venugopalan, A. (2005): Essentials of Veterinary Surgery, 8th Edition. Oxford and IBH Publishing Co. Pvt. Ltd., NewDelhi. Pp 330-333.

\* \* \* \* \*