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First Record Case of Seminal Vesiculitis in Mithun (*Bos frontalis*)

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Case Report

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ABSTRACT

A rare case of seminal vesiculitis developed in an adult (6 years old) captive Mithun due to continuous massaging of the vesicular gland for 2 months regularly at 2-3 days interval for the purpose of semen collection by massage method and its successful management by complete sexual rest for 2 months is reported.

INTRODUCTION

Mithun (*Bos frontalis*) which is believed to have a common ancestry with Gaur or *Bos gaurus* ^[1] is a pride hill animal of North Eastern hill (NEH) regions of India. It is considered as a very unique species since it occupies an important position in the economy of the tribal community of NEH region ^[2]. Mithun is also found in Bhutan, Myanmar, Bangladesh, hilly tracts of China and Malaysia. It is mostly reared for beef purpose and considered as an efficient converter of forest biomass into valued beef with a daily body weight gain of 324-497 gm ^[3]. Due to its semi-wild nature, the animal has become vulnerable to various biotic and abiotic stresses.

Seminal vesiculitis occurs in domestic bulls most commonly with incidence of 0.5 to 5% and less commonly in stallion and boar ^[4]. To the author's knowledge, this condition has not been previously reported in Mithun. This clinical article describes one interesting case of seminal vesiculitis in a captive Mithun reared at National Research Centre on Mithun (NRCM), Indian Council of Agricultural Research (ICAR), Jharnapani, Nagaland, India.

Case History and Observation

A 6 years old Mithun maintained at the farm of NRCM, ICAR, Jharnapani, Nagaland was used for semen collection by massage method at every 2-3 days interval. For the purpose of semen collection the seminal vesicles were massaged along with milking of ampulla continuously for 2-3 minutes per rectum. Following continuous use of semen collection for 2 months from this animal it was observed that right seminal vesicle of the animal became enlarged and firm on palpation. There was imparity in the clarity of lobulation of the gland, which transform into hard structure. However, the gland was free from adhesion. While palpating the seminal vesicle, the animal exhibited the signs of pain and the animal refused to allow prolonged palpation. Volume of semen that could be obtained from the animal varied from 0.4 to 2.20 ml in a single collection trial. Semen thus collected was not found to contain any floccules of pus or leucocytes. On the basis of clinical finding it was diagnosed to be a case of unilateral seminal vesiculitis.

RESULTS AND DISCUSSION

When the mithun was diagnosed as a case of seminal vesiculitis, the animal was given sexual rest and was not used for semen collection. However, no treatment was resorted against the condition. The Mithun was examined per rectally at 15 days interval to observe the effect of sexual rest on the recovery of the seminal vesiculitis. After a lapse of 2 months it was observed that the gland returned to its original size and shape with no other complications. Non-infectious causes of seminal vesiculitis in bovine were not recorded earlier. Cultural examination of semen revealed no infection. The development of seminal vesiculitis in the Mithun could be a sequel to frequent excessive massage. Mc Cauley ^[5] observed that seminal vesiculitis in bulls initiated by a viral or mycoplasmal infection usually involve an acute stage with often secondary bacterial invasion due to an immune reaction that follow this type of initial infectious process, may undergo spontaneous remission and affected seminal vesicle return to normal state. In the present case to the seminal vesiculitis in the Mithun was cured without undertaking any treatment. One earlier report indicated that young bull (cow bull) affected with seminal vesiculitis may usually recover from the disease without treatment ^[4].

Mithuns suffer from many infectious and noninfectious diseases as other animals and the most common diseases reported in captivity are tuberculosis, brucellosis, Infectious Bovine Rhinotracheitis (IBR), microfilariasis, gastrointestinal parasitism, ectoparasitism, papillomatosis, hydatidosis, echinococcosis, babesiosis, hepatic abscess, naval ill in calf, blue tongue ^[6] and ocular parasitic granuloma ^[7]. However, this is probably the first report on occurrence of seminal vesiculitis in Mithun.

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