CONGENITAL ABOMASAL FISTULA IN A BUFFALO CALF
AND ITS SUCCESSFUL TREATMENT

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ABSTRACT

This communication reports a case of a congenital abomasal fistula in a buffalo calf which was successfully treated surgically without any post operative complications.

Keywords: congenital, buffalo, calf

INTRODUCTION

Congenital anomalies in the bovine population have been associated with genetic factors (transgenes, chromosomes), environmental agents (infections, toxins, fertilization technique, management) or a combination of factors (Newman et al., 1999). Abomasal hernia and fistulation following trauma have been reported in an adult buffalo (Sobti et al., 1998) and a dairy cow (Balagopalan et al., 1993) but few reports of abnormalities in buffalo calves have documented a congenital abomasal fistula. The present case demonstrates the surgical management of congenital abomasal fistula in a buffalo calf.

HISTORY AND OBSERVATIONS

A 15-day-old non-descript buffalo calf produced by natural breeding was presented with a rare form of congenital abomasal fistula. History revealed that since birth, on suckling, milk was partially ingested and rest flowed out from the fistula (Figure 2). Physical examination revealed a fistula communicating to the exterior through the umbilical opening (Figure 1). The area surrounding the umbilicus was thickened and fibrosed. No other physical abnormality was manifested by the calf.

On clinical examination, the physiological parameters were found to be within the normal range. Haemato-biochemical parameters are depicted in Table 1. Haematological parameters and serum glucose levels were observed to be slightly lower than the normal physiological range.

TREATMENT

The animal was prepared for aseptic surgery, tranquilized with triflupromazine hydrochloride 0.1 mg/kg b.wt i/m and restrained in dorsal recumbency. Local infiltration with 2%
lignocaine hydrochloride was given encircling the lesion. An elliptical skin incision was then taken at the level of fistulous opening. It became clear at surgery that the fistula involved the abomasum. Haemorrhage was controlled and abomasum was freed of adhesions, freshened and sutured by double layer of inversion sutures using chromic catgut no.1. The muscle wall and skin was freshened and sutured routinely.

Post operatively dicrysticine sulfate 1 gm i/m for 5 days and meloxicam 0.5 mg/kg b.wt for 3 days were administered. Antiseptic dressing of the surgical wound was carried out and skin sutures were removed on the 12th post operative day. Animal was kept on fluid therapy for three post operative days and thereafter a restricted soft diet was allowed. The calf recovered uneventfully and no recurrence of fistulation was noticed during a two-month observation period.

**DISCUSSION**

Fistulas of compound stomach have been frequently observed and usually associated with trauma. Due to the infrequency of abomasal

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<th>Table 1. Haemato-biochemical parameters observed on presentation.</th>
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<td><strong>Haematological parameters:</strong></td>
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<td>Hb (g%)</td>
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<td>8.0</td>
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<td><strong>Biochemical parameters:</strong></td>
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<td>Serum Glucose (mg%)</td>
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<td>52.35</td>
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Figure 1. Fistula communicating through the umbilical opening.

Figure 2. Milk passing through the abomasal fistula
disorders in calves, they need to be recognized and treated promptly to obtain a successful outcome (Nowrouzian, 1994). A case of reticular fistula in a buffalo (Singh, 2004) and omasal hernia with fistulation in a bullock (Bhardwaj et al., 2000) have been reported. The present case reports the successful surgical treatment of congenital abomasal fistula in a buffalo calf. Though abomasum has been usually involved in fistula in heifer calves (Rijkenhuizen and Sickmann, 1994), it is also reported in association with hernia in a cow (Balagopalan et al., 1993) and buffalo (Sobti et al., 1998), however associated with trauma. But the cause of the abnormality in the present case could not be ascertained.

REFERENCES


