

IATROGENIC UMBILICAL-ABOMASAL FISTULA IN A HOLSTEIN FRESIEN CALF: A CASE REPORT

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SUMMARY

A Holstein Fresien female calf presented at Teaching Veterinary Clinical Complex, IVRI, Izatnagar, Bareilly with a swelling at umbilicus and leaking contents was diagnosed to be suffering from iatrogenic umbilical-abomasal fistula. Surgical reconstruction of the fistula was performed and the animal recovered successfully.

Key words: Abomasal fistula, Calf, Iatrogenic, Umbilical

Umbilical hernias, congenital or acquired, are the most common omphalopathies occurring in cattle (Silva *et al.*, 2012). The hernial contents may get strangulated due to constriction of hernial ring resulting into necrosis. The abomasal fistulation has been reported in calves due to necrosis of the organ following its entrapment in the ring. However, trauma to umbilical hernias can also lead to fistulation. The current report presents a case of traumatic umbilical-abomasal fistulation in a cow calf.

A four month old Holstein Fresien 35 kg female calf was presented at Teaching Veterinary Clinical Complex, IVRI, Izatnagar, Bareilly with continuous dripping of whitish fluid from the umbilical region. As per anamnesis, the calf had a constantly growing swelling at the umbilicus for 2 months. The swelling had been punctured with a BP blade by some local paraveterinarian a week back. Since then, there had been continuous leaking of milky contents through the puncture especially after feeding. Clinically, the calf was depressed, dehydrated with swollen margins around the umbilical opening (Fig. 1). History and clinical signs in the present case were suggestive of hind stomach fistulation. Further, pH of leaking contents was suggestive of abomasal fistulation and the same was confirmed radiographically after barium swallow which revealed radio-opaque barium lining the fistulous opening (Fig. 2). It was decided to go for surgical correction after written consent from the owner.

Postoperatively, feed and water were completely restricted to the animal for 3 days and was kept on intravenous fluid therapy (0.9% NS 1000 ml and 5 % DNS 1000 ml). Inj. enrofloxacin @ 5mg/kg b.wt O.D, IM for 5 days and inj. meloxicam @0.2 mg/kg b.wt.O.D, IM for 3 days were administered. The calf recovered without any complications and skin sutures were removed on 12th postoperative day.

Primary abomasal fistulas are not commonly

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Fig. 1. Calf with swelling around umbilicus and leaking contents.

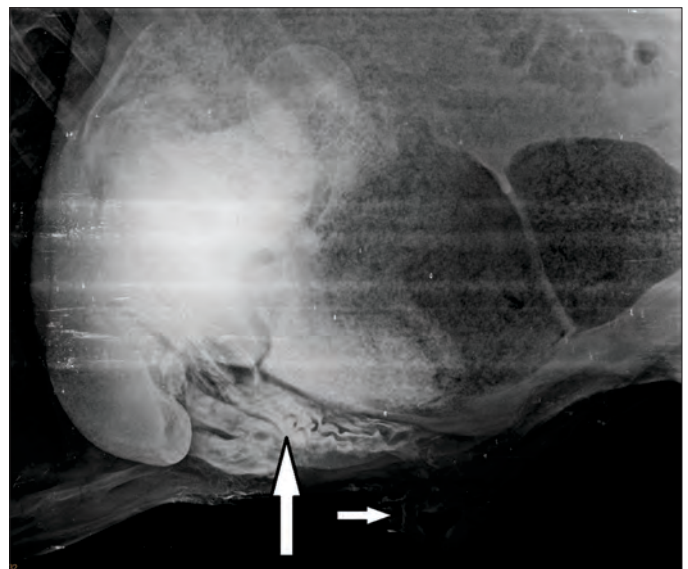


Fig. 2. Arrows showing radio-opaque barium lining the fistulous tract reported. The incidence of umbilical-abomasal fistula is rare in calves (Fubini and Ducharme, 2004) and usually occur in association with umbilical hernia and omphalophlebitis (Alves *et al.*, 2013). The pyloric part of the abomasum is usually herniated in umbilical hernia in cow calves (Fubini and Ducharme 2004). 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. Vertenten *et al.* (2009) has reported a case of abomasal fistula after a surgical procedure of displacement of abomasum in adult cattle. In the present case, stab incision put by a local paraveterinarian on the swelling for the purpose of drainage seemed to be the most probable cause of fistulation. The fistulation was found to be in the region of pylorus confirming the findings of Fubini and Ducharme (2004) and Sangwan *et al.* (2011).

The present case report highlights the need of proper diagnosis followed by careful surgical intervention for treating umbilical hernias and or omphalophelbitis in neonatal calves for there is every chance of clinician induced hind stomach fistulation.

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