

1                   **Intestinal intussusceptions in cattle: a retrospective study (22 cases)**

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6                   The objective of this study is to determine the prevalence and the prognosis after

7                   surgical treatment of intestinal intussusceptions (I.I.) in cattle.

8                   This study included 22 Belgian blue cattle, 11 calves (C) and 11 adults (A) referred to

9                   the clinic for ruminants of the University of Liege on 14 months. A clinical exam, a

10                  biochemistry profile, a haematology profile and a trans-abdominal ultrasonography were

11                  performed. A celiotomy on dorsal recumbency on the midline under intravenous general

12                  anaesthesia for the calves and a right flank celiotomy on standing animal for the adults were

13                  performed. When manual reduction was inefficient, an enterectomy was performed.

14                  Fluidotherapy, Penicillin (IM, SID for 10 days), gentamicine (IV, SID for 5 to 10 days),

15                  flunixin (IV, SID for 4 days) were administered post-operatively.

16                  In all cases, they were referred for decreased in appetite and scant fecal material. In

17                  all cases, abdominal distension was observed. In 10 cases (3 C/7 A), signs of abdominal

18                  pain were observed. Fecal material was scant in 4 cattle (1 C/3 A), absent in 13 (7 C/6 A)

19                  and contained blood in 5 (3 C/2 A). Biochemistry and haematology revealed a hypochloremic

20                  metabolic alkalosis in 16 (5 C/11 A) cases and acidosis in 5 calves. In 6 cases,

21                  ultrasonography allowed diagnosis. There were 13 jejunoojejunal (4 C/9 A), 4 ileocecal (3 C/1

22                  A), 4 ileoileal (4 C/0 A) and 1 colocolic (0 C/1 A) intussusceptions. Sixteen (7 C/9 A) cattle

23                  were treated by enterectomy, 3 (1 C/2 A) by manual reduction, 2 were euthanatized during

24                  the celiotomy (2 C/0 A) and one died before the surgery (1 C/0 A). Five calves died during

25                  the hospitalisation and 3 were euthanatized. Ten adults recovered well and were discharged

26                  4 to 8 days after surgery. One adult was euthanatized. All necropsies revealed fibrinous

27                  peritonitis and complete intestinal ileus.

28                  Unlike other studies, our study showed that I.I. represented 20 % of the surgical

29                  intestinal obstructions during this period. The season had no impact in our study.

30                  Clinicopathological findings were not specific. Ultrasonography may be a useful diagnostic

31                  tool. No aetiology could be determined from this study. Similar to other studies, I.I. occurred

32                  most commonly (60%) in the jejunal portion. The overall success rate after surgery was 50

33                  %. This study also revealed that I.I. has a better prognosis for adults (91 % success rate)

34                  than calves (9 % success rate).

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36                  Key words: cattle, intestinal obstruction, intussusception, enterectomy