abscesses, omal dilatation, perforating abomasal ulcers and advanced pregnancy were also identified as primary cause of CI in three cases (6%) each. However, the precise etiology remained undetermined in 12 cases (23%). Necropsy was performed in 24 cases (46%) and vagal nerve lesions detected in only one case.

Short-term prognosis was good with 30 cases (58%) being discharged. Long-term prognosis was fair with 13 cases (25%) remaining in the herd for at least one subsequent lactation. Three out of 10 (30%) cattle with perireticular abscesses remained in the herd for at least one subsequent lactation. 9 out of 15 (60%) cattle with an abomasal dysfunction were euthanized or died during hospitalization.

The prospective study included 34 calves ≤28 days of age with diarrheic and 5 healthy age-matched controls. Comparisons between groups were performed using t- or Mann-Whitney U tests. ANOVA test was used to determine association between plasma LPS and posture (standing, sternal or lateral recumbence), attitude (bright, depressed and comatose) and suckle reflex (strong, weak and absent). Spearman rank (r s) test was used to evaluate correlations.

Plasma LPS was detected in both healthy and diarrheic calves. LPS was significantly higher in diarrheic than healthy (0.997 ng/mL; 0.97–1.044 and 0.966 ng/mL, 0.961–0.981, respectively; P = 0.008) and in nonsurviving than surviving calves (1.036 ng/mL; 1.004–1.073 and 0.97 ng/mL, 0.974–0.996, respectively; P < 0.001). LPS was not associated with calf demeanour (P > 0.05), however, it was positively associated with plasma L-lactate (r s = 0.47; P = 0.005) and negatively associated with glucose (r s = −0.45; P = 0.008). LPS was higher in calves with hyper-L-lactatemia (>2.5 mmol/L) versus those without hyper-L-lactatemia (1.023 ng/mL; 0.95–1.069 and 0.985 ng/mL; 0.974–0.995, respectively; P = 0.01), and in hypoglycemic (<3.5 mmol/L) calves compared with normo/hyperglycemic (1.046 ng/mL; 0.976–1.32 and 0.994 ng/mL; 0.969–1.255, respectively; P = 0.02).

Plasma LPS was higher in diarrheic and nonsurviving calves. LPS was higher in hyper-L-lactatemic and hypoglycemic calves suggesting that diarrheic calves with endotoxia may have altered metabolic pathways.

To (1) determine risk factors for silica urolithiasis in goats; and (2) to evaluate changes in silica urolith submission rate over the past 28 years by comparing January 1, 1984 to December 31, 1998 (period 1) and January 1, 1999 to December 31, 2012 (period 2). Study population included 832 goats of which 106 had silica uroliths and 16,366 control goats. Information about age, breed, sex, reproductive status, geographic location, season of the year, and anatomic location, were used to identify risk factors. Pygmy, Nubian, Nigerian dwarf and mixed breeds were more likely to develop silica urolithiasis than other breeds. Breeds of mixed origin including Pygmy and Nigerian Dwarf comprised 56% of cases. Neutered males had significantly increased risk of developing silica uroliths. A significant association was found between breed, sex, reproductive status, geographical location, season, and anatomical location and detection of silica liths in goats. The proportion of silica urolith submissions had decreased from 20% in period 1 to 12% in period 2. Mean age of goats with silica increased from 2.5 ± 3.2 years in period 1 to 3 ± 2.5 years in period 2. Males comprised 96% and females comprised 4% in period 1. In period two males comprised 100% of the submissions. Results suggest that the prototypical goat with silica urocystoliths is a neutered male, 2.5–3 years and of African descent. While results of this study increased the number of risk factors for silica uroliths, these associations do not prove a cause and effect relationship.

The aim of this study was to evaluate the cardiotoxic effects of DOXY overdosage using 2DST echocardiography. Two-dimensional-speckle tracking (2DST) is used to evaluate LV dysfunction in numerous species but not in cattle. The aim of this study was to evaluate the cardiotoxic effects of an experimental overdose of DOXY using 2DST in calves.

Ten healthy male Holstein calves. Group 1: 5 calves (mean age 58.0 ± 16.3 days; mean body weight 72.2 ± 13.0 kg) received 25 mg/kg of DOXY orally for 5 days. Group 2: 5 calves (mean age 56.4 ± 15.7 days; mean body weight 73.4 ± 7.0 kg) received a placebo. Electrocardiography (ECG) and 2DST echocardiography were performed at day 0 and day 8. ECG tracings were analyzed for occurrence of arrhythmias. 2DST measurements included global and segmental, peak values for radial and circumferential strains (SR, SC), strain rates (SrR, SrC), rotation (Rot), rotation rates (RotR) and radial displacement (DR). All calves completed the study. ECG recordings were unremarkable in both groups. Heart rate was neither significantly different between groups nor before and after treatment. LV systolic function was affected in calves receiving an overdose of DOXY as shown by a significant decrease of segmental SR (P < 0.05), SC (P < 0.05) and DR (P < 0.05) in treated calves compared to the placebo group in several segments. The SrC in early diastole was also significantly decreased in 1 segment (P < 0.05).

In calves, DOXY overdose induces a LV dysfunction in systole, and to a lesser extent, in diastole. A better comprehension of the pathophysiology involved in the DOXY overdose will help in the treatment of accidental cases.