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Few studies report long term information on how cattle perform following rumen surgery. The purpose of this study were to gather information from medical records of cattle having rumenotomy or rumenostomy to determine how these cattle functioned following surgery.

The medical records of twenty-five cases of cattle undergoing rumenotomy or rumenostomy between 1999 and 2005 were reviewed. A standardized client questionnaire was created to obtain follow-up information.

Twenty-five cattle met the inclusion criterion for this study, of which 24 (96 %) were female. Rumenotomy (RT) was performed on 76% (19/25) of the cattle and rumenostomy (RS) was performed on 24% (6/25). Eighteen dairy cows (17 RT and 1 RS) and seven beef cows (2 RT and 5 RS) were included in the study. The age at the time of surgery was a mean of 4.2 ± 2.0 years for the RT animals and a mean of 0.9 ± 1.0 years for RS cattle. Hardware disease was diagnosed in 12 out of 19 (63%) RT cases; hardware disease was not diagnosed in any of the RS animals. Other diagnoses were bloat (nRT=3, nRS=3), other foreign body (nRT=4), choke (nRS=1), omasal impaction (nRS=1), and rumen acidosis (RS=1). Concurrent diseases were recorded for 64% (16/25) of the cattle. Medical therapy was instituted in all cases including antibiotics (oxytetracycline n=15, penicillin n=11, ceftiofur n=3, florfenicol n=1, and enrofloxacin n=1) and anti-inflammatory drugs (flunixin Meglumine n=15, dexamethasone n=1, prednisolone n=1). Four animals (1 RT and 3 RS) died within 60 days following the surgical procedure. Long term follow-up (>60 days) information was obtained on 21/25 (84%) of the animals. Time to follow-up varied from 4 months to 6 years. Seven animals (5 RT and 2 RS) were still present and productive in the herd. Eight animals (7 RT and 1 RS) had been culled from the original herd by the time of follow-up. Six animals (3 RT and 3 RS) were dead. Client questionnaires revealed that 10 (77%) cattle had a normal appetite following return home, 9 maintained normal body condition, 7 cattle returned to breeding and bred back in a timely fashion.

Conclusion: The greatest factor affecting outcome of rumen surgery is the primary disease and the preoperative condition of the animal. The RS animals had a markedly greater death rate than the RT animals.