
Soft Tissue Surgery in Ruminants

*Marchionatti E**

Clinic for Ruminants, Vetsuisse Faculty, University of Bern, Bern, Switzerland.

Several veterinary specialties, including surgery, have evolved since Claude Bourgelat founded the first veterinary school in Lyon, France in 1761 with the main objective of training veterinarians to protect cattle and horses against disease. As a consequence, veterinary surgery is becoming more specialized, with a general division between orthopedic surgery and soft tissue surgery. Soft tissue surgery encompasses a wide range of procedures including everything not related to bones, joints, muscles, or the neurologic system.

Soft tissue surgery in ruminants has progressed over the years and continues to evolve with time and the ruminant surgeon must therefore remain vigilant in its professional development to ensure the best clinical practice. A rapid growth in the number of published articles on different topics of soft tissue surgery in ruminants, such as gastrointestinal and urogenital disorders, was seen in the last decades. Despite soft tissue surgery in ruminants presents unique challenges, an increase in the demand for advanced veterinary care exists, and adaptation of techniques and practices used in human, small animal and equine surgery are common research subjects.

This lecture is intended to update the specialist and specialist in training on current key topics in soft tissue surgery in ruminants in an evidence-based way focusing on recent advancements, innovations, and emerging trends, as well as outcomes and complications.

Among the current key topics, particular attention has been given to the surgical management of obstructive urolithiasis in small ruminants, notably due to the increasing number of pet goats and sheep and the changing demographic of animals presented to the ruminant surgeon. While urolithiasis is one of the most common surgical emergencies, it remains a challenging condition in small ruminant practice. Significant advancements have been made in the past years to fulfill the demand from clients raising small ruminants as pets and the medical and surgical approaches once reserved to companion animals are becoming more and more frequent in ruminants' surgery.

Several surgical procedures, such temporary tube cystotomy, perineal/antepubic urethrotomy/urethrostomy, bladder marsupialization, urethroscopy and laser lithotripsy, and vesiculopreputial anastomosis have been described over time. Efforts to modify techniques to improve outcomes and decrease complications, and/or to comply with financial constraints of some owners have been made. The lecture will consolidate the latest research findings and advancement in this field, aiming to equip large and small animal surgeons with a comprehensive understanding of urolithiasis in small ruminants and insights into the creation of a multidisciplinary approach to optimize patient care and favorize positive outcomes to meet the rising client expectations.
