A NOVEL ARTHROTHOMY TECHNIQUE FOR THE TREATMENT OF CHRONIC PURULENT SEPTIC ARTHRITIS OF THE STIFLE JOINT WITH OSTEOLYSIS OF THE DISTAL FEMUR IN A GERMAN HOLSTEIN CALF

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Objective: Septic gonitis is a common form of arthritis in calves. Although local and systemic antibiotics combined with joint lavage are often successful in acute cases, arthrotomy is indicated in chronic cases with a large amount of compact intra-articular fibrin deposits or osteolytic lesions. So far arthrotomy has been limited to the cranial part of the stifle joint in cattle; the relatively large caudal part of the femorotibial joint is not amenable to a cranial arthrotomy approach. Because of these limitations the purpose of this report was to introduce a new surgical approach for arthrotomy of the stifle joint.

Methodology: Chronic purulent septic arthritis of the stifle joint with osteolysis of the lateral femoral condyle in a six-week-old female German Holstein calf was diagnosed by clinical, radiographic and ultrasonographic examinations. For arthrotomy a caudal epidural anaesthesia in combination with injectable general anaesthesia was carried out. THE CALF was placed in right lateral recumbency. A 20 cm skin incision was made lateral over the stifle joint from the distal femur to the proximal tibia; the gluteobiceps muscle was cut along its fibres, and the gastrocnemius muscle was cut transversely over a distance of 2 cm. The capsule of the femorotibial joint was then entered via two approaches (caudolateral and craniolateral). Debridement of altered bone and cartilage was undertaken using a curette. Afterwards the wound was sutured with three layers. THE CALF was treated with enrofloxacin for five days followed by lincomycin for 30 days. Flunixin meglumine was administered for four days after surgery.

Results: One day after surgery, THE CALF showed a severe mixed LAMENESS in the left hind limb and only the toe touched the ground. By day 11 the LAMENESS was reduced to moderate grade. 60 days after surgery THE CALF was discharged from the clinic with a slight LAMENESS. At a telephone follow-up 15 months after surgery, the animal had been bred with 14 months and was sound and the left stifle appeared normal.

Conclusions: In conclusion, arthrotomy via a caudolateral approach is a suitable method for the treatment of septic purulent arthritis of the stifle joint with osteolysis of the lateral femoral condyle in calves. In our patient, this treatment resulted in the elimination of local inflammatory processes, prevented spread of infection to other organs, and restored normal joint function.