

**POLYARTHRITIS CAUSED BY *ERYSIPELOTHRIX RHUSIOPATHIAE*
IN THREE AUSTRIAN SHEEP FLOCKS — DIAGNOSIS,
TREATMENT AND MANAGEMENT MEASURE**

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Between December 2017 and March 2018 lambs from 3 different farms were presented at the University Clinic for Ruminants because of lameness. First clinical examination at the clinic revealed different swollen joints. By anamnestic questionnaire the farmer reported that all animals with lameness are lambs of twin or multiple births. Orthopaedic examination revealed swollen and painful carpal and tarsal joints and in some of these lambs a slight to moderate abnormal flexion of the carpal joints. Ultrasonographically, a mild to moderate anechoic to hypoechoic effusion with and without flow-phenomena, and raw articular bone surfaces were assessed in affected joints. Radiological examination confirmed the ultrasonographic findings showing mild subchondral osteolysis and mild periosteal bone proliferation of the affected joints. Blood analysis revealed that the blood count was inconspicuous and calcium, phosphorus, iron and magnesium were within the physiological range.

Samples for bacteriology were taken from the incriminated joints by arthrocentesis. The bacteriological examination revealed an infection with *Erysipelothrix rhusiopathiae*. In addition an antibiotics-resistance test was carried out.

Severely infected animals were euthanized and a standard necropsies were undertaken with special emphasis on the joints, showing moderate to severe cartilage damage of subchondral osteolysis.

Slightly infected sheep were treated with antibiotics (ampicillin) and non-steroidal anti-inflammatory drugs and had a successful outcome. A herd-specific autogenous vaccine was produced from isolated *Erysipelothrix rhusiopathiae*, which was administered to pregnant sheep and lambs in the affected farms.

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