groups showed strong IgG responses post-vaccination. Neutralizing antibodies were detected regardless of IgG levels.

Conclusion: In summary, vaccinating new breeding stock may offer an effective long-term strategy for controlling Q fever outbreaks in livestock. This approach has already proven successful in Coxiella-infected sheep flocks and dairy cattle herds.

Ethics Approval: Federal state government of Schleswig-Holstein Az. V244-64609/2020

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Presence of *Mycoplasma putrefaciens* in a severe outbreak of polyarthritis and increased somatic cell count in a dairy goat herd

Sander Prins[1,2], Pauline Otz[3], Dominique Le Grand[1], Kim Hamer[4], Neil Sargison[5], Piet Vellema[6]

[1]*SHAR (Service d'hospitalisation des animaux de rentes), département élevage et santé publique, VetAgro Sup, 1 Avenue Bourgelat, 69280, Marcy l'Etoile, France;* [2]*Université Clermont Auvergne, INRAE, VetAgro Sup, UMR Herbivores, 63122 Saint-Genès-Champanelle, France;* [3]*CHUV Animaux de Production, service Médecine de Troupeaux, VetAgro Sup, Campus vétérinaire de Lyon, 1 avenue Bourgelat 69280 Marcy l'Etoile;* [4]*School of Biodiversity, One Health and Veterinary Medicine, University of Glasgow, Glasgow, G61 1QH, UK;* [5]*Royal (Dick) School of Veterinary Studies, University of Edinburgh, Easter Bush, Midlothian, EH25 9RG, UK;* [6]*Department of Small Ruminant Health, Royal GD, Arnsbergstraat 7, 7418 EZ Deventer, the Netherlands*

Corresponding author: sander.prins@vetagro-sup.fr

Introduction: Outbreaks of polyarthritis in kids caused by bacterial infection, often require predisposing factors, including management or environmental shortcomings.

Case description A severe outbreak of polyarthritis in goat kids (107/300 kids) and primiparous goats (55/61 goats), together with an elevated somatic cell count (SCC; $> 6.0 \times 10^6$ cells/mL; ref.: $< 1.0 \times 10^6$ cells/mL) in the multiparous goats was observed in a herd of 180 dairy goats, in October 2024. Bacterial cultures were taken from the affected joints of three kids at post-mortem, and from one clinical mastitis case. During a farm visit, potential risk factors were identified, and blood samples were taken from ten goats for CAEV and BTV serology.

Findings: Bacterial cultures of joint fluid were positive for *Escherichia coli* and *Mycoplasma* spp. Bacterial culture of the milk sample was positive for coagulase-negative *Staphylococci* and *Mycoplasma* spp. A *Mycoplasma putrefaciens* specific PCR was positive for both the bacterial cultures from the joint and the milk. Ten and two out of the ten blood samples for serology were positive for CAEV and BTV, respectively. Risk factors identified included: high stocking density, poor bedding hygiene, pooling of colostrum and the presence of CAE.

Conclusions: The role of *M. putrefaciens* in this case seems to be opportunistic, and secondary to concurrent diseases and management shortcomings. The multi-morbidities on this farm required intense veterinary-farmer collaboration towards an acceptable outcome for the farmer.

Owner consent: Owners provided consent for the use of anonymised data

Early diagnosis of enzootic nasal adenocarcinoma (ENA) in goats: A preliminary study

Aurora Ortín[1], Pablo Quilez[1], Javier Balado[2], Marta Ruiz de Arcaute[1], Delia Lacasta[1], Ana Oliveira Neves[1], Enrique Castells[3], Alfredo Benito[4], Sergio Villanueva-Saz[1], Héctor Ruiz[1], Marcelo de las Heras[1]

[1]*Ruminant clinical service of the Department of Animal Pathology and Instituto Agroalimentario de Aragón-IA2 (Universidad de Zaragoza-CITA), Veterinary Faculty, Zaragoza 50013, Spain;* [2]*Quesos de Catí, Cooperativa V.C.H. 5, Catí 12513, Castellón, Spain;* [3]*Centro Clínico Veterinario, Zaragoza, Spain. 4. Exopol, Zaragoza, Spain*

Corresponding author: aortin@unizar.es

Introduction: Enzootic nasal adenocarcinoma (ENA) of goats, also known as an enzootic nasal tumour, is a contagious neoplasm of the nasal mucosal glands aetiologically associated with the betaretrovirus ENTV-2. Clinical signs are absent in the early stages when the tumour is small, but as the disease progresses, symptoms such as dyspnea, seromucous nasal discharge, snoring, coughing, exophthalmos, and skull deformities are observed. There is no effective treatment or vaccine, and disease control on affected farms is challenging due to the apparent lack of humoral immune response, making detecting preclinically affected goats difficult.

Objectives: To assess the efficacy of nostril thermography and RT-PCR from nasal swabs for the early detection of enzootic nasal adenocarcinoma (ENA) in goats.

Methods: Twenty-nine Murciano-Granadina milk goats from a herd in Spain with a high prevalence of ENA were included in the study. Each animal underwent a clinical examination, and thermographic images of the nostrils were taken. Nasal swabs were collected for the specific detection of ENTV-2 via RT-PCR using the EXOone Caprine Enzootic Nasal Tumour Kit (Exopol, Spain). Post-mortem examination of the heads was conducted, and tissue samples were taken for histopathological analysis.

Results: Positive thermographic images were obtained in 13/29 goats, of which 10 were confirmed to be ENA-positive by histopathology. The RT-PCR test was positive in 17/29 goats, with thermography showing positive results in 11 of them. Histological confirmation was obtained in 11/17 PCR-positive goats.

Conclusions: These preliminary results suggest that thermography and RT-PCR may be valuable tools for the early *in vivo* detection of goats affected by ENA, which would allow for improved disease control.

Ethics Approval: The experimental protocol was approved by the Ethics Committee for Animal Experiments from the University of Zaragoza (reference PD29/24 NE).