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ESVP/ ECVP Poster abstracts

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cells (eotaxin). The latter was only present in association with infiltrating neutrophils in ulcerated MCTs. SCF was only detected in spindle cells of vessel walls. Eosinophils did not express any of the markers. Overall, RANTES and eotaxin signaling was more intense in EG.

Conclusions: The results suggest that neither condition has a specific cytokine/chemokine expression pattern. Instead, MCT growth and/or recruitment of MC and eosinophils in MCT and EG are likely the result of a cellular cross-talk involving all relevant mediators, individually orchestrated in each specific case.

Poster 74: CORRELATION BETWEEN PREDISPOSING FACTORS AND LUNG INFLAMMATORY LESIONS IN PIGS NATURALLY INFECTED WITH MYCOPLASMA HYOPNEUMONIAE

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Introduction: *Mycoplasma hyopneumoniae* and several predisposing factors are involved in the pathogenesis of enzootic pneumonia. The aim of this study was to investigate the correlation between farm management factors and pulmonary alterations in slaughtered swines.

Materials and Methods: One thousand one hundred and three lungs of fattened pigs from 18 different vaccinated and unvaccinated batches from Italian herds were macroscopically examined. For each slaughtered batch, data related to production system, management practices and vaccination protocols were collected. One hundred lung tissue samples, were fixed in formalin and zinc salts for histopathological and immunohistochemistry studies (using antibodies against CD3, CD79 and Iba1).

Results: Our study revealed that open cycle, growing-finishing weight lower than 30 Kg, presence of slatted systems and mixed natural and forced ventilation systems are predisposing factors. The histopathological investigation revealed that vaccinated subjects have less severe lung lesions and more evident BALT hyperplasia. In vaccinated animals not affected by pneumonia, a higher count of B- and T-lymphocytes and a lower number of macrophages were observed in the BALT compared to unvaccinated animals. In vaccinated animals with pneumonia, a higher number of T-lymphocytes and macrophages and a lower of B-lymphocytes were evident in BALT and in inter-alveolar septa than in unvaccinated ones.

Conclusions: Our study underlined the main risk factors involved in the pathogenesis of enzootic pneumonia. A good tissue immune response was evident in vaccinated pigs without lung lesions but a lower Th2 response and a higher non-protective cell-mediated response was observed in vaccinated animals with pneumonia.

Poster 75: SALIVAPRINT: SHEEP SALIVA ELECTROPHORETIC PROTEIN PROFILE IN A BIOINFORMATICS APPROACH

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Introduction: Sheep saliva can be used for individual monitoring and decision aiding in therapeutic intervention. The total protein profile of each subject (SalivaPrint) can be integrated with clinical and environmental data to stratify individuals and analyze their health status. This study applies a bioinformatics strategy in order to identify standard protein profiles in healthy sheep. Standard total protein profiles of sheep are compared to human profiles.

Materials and Methods: Saliva samples were collected. Total protein profile of sheep saliva samples was performed using the Experion™ technology. An algorithm which is able to identify common molecular weights ranges in a group of electrophoretic profiles was used. Common molecular weights present in sheep SalivaPrint were then used with OvisOme database to identify proteins. Using AgBase GORetriever tool it was possible to analyze and catalogue their biological processes.

Results: Sheep and Human SalivaPrints are different. The SalivaPrints of individuals from the same flock appear to have a higher degree of similarity than individuals of different flocks. Fourteen proteins were identified using OvisOme database. The most representative biological process found was the response to stress with the proteins: Cathelicidin-1, Beta 2 microglobulin, Cathelin, Kallirein and Chloride intracellular channel protein.

Conclusion: Different species have different salivary protein profiles. The total protein profile seems to be highly conserved between flocks. By using SalivaPrint profiles with bioinformatic tools like OvisOme it was possible to find proteins which are common to healthy sheep populations. Furthermore, it's possible to infer novel biomarkers and indicators of animal health.

Poster 76: CEMENTOMA CAUSING AN ORONASAL FISTULA IN A HORSE: A RARITY

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Introduction: Cementomas are very rare, benign, slow-growing, expansive, mesenchymal odontogenic tumors arising from proliferation of cementoblasts and characterized by extensive deposition of cemental matrix associated to the tooth root, with occasional destruction of alveolar cortical bone. In humans, they are classified in three categories: periapical cemental dysplasia, benign cementoblastoma (true cementoma), and gigantiform cementoma. Cementomas in domestic animals are infrequent, with just six reports in horses and single cases in feline, bovine, monogastric herbivores and rodents.

Materials and Methods: An eight-years-old, male, Spanish purebred horse presented with a history of chronic unilateral rhinitis refractory to therapy for 3 weeks. Radiologically, a radiopaque mass extending from and surrounding the roots of the P2 maxillary premolar was demonstrated. Excised premolar and mass were routinely processed, decalcified and stained with hematoxylin-eosin, Grocott, and immunostained with polyclonal antibodies against *Aspergillus fumigatus*.

Results: After excision, a severe oronasal fistula was observed. Grossly the mass showed hard consistence, greyish-whitish color and irregular surface that, on the ventral aspects, fitted with the apical surface of the involved premolar. Histologically the mass consisted of an abundant deposit of eosinophilic irregularly mineralized cementum-like substance with frequent basophilic reversal lines surrounding empty lacunae and intermixed with fibrovascular tissue. Surround this matrix there were numerous fugal hyphae positive for *Aspergillus fumigatus* immunostaining.