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birth and tested negative. An ID Screen<sup>®</sup> MVV-CAEV Indirect Screening ELISA was used. In all diseased kids antibiotic (third-generation cephalosporin) and supportive therapy was maintained for 5 days which resulted in the disappearance of clinical symptoms. The kids returned to the herd, however three weeks later the symptoms recurred in two of them and they immediately died. The autopsies revealed purulent meningoencephalitis. Moreover, epidemiological investigation was launched to track down a potential origin of the infection. Swabs were collected from all visible wounds and abscesses in goats as well as from the external ear and nasal cavity of kids in the herd.

**Results:** *T. pyogenes* was cultured from the pus and samples of brain and internal organs of two dead kids. It was also isolated from two mandibular abscesses – one in a peer of the dead kids, another in an adult male. Neither nasal nor ear swabs harbored *T. pyogenes*.

**Conclusions:** *T. pyogenes* is a potential cause of an outbreak of purulent meningoencephalitis in goats irrespective of the quality of environmental conditions in which they are kept. Neither external ear nor nasal cavity seem to be the reservoir of the pathogen. *T. pyogenes* infection doesn't seem to be linked to CAEV infection.

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#### P44

### The prevalence of *Pasteurella multocida* from farm pigs in Serbia

Oliver Radanovic, Jadranka Zutic,  
Dobriša Jakic-Dimic, Branislav Kureljusic,  
Bozidar Savic

*Institute of Veterinary Medicine of Serbia, Vojvode Toze 14,  
11000 Belgrade, Serbia*

**Introduction:** Respiratory disease belongs to the most important problems in intensive pig production worldwide. The development of intensive swine farming is characterized by the forming of big agglomerations for the production of swine, which has resulted in the concentration of large numbers of animals in a small space. Such a manner of production favors the incidence of respiratory infections in swine. The objectives of the presented investigation were to determine the incidence and to identify the bacteria that cause pneumonia in pigs with an accent on the incidence of *P. multocida*.

**Material and methods:** The investigations covered a total of 234 pathoanatomical altered lung tissue of dead pigs, from 6 farrow-to-finish pig farms during 2013. and 2014 years. The samples were inoculated on corresponding culture media (blood agar, MacConkey agar, Columbia agar) and incubated at a temperature of 37°C during 24-48 h. The physiological and biochemical characteristics were examined in the pure cultures

obtained in that way. Bacterial isolates were identified using standard bacteriological methods. The identification was confirmed using the BBL Crystal , E/N, G/P ID Kit (Becton Dickinson). For determination of type of *P. multocida* PCR method was used.

**Results:** From the total of 234 examined lung samples, bacteria strains were isolated from 202 samples (86%). *P. multocida* in pure culture was isolated from 71 (35 %) samples. Furthermore, mixed cultures were established in 29 (14% ) samples, where, in addition to *P. multocida*, *Streptococcus* spp was isolated from 9 (31%) samples, *Arcanobacterium pyogenes* 8 (27%), *Actinobacillus pleuropneumoniae* 7 (24%) and *Haemophilus parasuis* 5 (17%). The PCR method confirm that all 15 investigated strains of *P. multocida* belong to type A.

**Conclusions:** The high percentage (86 %) of identified bacteria from pig lung indicated their importance in ethio-pathogenesis of the pig respiratory infections. These results have shown a high incidence and importance of *P. multocida* in genesis of the pig respiratory disease. The control of respiratory disease requires an understanding of the complexities and interaction between the organisms that are present, the pig and the management of the environment. The prevalence of respiratory disease is affected by the presence of respiratory pathogenic agents, the virulence of the pathogens present, the level of the pathogens in the house environment and the immunity of the pig.

#### P45

### Distribution of the PCV2 antigen in different tissues and the histopathological changes in the same tissues from pigs with PMWS

Ivica Gjurovski\*, Trpe Ristoski

*Faculty of Veterinary Medicine Skopje, R. of Macedonia*

**Introduction:** The Circovirus disease in pigs is caused by a small, spherical DNA virus which is spread in the pig production industry worldwide. Most important of the Circovirus diseases is the Postweaning multisystemic wasting syndrome (PMWS) which causes big economical losses in the pig industry.

**Material and methods:** Samples of lung, liver, kidney, spleen and lymph nodes from 40 pigs with Postweaning multisystemic wasting syndrome from different parts of the Republic of Macedonia were collected. Samples of each organ were fixed in 10% formalin, dehydrated, embedded in paraffin and cut on 3 µm thick slides. The histopathology slides were stained with hematoxylin-eosin and the immunohistochemistry slides were treated with F217 2C6-H9-A2 monoclonal antibody using LSAB method.

**Results:** We examined 40 pigs from different herds with signs of wasting disease. The clinicopathological symptoms were: weight loss, dyspnea, skin pallor and occasionally icterus, interstitial pneumonia and lung oedema, lymphadenopathy, hepatitis and nephritis.

