

CONTENT PAGE OF THE ISSUE APRIL OF 2009

EQUINE

N. Nógrádi, B. Tóth: Neonatal isoerythrolysis in foals. Literature review / 195

BOVINE

*K. Jánosi, L. Stipkovits, O. Schreck, R. Glávits, T. Molnár, L. Makrai, M. Gyuranecz, J. Varga, Zs. Szathmáry, L. Fodor: Pathological and histopathological findings on lungs following experimental infection of calves with *Histophilus somni* / 202*

PORCINE

W. Herbst: Swine dysentery / 210

POULTRY

Zs. Benyeda, V. Palya, M. Rusvai: Infectious bronchitis of chickens / 217

SMALL ANIMALS

K. Kovács, K. Szakmáry: Treatment of shot wound by soft laser. Case report / 226

M. Engert, C. Thiel, T. Peppler, J. Bokemeyer, M. Kramer: Surgery of external ear canal and middle ear in dogs and cats / 231

PET ANIMALS

J. Mátyus, A. Krizsanics, A. Bölcskey Molnár, J. Gál: An investigation of the causes of death in Amazon parrots between 1996 and 2008

/ 235

ANIMAL WELFARE

A. Á. Béres, J. Janan, E. Szűcs, P. Tóth: Role of resting stations in the transport of animals / 243

ACADEMIC REPORTS, 2009

Veterinary research in 2008, in the light of academic reports. Part 2 / 251

EVENTS

Overview about food-chain control in Carpathian – Euroregion (Visegrád, 25–27 November 2008) / 256

IN MEMORIAM

György Póth (1927–2008) / 250

N. Nógrádi – B. Tóth:

NEONATAL ISOERYTHROLYSIS. LITERATURE REVIEW

Neonatal isoerythrolysis of foals is an immunmediated disease which occurs only during the first days of life. The process is exacerbated by immunoglobulin produced by the mare's immune system against foreign red

blood cells. The antibodies can not cross the placenta but are secreted in the colostrum. In the neonate the antibodies bind to the surface of red blood cells and facilitate their lysis. The majority of the process occurs extravascularly, mostly in the spleen and in the liver but it can also happen intravascularly. The consequences are anaemia, icterus, and secondary hepatopathies, nephropathies, neurological symptoms, septicaemia. History reveals multiparous mares or mares that had previous history of blood transfusion or reported administration of autologous tissue vaccines, anti-toxins. Clinical signs in foals include pale, icteric mucous membranes, tachycardia, tachypnea, dull, depressed attitude and inappatence. Haematology and serum biochemistry indicate decreased haematocrit, increased indirect bilirubin levels, and commonly electrolyte abnormalities, metabolic acidosis, increased BUN, creatinine and liver enzymes. Most common immunologic tests include haemolytic (cross-match), antiglobulin (Coombs), and agglutination (JFA) test. Treatments involve muzzling the foal, temporary feeding via nasogastric tube, and if indicated blood transfusion, fluid, electrolyte, vitamin, antibiotic, antiulcer and liver supportive therapy and administration of corticosteroids. For prevention cross-match test, blood typing of the mare and the stallion, and restriction of colostrum intake from the questionable dam after parturition are essential.

K. Jánosi – L. Stipkovits – O. Schreck – R. Glávits – T. Molnár – L. Makrai –
M. Gyuranecz – J. Varga – Zs. Szathmáry – L. Fodor:

PATHOLOGICAL AND HISTOPATHOLOGICAL FINDINGS ON LUNGS FOLLOWING EXPERIMENTAL INFECTION OF CALVES WITH *HISTOPHILUS SOMNI*

Histophilus somni (former name: *Haemophilus somnus*) is a Gram-negative, fastidious, facultative pathogenic bacterium, that can cause local or generalised diseases in cattle: thromboembolic meningoencephalitis – TEME –, septicaemia, reproductive problems, mastitis, respiratory diseases, as well, as asymptomatic carriage on the mucous membranes of respiratory and genital tract can also occur.

The authors carried out the pathological and histopathological evaluation of lungs of 12 conventionally reared 3-month-old Holstein-Friesian calves after aerosol infection with *H. somni*.

All animals were exterminated and gross pathological examination was carried out on 15th day after infection. Ten calves developed acute catarrhal bronchopneumonia, while there was one subacute, as well as, one chronic case.

This is the first paper in Hungarian on pathological and histopathological findings of pneumonic lesions caused by experimental infection of calves with *H. somni*.

Zs. Benyeda – V. Palya – M. Rusvai:

INFECTIOUS BRONCHITIS OF CHICKENS

Infectious bronchitis of chicken is a well known disease since the beginning of the 1900's, but has remained a continuous challenge for both the broiler and layer industry. Besides the respiratory signs, the affected flocks often suffer from kidney damage or egg-production problems. During the recent years, several infectious bronchitis strains or closely related *coronaviruses* have been isolated from gallinaceus and non-gallinaceus species, which might be indicative of replication of these viruses in species apart from their original host. Antigenic differences between the strains are in connection with the variance of the amino-acid order of S1 protein. Although, these difference not always reflect the real relationship between the immunity and genotype of the strains. Therefore, we always have to be careful to choose and properly evaluate the diagnostic methods and their results. The numerous different serotypes and their high variability necessitate regular monitoring of the flocks and continuous development of vaccines. Live and inactivated vaccines have been used for a long time in the affected flocks worldwide. Although, the absence of cross-protection between serotypes or the inadequate application often result in deficient immune response. Several so called „new generation” vaccines have been developed in the recent years to assure a more reliable and safer protection in chickens. One of them, which can be administered *in ovo*, might have a great opportunity to develop an early and homolog immunity in the flocks.

K. Kovács – K. Szakmáry:

TREATMENT OF SHOT WOUND BY SOFT LASER. CASE REPORT

The authors summarize the advantage of the soft laser treatment in a hunting dog having serious skin wound due to shot. This laser treatment has many advantages to the veterinarian and also friend of animal technique. The authors used GaAlAs laser, 6–10 J/cm² to several weeks and the results were excellent. The laser recovered the tissue, decreased the oedema and increased regeneration. Laser therapy of wounds promoted healing and reduced pain at the same time.

J. Mátyus – A. Krizsanics – A. Bölcskey Molnár – J. Gál:

AN INVESTIGATION OF THE CAUSES OF DEATH IN AMAZON PARROTS BETWEEN 1996 AND 2008

The authors investigated the causes of death in Amazon parrots dissected between 1996 and 2008. In the given period 33 specimens belonging to nine species and another 19 birds of undetermined species were subjected to a diagnostic investigation. Of the birds studied by the authors the three most common species were Yellow-faced Amazon [*Amazona* (now *Alipiopsitta*) *xanthops*; 22%], Blue- or Turquoise-fronted Amazon (*A. aestiva*; 21%) and Orange-winged Amazon (*A. amazonica*; 18%). Of all pathologies of the liver (28%) inclusion body hepatitis, liver cyrrhoses and acute, purulent liver inflammations caused by various bacteria were frequent. Of the lesions observed in the intestinal tract (25%) intestine invagination and paralytic ileus

were occasionally represented in addition to an intestinal inflammation. In lungs and airsacs, lesions were found in 13% of the specimens, the most frequent was inflammation caused by *Chlamydophila psittaci*, but also airsac mycosis could often be observed. Other organic lesions (proventricular dilatation syndrome, kidney pathologies, circulatory diseases) were only rarely diagnosed in the species investigated.

Á. A. Béres – J. Janan – E. Szűcs – P. Tóth:

ROLE OF RESTING STATIONS IN THE TRANSPORT OF ANIMALS

The authors overview the legal background of resting/controlling stations and summarize veterinary problems appearing in the course of transportation of live farm animals. On the bases of experiments from Rédics on the Hungarian-Slovenian border, the practical working process of resting/controlling stations is presented and then some motions are made for the elimination of problems and faults discovered.