

VETERINARY MEDICINE

AIRE, T.A., SOLEY, J.T. & GROENEWALD, H.B. 2003. A morphological study of simple testicular cysts in the ostrich (*Struthio camelus*). *Research in Veterinary Science*, 74: 153-162.

Simple testicular cysts are rare in mammals and of unknown aetiology, but dietary conditions have been implicated in this phenomenon in poultry. This study characterises the structural features of simple intratesticular cysts in the ostrich. Seven testes from a total of 15 sexually mature ostriches slaughtered during the breeding season were used. The testes contained multifocal, fluid-filled, unilocular cysts which were lined by a simple squamous or low cuboidal epithelium and surrounded by a thick layer of fibrous connective tissue. The cysts developed within seminiferous tubules and displayed morphological features similar to those reported in man and domestic poultry. The testis parenchyma revealed several foci composed of intermingled normal seminiferous tubules and variably sized intratesticular cysts. The atrophic tubules lay within a mass of hyperplastic, fibroblastic intertubular connective tissue in the proximity of large cysts and their formation appeared to result from hydrostatic pressure exerted by cysts. Morphological evidence supports a continuous process of cyst formation in the affected testis and a concomitant progressive loss of atrophic seminiferous tubules. A pathogenetic scenario of cyst formation and the effect of simple cysts on testicular histology has been proposed. Although the course of this phenomenon remains unknown, its impact on the fertility of this economically important bird deserves closer scrutiny.

ANONYMOUS 2001. Proceedings of the American College of Veterinary Anesthesiologists 25th Annual Meeting, San Francisco, California, 12-13 October 2000. 28: 97-110.

The proceedings contain 29 papers on anaesthesia education and the use of anaesthetics and its effects on small animals (dogs and cats), ruminants (sheep and goats), horses, laboratory animals (guineapigs) and exotic species (ostriches, tapirs, greater bush baby).

ANONYMOUS 2001. Proceedings of the Annual meeting of the American College of Veterinary Radiology, Honolulu, Hawaii, USA, 5-13 August 2001. 42: 576-593.

The proceedings consist of 34 abstracts, which elaborate on various applications of radiology, ultrasound and other advanced diagnostic and imagery techniques in the field of veterinary medicine for purposes of therapy, disease diagnosis and monitoring, as well as to establish normal features of animal anatomy and physiology.

BISHOP, Y. 2000. The veterinary formulary. Pharmaceutical Press, London, UK, Ed.5, pp 692 .

This edition, published in association with the British Veterinary Association, contains 60 new drug monographs compared with the previous edition (1998). Examples are allopurinol, bupavaquone, ciclosporin, diflubenzuron, florfenicol (prescribing for fish), furazolidone, malathion, methionine, Psyllium, sodium citrate, and norethandrolone. There is also a number of new sections added including prescribing for ferrets, drugs for leishmaniosis, drugs for theileriosis, drugs for trypanosomosis, treatment of navicular disease, husbandry requirements for amphibians, wound management, PRRS, mastitis, Salmonella infections, and pasteurellosis, as well as revisions to all sections. As well as listing preparations that are authorised for use in the UK, veterinary preparation available in Australia, Irish Republic, New Zealand and USA are also given. Where authorised veterinary preparations are unavailable, products authorised for human use and are also commonly used in veterinary medicine are included. As with the previous edition there are appendices on drug interactions, drug compatibilities and incompatibilities, and tables on body weight and surface area, body weight ranges for domestic species, and exotic birds, and information on estimating drug dosage in species where there is little information available. The general index includes generic and proprietary names of drugs.

CANPOLAT, I. & UNSALDI, S. 2003. The evaluations of surgical lesions on the birds brought to the surgery clinics of Veterinary Faculty of University of Firat between 1992-2001. *Sağlık Bilimleri Dergisi, Firat Üniversitesi (Veteriner)*, 17: 55-57.

The records of 194 birds consisting of 23 indiana cocks, 6 hens, 4 ducks, 5 ostriches, 6 canaries, 60 lovebirds, 34 partridges, 12 pigeons, 3 parrots, 2 nightingales, 3 owls, 8

sparrowhawks, 10 eagles, 4 hawks, 3 falcons, 2 seagulls, 3 sparrows, 3 storks and 3 peacocks presented at the Firat University Veterinary Surgery Department between 1992-2001 were evaluated according to diseases and species. It was shown that there were 32.9% fractures, 9.2% bumblefoot, 13.4% eye diseases, 11.3% wounds, 5.1% abscesses, 2.0% ruptured claws, 2.0% sinusitis, 11.7% tumours, 2.0% dislocations, 4.1% arthritis, 1.0% myositis, 3.0% leg paralysis, 2.0% toe necrosis, 1.5% claw deformities, 2.0% beak deformities and 2.0% rectal prolapse cases.

CAPUA, I., MUTINELLI, F., POZZA, M.D., DONATELLI, I., PUZELLI, S. & CANCELOTTI, F.M. 2002. The 1999-2000 avian influenza (H7N1) epidemic in Italy: veterinary and human health implications. *Acta Tropica*, 83: 7-11.

From the end of March to the beginning of December 1999, a total of 199 outbreaks of low pathogenicity avian influenza (LPAI) was diagnosed in the Veneto and Lombardia regions, which are located in the northern part of Italy. The virus responsible for the epidemic was characterized as a type A influenza virus of the H7N1 subtype of low pathogenicity. On the 17th of December, highly pathogenic avian influenza (HPAI) was diagnosed in a meat turkey flock in which 100% mortality was observed in 72 h. The infection spread to the industrial poultry population of northern Italy including chickens, guinea-fowl, quail, pheasants, ducks and ostriches for a total of 413 outbreaks. Over 13 million birds were affected by the epidemic, which caused dramatic economic losses to the Italian poultry industry with severe social and economic implications. The possibility of H7 virus transmission to humans in close contact with the outbreaks was evaluated through a serological survey. Seven hundred and fifty nine sera were collected and tested for the detection of anti-H7 antibodies by means of the micro-neutralization (MN) and single radial haemolysis (SRH) tests. All samples resulted negative. A limited number of clinical samples were also collected for attempted virus isolation with negative results. Current European legislation considers LPAI and HPAI as two completely distinct diseases, not contemplating any compulsory eradication policy for LPAI and requiring eradication for HPAI. Evidence collected during the Italian 1999-2000 epidemic indicates that LPAI due to viruses of the H7 subtype may mutate to HPAI, and, therefore, LPAI caused by viruses of the H5 or H7 subtypes must be controlled to avoid the emergence of HPAI. A reconsideration of the current definition of avian influenza adopted by the EU, could possibly be an aid to avoiding devastating epidemics for the poultry industry in Member States.

DZOMA, B.M. & DORRESTEIN, G.M. 2000. Veterinary problems of farmed ostriches up to 12 weeks of age: a review. Part II: Chick rearing. *Zimbabwe Veterinary Journal*, 31: 95-109.

GULBAHAR, M.Y., AGAOGLU, Z., BIYIK, H. & YUKSEK, N. 2000. Zygomycotic proventriculitis and ventriculitis in ostriches (*Struthio camelus*) with impaction. *Australian Veterinary Journal*, 78: 247-249.

HERRAEZ, P., RODRIGUEZ, F., ESPINOSA DE LOS MONTEROS, A., ACOSTA, B., JABER, J.R., CASTELLANO, J. & CASTRO, A. 2005. Fibrino-necrotic typhlitis caused by *Escherichia fergusonii* in ostriches (*Struthio camelus*). *Avian Diseases*, 49: 167-169.

Two adult ostriches developed anorexia, prostration, and severe haemorrhagic diarrhoea, dying 24 hr after the onset of clinical signs. On postmortem examination, the cecal mucosa showed locally extensive areas of haemorrhages and fibrino-necrotic typhlitis with a white-yellowish material covering the mucosal surface. Multiple serosal petequeal hemorrhages and fibrinous peritonitis were present. Histologic examination revealed an intense mononuclear infiltration in the lamina propria and submucosa of the cecum and extensive superficial necrosis associated with fibrin and serocellular deposits. Several gram-negative bacterial colonies were observed within the necrotic areas. Samples from intestinal lesions were collected, and pure growth of *Escherichia fergusonii* was obtained. *Escherichia fergusonii* is a member of Enterobacteriaceae, closely related to *Escherichia coli* and *Shigella* sp., established as a new species of the genus *Escherichia* in 1985. In veterinary medicine, *E. fergusonii* has been reported in calves and sheep from clinical cases suggestive of salmonellosis. To our knowledge, this report represents the first description of *E. fergusonii* associated with enteritis in ostrich.

HUCHZERMEYER, F.W. Veterinary problems. IN *The ostrich: biology, production and health*. Ed. Deeming, D. C.; CABI Publishing, Wallingford, UK, 1999 : 293-320,

KOMNENOU, A.T., GEORGIADES, G.K., SAVVAS, I. & DESSIRIS, A. 2003. Surgical treatment of gastric impaction in farmed ostriches. *Journal of Veterinary Medicine - Series A*, 50: 474-477.

Partial or complete impaction of the proventriculus and/or the ventriculus is usually seen in juvenile ostriches. Common impaction materials include stones, sand, hay stems and leaves, and even plastic and metallic objects. Six live ostriches showing signs of impaction and three dead ones suspected to have impacted stomachs were presented to the Department of Clinical Sciences of the Faculty of Veterinary Medicine of the Aristotle University of Thessaloniki. The birds manifested anorexia, whitish and decreased urine output, scant defecation, unwillingness to rise and consume water. Clinical examination revealed distended and firm proventriculi, while radiographs showed foreign objects in the proventriculi of all birds and the ventriculus of one of them. The living birds were successfully treated surgically and medically. Autopsy of the three dead ostriches revealed severe dehydration and impaction of the stomachs. Bacteriological and parasitological examination was negative. Amendments in management practices were important to minimize losses caused by impaction of the stomachs in ostriches, while proventriculotomy remains the most effective approach to the problem.

KRITAS, S.K. 2001. The main medical problems of ostriches. *Deltion tel„s Ellel„nikel„s Ktel„natrikel„s Etaireias* = *Journal of the Hellenic Veterinary Medical Society*, 52: 169-175.

LOJKIĆ, M. & KARLOVIĆ, M. 2004. Croatian Veterinary Institute Zagreb: 2003 report. *Veterinarska Stanica*, 35: 151-158.

This year is the 70th anniversary of the Croatian Veterinary Institute. It was established as a production organization with only two experts and was mostly engaged in the production of vaccines and medicines. In the preceding year, 613,490 various samples have been examined (animals, fodder, animal products, environment/animal premises, drinking water, sewage/and other/ostrich eggs, plant control, medicine, toxicology material, biological material and special examinations concerning the presence of various residues). In addition, various diagnostic methods several types of vaccines have been produced. The scientific activities encompass 8 projects and discussions published in the international and Croatian magazines as well as in proceedings of the international and Croatian congresses, symposia and conferences.

MAAR, T.W. 2001. Introduction to avian medicine: companion birds and wild birds. *The Kenya Veterinarian*, 21: 20-22.

MATHIJSEN, A. 2005. Horses for shogun: importation of horses and veterinary knowledge in 18th century Japan. *Historia Medicinae Veterinariae*, 30: 87-98.

The only contact between Japan and Europe from the early seventeenth century to the early part of 1856 was maintained by the Dutch East India Company. A trading post situated on an artificial island called Deshima, in the bay of Nagasaki, was the centre of commercial relations which was developed according to very strict rules. Once a year a delegation from the trading post visited the court of the shogun in Edo (some 1000 kms from Deshima). Some shoguns took advantage of these visits to enrich their knowledge in science and technology from the Western world. Shogun Yoshimune in particular, who reigned from 1716 until 1745, showed much interest in Rangaku or Dutch science. He constantly asked the chiefs of Deshima to bring him books, instruments, weapons, plants and animals either of European origin or those known in Europe. His requests were fulfilled in the best possible way in order to maintain and further improve the good trade relations between the two countries. Some of the animal species brought to Japan were peacocks, turkeys, ostriches, hunting dogs and horses. Furthermore, a Dutch riding master brought horses to Yoshimune as gifts and spent some time at the imperial court teaching the European methods of horse riding and veterinary medicine. His lessons, although of limited practical use, proved to have a lasting influence on Japanese culture.

MINET, D. 2004. Veterinary ostrich inspection. Proceedings of the 11th Ostrich World Congress, Island Great Brijun, Croatia, 15-17 October 2004, Veterinarski Fakultet Sveučilišta u Zagrebu (Faculty of Veterinary Medicine, University of Zagreb), Zagreb, Croatia. : 36-39.

Proper veterinary inspection is vital for determining the basic information about the common health problems of ostriches. I would like to share some information that could be very useful to inexperienced veterinarians or farmers. I hope to help them examine ostriches thoroughly so that they can spot acute health problems and prevent diseases. The inspection starts with the distant observation of the ostriches before catching the chicks or adults. The best place to observe the birds is from the outside without entering the paddocks or flock. The veterinarians or farmers should observe the birds in the same flock whether they follow the group, active, bright, aggressive, in panic, indifferent, running or walking. They should observe how they hold their necks (upright), whether their wings are laid down or sitting in the corner with a clicking beak. If running and the bird throws its leg outwards but is walking normally, then there is a presence of an underlying tibiotarsal rotation or tendon problems which will cause lameness. A limp on one leg is a sign of pain due to physical abnormalities like limb deformity or long claw.

MOSTAFA, M.B. & GALIWANGO, B. 2004. Traumatic oesophageal perforation in a male ostrich (*Struthio camelus australis*). *Veterinary Record*, 154: 669.

SMITH, D. 2001. Veterinary medicine and the farming of ratites (ostriches, emus and rheas). *Medecin Veterinaire du Quebec*, 31: 33-38.

WAGNER, W.M. & KIRBERGER, R.M. 2003. Radiographic gastrointestinal contrast study in the ostrich (*Struthio camelus*). *Veterinary Radiology & Ultrasound*, 44: 546-552.
Ten gastrointestinal contrast studies were performed with barium on seven clinically healthy ostriches. Concentrations of 25-100% w/vol liquid barium sulfate at 7 and 10 ml/kg were administered by stomach tube after withholding food for 16 h. A 6-frame technique for left-to-right lateral views in standing and a 3-frame technique for the dorsoventral views in sternally recumbent adult ostriches were used for survey and contrast radiographs. Objectives were to describe the appearance of the normal gastrointestinal tract with contrast radiography and to provide a guideline for optimal dosage and concentration of barium sulfate as well as a reliable protocol for frequency of radiographs. Structures that were consistently identified included the esophagus, proventriculus, ventriculus, duodenum, jejunum, proximal, and distal rectum. Due to the superimposition of the remainder of the small intestine, individual components were difficult to differentiate. The caeca were inconsistently highlighted and only for a short time. The ventral pouch of the coprodeum never filled with contrast medium.

WAGNER, W.M. & KIRBERGER, R.M. 2001. Radiography of the thoraco-abdominal cavity of the ostrich (*Struthio camelus*). *Veterinary Radiology & Ultrasound*, 42: 134-140.
A standard radiographic procedure was developed for the thoraco-abdominal cavity of female non-breeding ostriches. Positioning, collimation, centering and a technique chart were defined to give reproducible and consistently good quality radiographs. Radiographs were obtained from one adult ostrich cadaver, two adult female ostriches as well as two growing ostriches at various stages. A 6-frame technique was established for lateral views taking the topographic tissue distribution into consideration and using easily palpable landmarks as centering points. Standing true right lateral radiographs are recommended for standard procedures. For dorsoventral exposures a 3-frame technique in the recumbent ostrich was found to be optimal. Birds should be fasted if possible. A technique chart for lateral exposures is provided.