OSTRICH VIRAL DISEASES 2000-2004 References from the literature

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TI: Prevalence of Newcastle disease antibodies in domestic and semi-domestic birds in Zaria, Nigeria
AU: Sa'idu,-Lawal; Tekdek,-Lazarus-Baba Abdu, -Paul-Ayuba

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TI: Viral diseases of the Ostrich (Struthio camelus var. domesticus
AU: Cooper,-Ross-Gordon; Horbanczuk,-Jaroslaw-Olav; Fujihara,-Noboru
AB: The ostrich is an important animal in many livestock industries. A significant threat to this industry is losses from diseases. Newcastle disease is a notifiable, highly contagious viral infection of ostriches. Avian influenza may be transmitted from waterfowl, shorebirds and gulls to ostriches. Borna disease virus is a viral neurotropic infection spread mainly by rodents and felines. Crimean-Congo hemorrhagic fever is a viral disease transmitted by Hyalomma ticks to humans. Avipoxvirus afflicts ostrich chicks and is transmitted by mosquitoes or by direct contact with a pox lesion. Maintenance of a healthy and profitable enterprise requires the implementation, with assistance from the local veterinary authority, of comprehensive, practical and effective methods of health management and preventative medicine.

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TI: Increased prevalence of Borna disease virus ELISA and immunofluorescent antibodies in horses from farms situated along the paths of migratory birds.
AU: Teplitsky,-V; Pitlik,-S; Richt,-J-A; Herzog,-S; Meir,-R; Marcus,-S; Sulkes,-J; Weisman,-Y; Malkinson,-M

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TI: Clinical, gross, and microscopic findings in different avian species naturally infected during the H7N1 low- and high-pathogenicity avian influenza epidemics in Italy during 1999 and 2000.
AU: Mutinelli,-F; Capua,-I; Terregino,-C; Cattoli,-G
SO: Avian-Diseases. 2003; 47(Special Issue): 844-848

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TI: Pathogenicity of a ratite-origin influenza A H5 virus in ostriches (Struthio camelus).
AU: Clavijo,-A; Riva,-J; Pasick,-J
SO: Avian-Diseases. 2003; 47(Special Issue): 1203-1207

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TI: Pathogenesis of H7 influenza A viruses isolated from ostriches in the homologous host infected experimentally.
AU: Manvell,-R-J; English,-C; Jorgensen,-P-H; Brown,-I-H
SO: Avian-Diseases. 2003; 47(Special Issue): 1150-1153

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TI: Detection of circovirus with a polymerase chain reaction in the ostrich (Struthio camelus) on a farm in The Netherlands.
SO: Veterinary-Microbiology. 2003; 95(1-2): 27-38

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AU: Peroulis-Kourtis,-I; O'Riley,-K [Author,-Reprint -Author]; Grix,-D; Condron,-R-J [Author,-Reprint -Author]; Ainsworth,-C

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TI: Differentiation of velogenic, mesogenic and lentogenic strains of Newcastle disease virus by multiplex RT-PCR.
AU: Shan-Songhua; Shao-Chaogang; Xu-Caozhe; Zou-Jian; Hu-Yongqiang; Wu-Jianhua; Gong-Zuxun [Author, -Reprint-Author]
PY: 2003
DT: Article
The 1999-2000 avian influenza (H7N1) epidemic in Italy: Veterinary and human health implications.
AU: Capua,-Ilaria; Mutinelli,-Franco; Dalla -Pozza,-Manuela; Donatelli,-Isabella; Puzelli,-Simona ; Cancellotti,-Francesco-Maria
SO: Acta-Tropica. 2002; 83(1): 7-11

Diseases of farmed crocodiles and ostriches
AU: Huchzermeyer,-F-W
AB: Crocodiles and ostriches are very sensitive to stress, and the ideal conditions for intensive rearing have not yet been established. Consequently, mortality is often directly linked to conditions on the farm. Crocodile and caiman pox, adenoviral hepatitis, mycoplasmosis, chlamydioides and coccidiosis are crocodile-specific infections with reservoirs in wild populations and adult wild-caught breeding stock. Other important conditions are salmonellosis, non-specific septicaemia, trichinellosis, the nutritional diseases osteomalacia, fat necrosis and gout, as well as winter sores. The only ostrich-specific transmissible disease is libyostrongyllosis. Other important conditions are Newcastle disease, avian influenza, fading chick syndrome, tibiotarsal rotation and enteritis. No cases of coccidiosis in ostriches have ever been confirmed.

Phylogenetic relationships of southern African West Nile virus isolates
AU: Burt,-Felicity-J; Grobbelaar,-Antoinette-A [Author]; Leman, -Patricia-A; Anthony,-Fiona-S; Gibson,-Georgina-V-F; Swanepoel,-Robert
SO: Emerging-Infectious-Diseases. 2002; 8(8): 820-826

Genetic and antigenic characterization of a poxvirus isolate from ostriches
AU: Shivaprasad,-H-L; Kim,-T-J; Woolcock,-P-R [Reprint -author]; Tripathy,-Deoki-N
SO: Avian-Diseases. 2002; 46(2): 429-436

La medecine veterinaire dans l'industrie des ratites [Veterinary medicine and the ratite industry.]
AU: Smith,-Dale

Adenovirus pathogenicity in immature ostriches
AU: El-Attrache,-J; Villegas,-P; O'Connor,-B; Buhr,-J-R; Rowland,-G-N
SO: Avian-Diseases. 2001; 45(2): 442-446

Highly pathogenic avian influenza (H7N1) in ostriches (Struthio camelus)
AU: Capua,-Ilaria; Mutinelli,-Franco; Bozza,-Maria -Augusta; Terregino,-Calogero; Cattoli,-Giovanni

Assessment of the pathogenicity of an emu-origin influenza A H5 virus in ostriches (Struthio camelus)
AU: Clavijo,-Alfonso; Riva,-Jose; Copps,-John ; Robinson,-Yves; Zhou,-En-Min

The jury is still out on Borna disease virus
AU: Kitching,-R-P
Serologic survey of slaughter-age ostriches (Struthio camelus) for antibodies to selected avian pathogens

AU: Ley,-Elizabeth-C; Morishita,-Teresa-Y; Harr,-Brian -S; Mohan,-Ram; Brisker,-Thomas

Newcastle disease and avian influenza A virus in wild waterfowl in South Africa

AU: Pfitzer,-S; Verwoerd,-D-J; Gerdes,-G-H; Labuschagne,-A-E; Erasmus,-A; Manvell,-R-J; Grund,-Ch
AB: In an intensive ostrich farming area in South Africa with a history of ostrich influenza outbreaks, we conducted a survey of avian influenza virus(AIV) and Newcastle disease virus (NDV) in wild aquatic birds…This is the first H10N9 isolate to be reported from Africa. In addition, our data support the notion that wild aquatic birds may function as a reservoir for AIV and NDV in South Africa.

Ostrich diseases

AU: Verwoerd,-D-J
AB: Scientific knowledge of ostrich diseases is incomplete and very fragmented, with specific details on technical aspects of diagnostic and/or screening tests completely absent in most cases. Salmonella Typhimurium is common in multispecies collections and causes mortality in chicks younger than three months on commercial farms, but is rarely found in chicks older than six months, or slaughter birds of twelve to fourteen months in southern Africa.

Campylobacter jejuni and Chlamydia psittaci are occasionally reported, mainly in young ostriches, but both remain a diagnostic challenge. Crimean-Congo haemorrhagic fever is transmitted to domestic animals including ostriches, principally by ticks of the genus Hyalomma. In the ostrich, the disease causes no clinical symptoms during a viraemia of approximately four days. Spongiform encephalopathy has not been reliably reported in ostriches, while anthrax has occurred rarely in modern times but was reportedly an important cause of death approximately 100 years ago in South Africa. Salmonella Gallinarum and S. Pullorum are unknown in ostriches. Pasteurella multocida occurs but is easily contained with antibiotics. Mycoplasma spp. are regularly found in an upper respiratory disease syndrome complicated by opportunistic bacterial pathogens. Ostriches of all ages are susceptible to challenge by velogenic Newcastle disease virus (NDV), but standard inactivated La Sota poultry vaccines can stimulate protective immunity lasting over six months. The viraemic period in vaccinated slaughter ostriches is between nine and eleven days and there are no indications of a carrier state or presence of the virus in the meat or any other tissues after this period, with peak immunoglobulin G response reached on day fourteen post infection. Haemagglutination inhibition tests are significantly less sensitive and less specific than enzyme-linked immunosorbent assays. Cloacal and choanal swabs used for direct virological screening in clinically affected cases (field and experimental) could not detect NDV. All avian influenza isolates reported from ostriches have been non-pathogenic to poultry, even the H5 and H7 subtypes. Some of the latter have been associated with mortality of ostrich chicks in localised outbreaks during periods of inclement weather and with significant wild bird (waterfowl) contact. Borna disease causes a nervous syndrome in ostrich chicks, but to date, has only been reported in Israel. Eastern and Western equine encephalomyelitis cause fatal disease in ostriches and other ratites, with mortality ranging from less than 20% to over 80% in affected flocks. These diseases are present in North, Central and South America where the associated ornithophilic mosquito vectors occur. Equine and human vaccines are apparently safe and efficacious in ratites. Wesselsbron disease, infectious bursal disease (type 2), adenovirus and coronavirus infections have been reported from ostriches but the significance of these diseases is unclear. Due to the paucity of data regarding ostrich diseases and the unvalidated state of most poultry tests in this unique group of birds, strict observation of a pre-slaughter quarantine of thirty days is strongly advised, whilst live exports and fertile eggs should be screened through the additional use of sentinel chickens and/or young ostriches.

Antibody responses to La Sota strain vaccines of Newcastle disease virus in ostriches (Struthio camelus) as detected by enzyme-linked immunosorbent assay
**Newcastle disease in ostriches (Struthio camelus): A review**

AU: Alexander, D-J


TI: Selected issues of infectious diseases in ostrich (Struthio camelus)

AU: Wieliczko, Alina; Kuczkowski, Maciej