### Animal Science Reporter

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HISTOPATHOLOGICAL STATUS OF THYROID GLAND IN NON-PRODUCTIVE ABATTOIR BUFFALOES (*Bubalus bubalis*)

V.M. Shelke¹, V.P. Pathak², D.K. Bedre³, J.M. Patil⁴, C.S. Mote⁵

ABSTRACT

Unproductive buffalo cows in India are culled in haste at a relatively low age than the age enshrined in law (15 years) and are disposed off for slaughter in abattoirs. Thyroid related reproductive failure is a prime reason for culling these animals. But, the cases are hardly detected and treated in time. There are few reports on the histopathology of the thyroid gland in non-productive abattoir buffaloes (*Bubalus bubalis*) in India. This study conducted on 290 non-productive she-buffaloes in selected abattoirs in Maharashtra (India) during April to August 2004 revealed thyroid anomalies in 75 (26%) animals. Colloid goitre (11.7%) and invasive fibrous thyroiditis (9.6%) were the major pathological conditions. This study indicated that astute corporal management, timely detection and appropriate clinical intervention of hypothyroidism can extend the productive life of buffalo cows.

KEY WORDS

Abattoir, Buffalo, Colloid goitre, Histopathology, Invasive fibrous thyroiditis, Parenchymatous goitre, Thyroid

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EFFECT OF OPEN TRANSPORT AND WATER IMMERSION ON THE MICROBIAL LOAD OF MARKET MEAT

Ezenduka, E.V.1; Oboegbulem, S.I.2; Onunkwo, J.I.3; Nwanta, J.A.4; Noel Uneke, O.5

ABSTRACT

This study was carried out to determine the effect of open transportation of carcasses/bulk meat on wheelbarrow from the abattoir to the sales joint and the effect of immersion water used to wet the carcasses/bulk meat at the sales joint. The samples were collected once in a week for 7 weeks and analysed by using the contact surface method to determine the total viable bacterial count (TVBC) and the total coliform count (TCC). The mean TVBC and TCC for bulk meat increased significantly (P≤0.05) from 7.6 x 10^{12} ± 7.4 cfu/cm² and 8.4 x 10^{10} ± 1.5 cfu/cm² respectively before loading on the wheelbarrow to 6.4 x 10^{13} ± 9.5 cfu/cm² and 3.1 x 10^{12} ± 6.6 cfu/cm² respectively after offloading from the wheelbarrow. The mean TVBC and TCC for bulk meat increased significantly (P≤0.05) from 1.82 x 10^{13} ± 4.7 cfu/cm² and 8.2 x 10^{12} ± 7.0 cfu/cm² respectively before immersion in water to 1.8 x 10^{15} ± 1.8 cfu/cm² and 4.1 x 10^{15} ± 5.6 cfu/cm² respectively after immersion. The pathogens isolated from the contaminated meat belonged to Bacillus sp., Escherichia coli, Klebsiella sp., Pasteurella sp., Staphylococcus sp., Streptococcus sp., and Salmonella sp. The study revealed that wheelbarrow and immersion water were the potential sources of contamination of market meat.

KEY WORDS

Immersion water, Market meat, Total coliform count, Total viable bacterial count, Wheelbarrow
DETECTION OF CLASSICAL SWINE FEVER VIRUS FROM FROZEN TISSUE BY RT-PCR*

N.A. Chopade¹, V.V. Deshmukh², S.S. Rautmare³, N.V. Kurkure ⁴

ABSTRACT
Classical swine fever (CSF) is a contagious febrile disease of pigs and has the potential to cause devastating epidemics. Wide range of clinical signs and similarity to other diseases can make classical swine fever challenging to diagnose. In recent times, molecular diagnostic techniques are gaining popularity due to their specificity, sensitivity, reliability and rapidity. Reverse transcription polymerase chain reaction (RT-PCR) has been used in the present study for identification of CSF virus from morbid specimen. Thirteen tissue samples from frozen spleens, collected during a CSF epidemic in Maharashtra (India) during 2006-07 were subjected to RT-PCR for detection of CSF virus. Only one sample showed the presence of CSF viral nucleic acid confirming the outbreak of CSF. The low rate of detection of virus (7.7%) is attributed to indigent sample quality.

KEY WORDS
Classical swine fever virus, Epidemic, Frozen tissue, Pig, RNA, RT-PCR

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RECURRENT DEEP CANINE PYODERMA: CLINICAL SYNDROME, CAUSATIVE PATHOGENS AND TREATMENT PROTOCOL

K. Suresh¹, K. Rajesh², K. Lakshmi Kavitha³, N. Syamma Sundar⁴

ABSTRACT

Recurrent deep pyoderma is a complicated skin disorder in dogs with life-threatening consequences. It is usually a sequel to some underlying etiological factor including metabolic, hormonal and immunological disorders. Bacterial involvement is a prime reason for pyoderma. There is sparse published literature on clinical management of recurrent deep canine pyoderma in India. This paper describes the clinical syndrome, identification and isolation of causative organisms, antibiogram and therapeutic management of the disease in 24 dogs of different ages and breeds presented at the college clinic. Staphylococcus sp was the most common cause of infection, and was isolated from 92% of the cases followed by Pseudomonas sp (8%). Antibiogram revealed that Staphylococcus was highly sensitive to Chloramphenicol, followed by Cephalexin and Enrofloxacin, while Pseudomonas was sensitive to Cephalexin only. A cocktail of drugs involving antibiotics (Parenteral and Topical), antibacterial shampoos and immunomodulators were used to cure the disease.

KEY WORDS

Antibacterial shampoo, Antiibiogram, Antibiotic, Immunomodulator, Recurrent deep canine pyoderma, Pseudomonas, Staphylococcus

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MIXED INFECTION OF PARVOVIRUS ENTERITIS AND ANCYLOSTOMIASIS IN A PUP: CASE PROFILE

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ABSTRACT

Canine parvovirus infection is an emerging viral disease of dogs registering a consistent increasing trend in India. It is caused by Canine parvovirus type 2 (CPV-2). The disease has two clinical presentations viz., myocarditis and gastroenteritis. The clinical manifestation of parvovirus gastroenteritis is vomiting, haemorrhagic diarrhea, pyrexia and dehydration. Dogs of all ages are susceptible to parvovirus enteritis, but it is severe in puppies less than 12 weeks of age, especially those not protected by maternal antibodies or vaccination culminating in heavy casualty. The case gets complicated by internal parasitic infection and secondary bacterial invasion. The present case describes the case history, clinical signs, diagnosis and therapeutic profile of a nine week old male puppy suffering from the mixed infection of parvovirus enteritis and ancylostomiasis.

KEY WORDS

Ancylostomiasis, Enteritis, Parovirus, Puppy, Treatment

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SUBLINGUAL SIALOCELE IN BUFFALO - A CASE REPORT

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ABSTRACT

Sublingual sialocele (ranula) is a cyst formed by obstruction of salivary duct or gland. It leads to painful swelling of the tongue. The animal goes off-feed as tongue is the organ of prehension. This communication reports a case of sialocele in a five year old she buffalo presented in the clinic with swollen tongue and pyrexia. The animal was off-feed due to trauma. The case was successfully treated by aspirating the contents of the cyst by a nick incision, and administering antibiotics (Benzathine penicillin, 48,00,000 IU, I/M) to hasten the healing. The animal recovered fully in five days without any complication. This is apparently the first report of a sublingual sialocele in buffalo in India.

KEY WORDS

Buffalo, Sialocele, Sublingual, Treatment

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ACUTE ACALCULOUS CHOLECYSTITIS IN DOG - CASE PROFILE

N. Lakshmi Rani¹, K. Rajesh², K. Suresh³, M. Sreenu⁴, N. Syamaa Sundar⁵

ABSTRACT

Acute acalculus cholecystitis is a rare form of acute cholecystitis, which is more serious than other forms of cholecystitis. The clinical manifestations are vague and non-specific. Therefore, it is difficult to diagnose the disease on the basis of clinical signs. A four year old male dog with a history of persistent vomiting and off feed was presented at the college clinic for treatment, which was diagnosed to be a case of acute acalculus cholecystitis on the basis of serum biochemical profile and ultrasonography of the abdomen. This paper describes the therapeutic profile of the dog.

KEY WORDS

Acute acalculus cholecystitis, Dog, Ultrasonography

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LEPTOSPIROSIS IN DOGS IN ASSAM

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ABSTRACT

Leptospirosis is a disease of zoonotic importance in humans and animals. The disease is caused by *leptospira*. It affects the kidneys and liver leading to septicemia, which is fatal. It is difficult to demonstrate the bacteria due to the insensitivity of most of the currently available diagnostic tools. This paper describes the demonstration of the organism by phase contrast microscopy. The examination of seventeen urine samples of the dogs with suspected *leptospira* infection showed that 47% were positive for the organism. The prevalence was higher (75%) in rainy season. The infected dogs were successfully treated with antibiotics (combination of Penicillin and Streptomycin) for seven days leading to complete recovery of the animals. The present report is the first document on the incidence of confirmed leptospirosis in dogs in Assam.

KEY WORDS

Assam, Dog, Leptospira, Phase contrast microscopy

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