

VIRGINIA COOPERATIVE EXTENSION SERVICE

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VIRGINIA-MARYLAND
REGIONAL COLLEGE
OF
VETERINARY MEDICINE



VIRGINIA VETERINARY NOTES

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KC Roberts
Kent C. Roberts, D.V.M.,
Extension Veterinarian

CANINE REPRODUCTION NOTES

Pyometra may occur from one to twelve weeks after estrus. Cystic endometrial hyperplasia is usually present as a result of the influence of progesterone.

The estrogen in mismatching injections tend to amplify the effects of progesterone on the uterus.

E. coli is the predominant organism in endometrial and pyometra infections.

Treatment of open cervix pyometra can be accomplished using prostaglandins (Prostin F₂ Alpha-Upjohn) 0.25 mg/kg/ body weight, give 2 doses subcutaneously 24 hours apart. Antibiotics should be given for at least two weeks following prostaglandin therapy.

Abnormal estrus cycles are a frequent occurrence. Short cycles (four months), the cause of which is unknown, may be regulated using Cheque drops starting two months after heat and continuing for four months. Long cycles (eight months and longer) are most often due to hypothyroidism. A T-4 test should be run even though the bitch is not showing classical hypothyroid symptoms. It is recommended not to breed hypothyroid dogs until appropriate therapy has produced measurable results. Hypothyroidism also can be a reason for failure to cycle.--*Dr. Shirley D. Johnston; College of Veterinary Medicine; University of Minnesota; DC Academy of Veterinary Medicine; May, 1982.*

PUBLIC HEALTH ASPECTS OF FELINE LEUKEMIA VIRUS (FeLV)

There is no firm evidence to suggest that FeLV infects man or causes disease in humans. Some investigators feel FeSV/FeLV is potentially hazardous because it grows in human tissue culture cells.

The following information concerning FeLV has been tabulated:

1. Incidence of cancer in children and adults exposed to sick cats is the same as in individuals never in contact with cats.
2. In hundreds of humans tested, including cancer patients, FeLV antigens have never been found.
3. In large studies, no antibodies to FeLV were found in normal or cancerous people who had been in contact with sick cats, or in normal people who worked intimately with viremic cats or virus cultures.
4. In other studies, some antibody that reacts with FeLV has been found in a few people with malignant and nonmalignant diseases.

5. In general, leukemia viruses are relatively species specific. However, FeLV can cross species lines and produce LSA in newborn puppies and FeSV can cause malignant tumors in nonhuman primates.--*Dr. Robert Sherding; College of Veterinary Medicine Ohio State University; DC Academy of Veterinary Medicine; October, 1982.*

AN EQUINE DIARRHEA SYNDROME IN MARYLAND

Over the last three years, a previously unidentified disease syndrome of horses, characterized by diarrhea and high mortality, has been recognized in Montgomery County, Maryland. The number of cases has risen dramatically each year, with 104 cases reported in 1982 from three veterinary practices. Twenty-seven of these cases have died. There also appears to have been a gradual extension of the area in which cases have been recorded. A very similar clinical syndrome has recently been reported by a veterinarian in Pennsylvania.

The condition appears to be seasonal in nature, usually occurring between the months of June and September, and apparently more frequently in mature horses. The clinical picture is one of a prodromal fever, accompanied by depression and anorexia, followed by the development of a severe, often projectile diarrhea. Colic is reported in about one third of the cases. The fever is followed by a leucopenia, and a highly elevated hematocrit value develops as a result of severe dehydration. This clinical picture is reminiscent of salmonellosis and colitis-X. However, repeated attempts to culture *Salmonella* sp. from clinical and post-mortem material have been unsuccessful, and the prolonged nature of clinical cases coupled with the lower case-fatality rate (25%) suggest inconsistency with colitis-X.

The outcome of clinical cases is variable and unpredictable despite a variety of treatments, including oral and intra-venous fluids, banamine, Pepto-bismol and antimicrobial agents. In a proportion of cases, an acute laminitis develops, in which case the prognosis is grave. In severe cases, sloughing of the hooves has occurred.

The cause of this condition remains unknown.--*Brian D. Perry; B.V.M.&S., D.T.V.M., M.Sc., M.R.C.V.S., Veterinary Epidemiologist; Virginia-Maryland Regional College of Veterinary Medicine; Virginia Tech; Blacksburg, Virginia.*

THOUGHT FOR THE MONTH

If you think education is expensive, try ignorance.

ATLANTIC CITY CHOSEN FOR SECOND MID-ATLANTIC STATES AVIAN MEDICINE SEMINAR

April 19, 20, and 21 have been set as the dates for the forthcoming Mid-Atlantic States Avian Medicine Seminar to be held at Caesar's Boardwalk Regency in Atlantic City, New Jersey. Last year's seminar in Baltimore's Inner Harbor drew nearly 200 veterinarians from Maryland, Pennsylvania, Virginia, New Jersey, Delaware, and other states as far away as Florida. Topics highlighted for 1983 include: pet bird nutrition, pharmacotherapeutics, parasitism, psittacosis (chlamydiosis), Pacheco's disease, and other aviary epizootics.

The seminar is sponsored by the Pennsylvania Association of Avian Veterinarians and other host universities and agencies. To be on the mailing list for advance details, contact Dr. E. T. Mallinson at 301-454-3636 (Maryland), Dr. L. D. Schwartz 814-863-2160 (Pennsylvania), or Dr. Cal Larsen 703-961-7666 (Virginia). Special \$60.00 room rates may be available for "early birds."

PREVENT TETANY DEATHS

Each winter and spring many beef cows die due to deficiency of magnesium. Deaths are most prevalent in older cows during the first 3 weeks after calving although no age group is totally exempt. Tetany is more prevalent in the central and southern parts of the state.

What can you do to prevent tetany deaths? Even with today's depressed prices, one dead cow would have paid for a lot of prevention.

1. Keep cows well fed to meet energy and protein needs. Extremely thin cows are more susceptible to tetany.
2. Feed 4-5 lbs. of legume hay per day. Legumes have a higher magnesium content than grass hays.
3. Feed 2-3 lbs. of grain per day. Even small amounts of grain (or corn silage if available) seem to go a long way in preventing tetany. (Especially if you add 80 to 100 lbs. of magnesium oxide per ton of grain).
4. Supply good commercial or home mixed salt-mineral mixes which contain from 15 to 20% actual magnesium. Cattle should consume at least 2 ounces of these mixes per head per day.--Lester A. Burdette, Extension Animal Scientist; Pennsylvania State University; University Park, Pennsylvania; as reported in *Veterinary Newsletter; The University of Georgia; October, 1982.*

OXYTETRACYCLINE AND IMMUNITY

Animals should not be vaccinated for at least 10 days after the administration of oxytetracycline.

Results of experimental work with 45 piglets and 30 rabbits demonstrated that the administration of oxytetracycline in therapeutic doses one day before vaccination against salmonellosis considerably reduced the formation of plasma cells. Suppression of haematopoietic activity resulted in acute depletion of the circulating B and T lymphocytes. The antibiotic persisted in the lymph nodes for 10 days and interfered with antibody formation. The blockage of immunoglobulin receptors of B and T lymphocytes prevented the transmissions of "Antigenic" information from macrophages and as a result no plasma cells were formed.--AASP Res. Ab. 2/82; KY. NL. 8/82, as reported in the *Veterinary Medicine Newsletter; University of Florida; October, 1982.*

SEASONAL HORSE HEALTH TIPS

During the 1981 AAEP meeting in New Orleans, a broodmare panel discussion brought up several points of broodmare care that are worth considering at this time of year.

All broodmares need to have their immunizations boosted the last 4-6 weeks of their pregnancy. This provides the highest level of possible protective antibody in the colostrum for the foal. Tetanus, influenza, rhinopneumonitis, and Eastern and Western encephalomyelitis boosters were all suggested as being needed.

Botulism was considered a strong possible cause of the "Shaker Foal" syndrome. Vaccination of the mare with C1. botulinum toxoid has reportedly proven effective. At present the toxoid may be available upon special request from the Michigan Department of Health, Lansing, MI. Consideration for a commercial vaccine is pending.

The panelists stated that they also routinely practiced late pregnancy or immediate postpartum deworming. This prevents infecting the foal with parasite ova shed by the mare.

Pregnant mares being shipped for breeding should arrive at the breeding farm 6-8 weeks prior to foaling or not until the foal is at least 20 days of age. This is to reduce the danger of the foal acquiring an infectious disease.

Wide variations of opinion were expressed concerning the value of IgG measurements. Opinions ranged from considering IgG measurements to be a guideline to believing they are worthless. However, panelists stressed the value of avoiding premature breaking of the umbilical cord as well as making sure that the foal receives an adequate intake of effective colostrum within the first 1-2 hours of birth.

The value of routine uterine cultures was considered questionable. Management and sanitation were stressed. However, culture of selected problems, i.e., "dirty"

mares, was felt to still be of value. Heat detection and waiting for the mare's physiological breeding season were emphasized, especially with problem mares.

With tongue in cheek, one speaker said he considered any mare in season after May 10th to be a problem mare.

A modified Caslicks on any problem mare or on a mare with questionable conformation still has considerable support among practitioners. Breeding these mares by AI and using a minimum contamination technique was emphasized. The use of an antibiotic-containing semen extender was also felt to be helpful.

A New Zealand report indicated that 8 of 11 problem mares were successfully bred following intrauterine treatment with 250 cc of reconstituted colostrum. Mares were bred following infusion with colostrum and received no other antibacterial treatment.

It was still considered "normal" for 10-15% of the mares that conceive to suffer an early embryonic death. This emphasizes the need for follow-up pregnancy confirmations on mares checked prior to implantation (i.e., < 60 days).

Research at Louisiana State suggests that prolonged butazolodin therapy can be accumulative. Butazolodin can inhibit prostaglandin which may result in failure of luteolysis. This can cause a reduction of fertility in mares via prolonged periods of anestrus.--*Veterinary Professional Topics; University of Illinois; 1982, Vol. 8, #1; as reported in Notes from the Extension Veterinarians; Kansas State University; October, 1982.*

SUCCESS IS NO ACCIDENT

You may profess to love all animals and to treat your patients as though they were your own. Just remember that your actions speak so loudly that your clients may not hear what you're saying.

Make a genuine effort to put yourself in the animal owner's place. What does he/she expect of you? Are you honest and willing to admit mistakes?

Remember, the more success you achieve, the more humble you should become.--
Kent C. Roberts, D.V.M.; Virginia-Maryland Regional College of Veterinary Medicine; Virginia Tech; Blacksburg, VA 24060.

VIRGINIA-MARYLAND REGIONAL COLLEGE OF VETERINARY MEDICINE UPDATE

Advanced Orthopedic Short Course

We thank those who participated with such interest and enthusiasm in the recent Advanced Orthopedic Short Course held in Blacksburg. We believe the program was effective in achieving its goal of teaching practical orthopedic procedures to practitioners.

To those veterinarians who were unable to attend because of the course's limited enrollment, we promise regular continuing education programs in the field of orthopedics. Similar limited enrollment lecture/wet lab courses are planned for April and October, 1983, at the Virginia-Maryland Regional College of Veterinary Medicine.

Dr. John R. August

Dr. John R. August, Coordinator of Medical Services, Diplomate A.C.V.I.M. and small animal clinician, has developed an allergy testing protocol for animals referred to the Veterinary Medical Teaching Hospital for dermatological problems. Dr. August will be pleased to discuss this service with interested practitioners.

Dr. Tom Bibb

Dr. Tom Bibb, Associate Professor, Extension Specialist in cattle and sheep, and Ambulatory Health Service clinician, has resigned from the college's faculty to practice privately in the Riner area of Montgomery County. Dr. Bibb has been affiliated with Virginia Tech for 17 years and will continue to serve the college as an adjunct faculty member.

New Faculty

James W. Boyd, M.R.C.V.S., clinical pathology--Dr. Boyd, a graduate of the University of Bristol, taught for ten years at the University of Liverpool.

Larry C. Booth, D.V.M., large animal surgeon--Dr. Booth comes to Virginia from Minnesota and is a Diplomate of the American College of Veterinary Surgeons.

James C. Keith, D.V.M., cardiovascular physiology--Dr. Keith has special interests in heartworm disease and electrocardiography.

Andrew S. Loar, D.V.M., small animal medicine--Dr. Loar comes from the Animal Medical Center with special interest in oncology.

W. Kent Scarratt, D.V.M., large animal medicine--Dr. Scarratt comes from the University of Florida and is board certified in internal medicine.

Thomas E. Toth, D.V.M., virology--Dr. Toth is a Diplomate of the American College of Veterinary Microbiology.

Senior Students to Begin Clinical Year in June '83

Starting in the summer of 1983, senior veterinary students at the Virginia-Maryland Regional College of Veterinary Medicine will enter their clinical year. One required rotation will be a private practice clerkship designed to place senior students in a private practice setting under the direction of an experienced clinician. The basic purpose of this private practice clerkship is to expose students to non-institutional veterinary practice. This clerkship will provide students with experiences which will complement those delivered within the Veterinary Medical Teaching Hospital located at Virginia Tech. To initiate the involvement of practices in this clerkship, Virginia and Maryland practitioners will be approached within the next few weeks by the college's Curriculum Committee. Those practitioners who are interested in providing training to a senior student or students through the private practice clerkship are encouraged to respond to the Curriculum Committee's invitation.--*Dr. Colin B. Carrig, Curriculum Committee Chairman; Virginia-Maryland Regional College of Veterinary Medicine; Virginia Tech; Blacksburg, Virginia.*

MEETINGS

The following upcoming meetings will be of interest to veterinarians. If you need further information and programs, please contact Dr. Kent C. Roberts, Director of Continuing Education, at 961-7666.

December 5, 1982

Small Animal Practitioners Seminar
Holiday Inn - Crossroads
Richmond, Virginia

February 17-20, 1983

Virginia Veterinary Medical Association
Annual Meeting
Hyatt House
Richmond, Virginia

Virginia-Maryland Regional College of Veterinary Medicine Extension Staff:

Dr. C. T. Larsen, Extension Specialist - Avians
Dr. G. A. MacInnis, Extension Specialist - Swine
Dr. K. C. Roberts, Extension Specialist - Equine and Companion Animals
Dr. T. P. Siburt, Extension Specialist - Pharmacology and Toxicology

Melissa Wade, Managing Editor of Virginia Veterinary Notes

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