VIRGINIA COOPERATIVE EXTENSION SERVICE

EXTENSION DIVISION - VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY - BLACKSBURG, VIRGINIA 24061

VIRGINIA-MARYLAND REGIONAL COLLEGE OF VETERINARY MEDICINE



VIRGINIA VETERINARY NOTES

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Kent C. Roberts, D.V.M. Extension Specialist

MEETINGS

The following upcoming meetings may be of interest to veterinarians. If you need further information and programs, please contact Dr. Kent C. Roberts at 961-6057.

April 6-7, 1982

Virginia Poultry Health and Management Seminar Holiday Inn - Airport Roanoke, VA

May 4-5, 1982

Mid-Atlantic States Avian Medicine Seminar Holiday Inn - Inner Harbor Baltimore, MD

May 28, 1982

Bovine Practitioner's Seminar "The Calf - Management, Nutrition, and Diseases" Red Carpet Inn Waynesboro, VA

July 6-9, 1982 Agri-Tech Week Virginia Tech Blacksburg, VA

SUCCESS IS NO ACCIDENT

What are your services worth? What is a fair fee? These are questions often asked but difficult to answer. As a practicing veterinarian, only you can decide what you're worth in terms of the service you provide your clients.

As veterinarians our job is to deliver the best animal care we are capable of, not the cheapest. Charging a good fee should make us think about providing quality care and about upgrading our ability to help clients and their animals. Volume is not bad in itself, unless the quality of service suffers as a result of high volume. Educate your clients to the services you can and should provide. Upgrade these services whenever possible and make your clients aware of these improvements. Then charge accordingly.

Kent C. Roberts, D.V.M. Extension Specialist VA-MD Regional College of Veterinary Medicine Virginia Tech Blacksburg, VA

VACCINATION OF PUPS VS. PARVOVIRUS

"The age at which pups can be successfully vaccinated depends upon the antibody titer of the bitch. Pups born to recovered dams receive enough maternal antibody to block active immunization for up to 14 weeks. Thus, the outcome of vaccination prior to this age is uncertain.

There are two approaches to the immunization of pups. The first is to incorporate CPV prophylaxis into the standard distemper protocol: Pups are vaccinated every two to three weeks for first presentation until 14 to 16 weeks of age. Pups born to bitches with low antibody titers are protected by the first vaccinations. Pups from bitches with high titers do not respond until the last vaccination. Alternatively, one could determine the bitch's HI titer and then estimate the time to begin vaccinating the pups by using a half life of nine days and starting the immunization program when the pup's titers are predicted to drop below 1:5.

Nevertheless, it appears that there is a period of susceptibility during which maternal antibody levels in the pups still block active immunization yet are no longer protective against oral infection. Thus, apparent 'vaccine failures' will continue to occur in young pups regardless of which vaccine or vaccine strategy is employed. For this reason it is especially important that older dogs in the kennel are immunized with vaccines that prevent shed of virulent CPV to minimize the possibility of exposure of the pups during this critical period."

Roy V. H. Pollock, D.V.M.
A. A. H. A.
1981 Proceedings, pp. 205-210
as cited in:
Notes from the Extension Veterinarians
Kansas State University
January, 1982

PYOMETRITIS

The treatment of choice for pyometritis in the dog is ovariohysterectomy. In some cases, however, this surgery is ruled out by the owner and medical therapy is the only option left to the veterinarian.

Prostaglandin F $_{2\alpha}$ effects on the canine uterus include an opening of the cervix, contraction of the uterus, and an increased blood supply to the uterus. The LD $_{50}$ of the drug in the bitch is 5.13 mg/kg.

Dr. Thomas Burke has used the following treatment regimen with good results in selected cases at the University of Illinois Veterinary Medical Teaching Hospital. He gives $250~\mu g/kg$ subcutaneously once a day until there is little or no evidence of discharge an hour after injection. An additional single dose is given 4-5 days after the discharge stops to see if there has been any additional pus accumulation. Appropriate antibiotics, based on culture and sensitivity, are given for 4-5 weeks as well as maintenance of fluid and acid-base balance.

Using this regimen, over 95% of the cases treated did not need surgery. Over 65% of the cases whelped normally after treatment.

Side effects seen with the use of PGF, include hypersalivation, vomition, loose stools, pupil constriction or dilation, and collapse. The effects are transient, however, and do not last more than an hour. No deaths have been reported.

 $\mathsf{PGF}_{2\alpha}$ is not approved for use in the dog and the client should be made aware of this.

The use of prostaglandins will not replace surgery as the treatment of choice for canine pyometritis, but hopefully it will help improve the success of medical treatment in selected individual cases.

Allan Paul, D.V.M.
Small Animal Extension Veterinarian
University of Illinois
College of Veterinary Medicine
Veterinary Professional Topics
Vol. 6, No. 4, 1981

ORGANIC PHOSPHATES

Organic phosphates have been incriminated in cerebellar hypoplasia in baby pigs. Extrapolation to horses would suggest avoiding the use of organic phosphates during the first trimester of pregnancy. Tranquilizers and MLV vaccines should also be avoided during this time. Some anthelmintics may need to be considered possible problem drugs during early pregnancy. Many congenital problems may be avoided by not using these agents during early embryonic development. The most rapidly developing organ systems are most likely to be affected.

Dr. R. D. Scoggins
Equine Extension Veterinarian
University of Illinois
College of Veterinary Medicine
Veterinary Newsletter
VM 867-872, No. 161
September, 1981

LEGAL NOTES

A farmhand died as a result of accidentally drinking poisonous dye used to mark cattle. The dye was prepared by a veterinarian (in Oregon), who had dispensed it in a white plastic gallon jug to the deceased's employer. The deceased drank from the jug, having mistaken it for his water bottle, which was also a white plastic gallon jug.

The widow sued the veterinarian for negligence.

The Oregon Court of Appeals ruled that the widow failed to prove that any alleged labeling deficiencies were the proximate cause of injury. Also, dispensing cattle dye was within scope of the veterinarian's professional activity.

The veterinarian was exonerated.

An assistant to a veterinarian sued the owners of a German Shepherd when he was bitten by the canine while assisting the veterinarian in extracting blood from the dog's leg.

The owners, in turn, filed a third-party complaint against the veterinarian.

The Florida District Court of Appeals ruled: "We find nothing in Florida law which indicates any intention to hold a dog owner strictly liable in a dog bite case where the proximate cause of the injury was the intervening negligence of another person. The owner of a dog is not liable to a third party for damages from being bitten or otherwise injured by such dog subsequent to the delivery of possession and control of the dog to a qualified veterinarian for care or treatment and the acceptance of such employment and possession by the veterinarian."

The owner was not liable to the veterinarian's assistant. The veterinarian was exonerated.

Murray Loring, D.V.M. Williamsburg, VA

PRACTICE TIPS

Hydrogenated vegetable shortening applied to the hair of the fetus is especially good in prolonged bovine dystocia.

Dr. Les Ball Colorado State University Medicated water treatment for weaning calves: Add with medication one package of Jello per 200 gallons of water. This will improve taste and give better water consumption.

Dr. Myron McCune North Platte, NE

Stray low voltage current in milking facilities may be a cause of nervousness, reluctance to enter the parlor, reduced feed or water intake, lower milk production, failure to let-down milk, mastitis and other problems.

Dr. G. W. Meyerholtz Veterinary Project Leader Extension Service USDA

Herd Health Memo University of Kentucky No. 3 September, 1981

REFRACTOMETER FOR ASSESSING COLOSTRAL IMMUNITY

Serum protein levels read on a clinical refractometer can be an easy method for evaluating antibody transfer from cow to calf via colostrum. Calves with serum protein values less than 5 gm/dl are considered colostrum deprived. (This technique is more simple and rapid than the zinc sulfate turbidity test and does not require mixing reagents.)

Dehydration may cause falsely elevated protein levels, but this can be detected clinically. The refractometer measures all serum protein instead of globulin only. This is not a concern, however, since the only elevation of protein in a baby calf would be caused by colostrum.

R. M. Mason, D.V.M.

Department of Preventive Medicine
College of Veterinary Medicine
University of Florida
adapted from an article in:
Kansas Veterinary Newsletter
November, 1981
as cited in:
Notes for the Veterinary Practitioner
University of Kentucky
No. 3
December, 1981

VETERINARIAN'S NOTEBOOK

VETERINARIAN'S NOTEBOOK, a five minute weekly radio program produced by the Virginia Tech Office of Educational Communications and the Virginia-Maryland Regional College of Veterinary Medicine, is now broadcast in 31 communities throughout the region. In the six months since the first programs were released, radio stations from Maryland's eastern shore to the coal country of southwest Virginia have been calling to sign up for this informative question-and-answer series.

Each program is an interview on a selected veterinary topic between moderator Rick Lindquist, of the Virginia Tech Office of Educational Communications, and a member of the faculty of the regional veterinary college. To date, faculty participants have included: Kent C. Roberts, D.V.M., Director of Continuing Education for the college; R. Lee Pyle, V.M.D., veterinary cardiologist and Director of the Veterinary Medical Teaching Hospital (VMTH); Joe Alexander, D.V.M., small animal orthopedic surgeon and Coordinator of Surgical Services for the VMTH; K. Jack Easley, D.V.M., large animal and equine orthopedic surgeon; and, Tom Bibb, D.V.M., large animal clinician with the Ambulatory Health Service of the VMTH.

In addition to the radio programming, a modified VETERINARIAN'S NOTEBOOK column is printed each week in The Bristol Herald Courier. Reader response to the newspaper column has been good and has stimulated development of programs/columns on several additional topics.

VETERINARIAN'S NOTEBOOK is provided free, on request, to radio stations and newspapers. Radio listeners receive free transcripts on request to the college.

Veterinarians who would like to hear the program or see the column used by their local media are encouraged to contact a local media representative. Broadcasters may preview the series by calling Lindquist at (703) 961-6997. Typed columns are available through the College Information Office at (703) 961-7666.

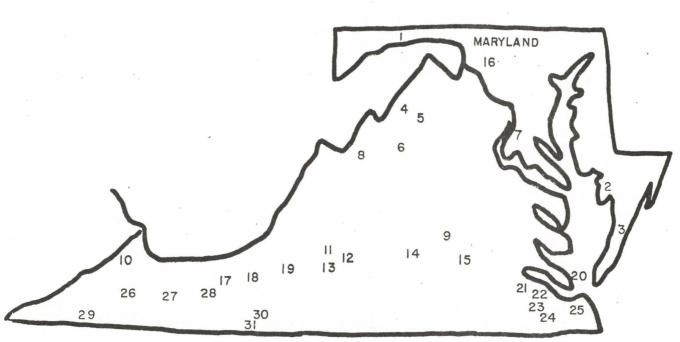
Programs and columns currently available include:

			*
1. 2. 3. 4. 5.	Rabies Internal Parasites (in small animals) The Overweight Dog Pet Emergencies Veterinary Services	16. 17. 18. 19. 20.	Caring for the Older Dog - I Caring for the Older Dog - II Ear Problems in Dogs and Cats Winterizing Your Horse Ambulatory Health Service
6. 7. 8. 9.	Birth Control for Pets Canine Parvovirus Canine Distemper Keeping Your Dog Healthy in Cold Weather Internal Parasites in Horses	21. 22. 23. 24. 25.	Hip Dysplasia Arthritis in Pets Tapeworms in Dogs and Cats Major Diseases in Horses Keeping Horses Healthy
11. 12. 13. 14.	Christmas Pets Pet Dentistry Household Poisons Veterinary Medical Teaching Hospital - I Veterinary Medical Teaching Hospital - II		First Aid For Horses Colic In Horses Pets and People The Importance of Animal Nutrition Physical Fitness for Dogs

RADIO STATIONS USING VETERINARIAN'S NOTEBOOK MARCH 1982

- 1. WHAG Hagerstown, Md.
- 2. WEMD Easton, Md.
- 3. WCTD Federalsburg, Md.
- 4. WFFV Middletown
- 5. WIXV Front Royal
- 6. WRAR/WQAA Luray
- 7. WPFW Washington D.C.
- 8. WHBG Harrisonburg
- 9. WEET Richmond
- 10. WMJD Grundy
- 11. WBRG Lynchburg
- 12. WJJS/WLGM Lynchburg
- 13. WRVL Lynchburg
- 14. WFLO Farmville
- 15. WSSV/WPLZ Petersburg

- 16. WBAL Baltimore, Md.
- 17. WRAD/WRIQ Radford
- 18. WQBX Christiansburg
- 19. WVWR Roanoke
- 20. WYCS Yorktown
- 21. WKGM Smithfield
- 22. WNIS Norfolk
- 23. WNSB Norfolk
- 24. WNHS Portsmouth
- 25. WQZQ Cheasapeake
- 26. WSPC Castlewood
- 27. WKGK Saltville
- 28. WBLB Pulaski
- 29. WGAT Gate City
- 30. WODY Bassett
- 31. WHEO Stuart



VIRGINIA

ROMPUN®/ KETAMINE IN DOGS

The use of Rompun (R)/ketamine mixture as an anesthetic agent in dogs and cats appears to be gaining popularity among practitioners. In a recent issue of the Ontario Veterinary Association (OVA) Update newsletter, however, it was reported that complaints have been made of anesthetic deaths due to this mixture. The OVA's complaint committee reported that it has been receiving these complaints with increasing frequency during the past several years.

Expert opinions received by the committee indicated that the Rompun ketamine mixture can produce severe hypotension and hypoxia. Rompun is also known to cause heartblock in the dog. In addition, ketamine has not been approved by the FDA for use in this species.

Because the combination of Rompun (ketamine has not been proven safe for use in the dog, it should be used only with extreme caution in this species.

Allan Paul, D.V.M.
Small Animal Extension Veterinarian
University of Illinois
College of Veterinary Medicine
Veterinary Professional Topics
Vol. 7, No. 1, 1981

TREATMENT OF RESISTANT CASES OF CYSTIC OVARIES

Many studies show the best initial treatment for cystic ovaries is 5,000 units of human chorionic gonadotropin (HCG) in the vein, 10,000 units of HCG in the muscle, or 100 micrograms of gonadotropin releasing hormone (GnRH) in the muscle. These treatments produce about 75% first treatment recoveries from cystic ovaries.

Cows that fail to recover from cystic ovaries may be treated in several ways. First of all, research shows that cows generally require 15 to 30 days to fully recover from cysts and come into true estrus. Recovery is the result of maturation, luteinization and subsequent regression of the luteal tissue and normal follicle development. Therefore, it may be best not to retreat cows for cysts until 30 days have passed. Significantly more cows were retreated for cysts when cows were examined at two-week intervals compared to four-week intervals following treatment.

Studies also show that HCG may be used two to four times in cows before antihormones are produced. GnRH may be used many times with only slight chances of antihormones being produced. Cows that fail to recover from two treatments may be given a third treatment after 30 days as follows: give a full dose of GnRH or HCG, wait only four days, and repeat the same dose. The rationale is that the first dose stimulates maturation of folicles and the next dose stimulates luteinization of these mature follicles (along with luteinization of viable granulosa cells

in the cyst). Thus, blood progesterone would increase and enhance a recovery from cysts. In one study of 225 cows, only 12 required three or more treatments.

H. Whitmore
University of Illinois
Veterinary Professional Topics
as cited in:
Veterinary News
Pennsylvania State University
Vol. 80, No. 1,
November, 1981

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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 <u>Virginia</u> <u>Veterinary</u> <u>Notes</u>

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