



VIRGINIA VETERINARY NOTES

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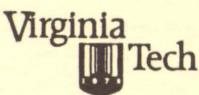
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Kent C. Roberts, DVM
Extension Veterinarian

THOUGHT FOR THE MONTH

You don't get paid for the hour. You get paid
for the value you bring to an hour.

--Jim Rohn



THE DIFFERENTIAL DIAGNOSIS OF SEIZURES (IN DOGS AND CATS)

Hypoglycemia, defined as serum glucose levels less than 60 mg/dl, is the most common metabolic cause of seizures in small animals. The two main causes of hypoglycemia are stress-related hypoglycemia and hyperinsulinism.

Toy and miniature breeds of dogs may not be able to properly store glycogen in the liver and have no resources when stressed.

Hyperinsulinism can result from an insulin overdose in dogs with diabetes mellitus or from an insulin-secreting mass.

Brain tumors located in the cerebrum are a common cause of seizures in middle-aged to older patients. --**Veterinary Notes II, North Dakota State University Extension Service, Vol. 2, No. 9, September, 1993, as reported in Animal Health Beat, Vol. 9, No. 10, October 1993.**

VOMITING, DIARRHEA AND DEATH IN BUDGERIGARS (PARAKEETS) ASSOCIATED WITH A PARAMYXOVIRUS-LIKE AGENT (KUNITACHI VIRUS?)

The isolation of an unusual paramyxovirus-like agent from an outbreak of disease in budgerigars (*Melopsittacus undulatus*) characterized by vomiting and diarrhea has been reported. During a two-year period, about 20 percent of the stock in a private aviary died. The clinical signs consisted mainly of vomiting and diarrhea, with proportionally more deaths in females. Antibiotic therapy using various treatments failed to reduce the symptoms significantly although several "affected" birds did eventually recover.

During April of 1993, three carcasses were submitted for postmortem and routine laboratory examination. Apart from fouling around the beak and vent, the only significant lesions were widespread hemorrhagic enteritis. Routine bacteriology and parasitology did not detect any significant bacteria or parasites. Tests for chlamydia were also negative.

Liver and spleen were processed for virus isolation in embryonated specific pathogen free (SPF) hens' eggs and chicken embryo liver cell cultures. Embryo mortality occurred after 6 to 10 days incubation following inoculation and passage via the yolk-sac. Electron microscopic examination of concentrated infected cell culture fluids and lysates revealed strands of viral nucleocapsid approximately 13 nm in diameter and the occasional pleomorphic fringed particle. The "herringbone" appearance of the viral nucleocapsid and the size and morphology of the virus particles suggested the isolate probably belonged to the family Paramyxoviridae.

Significant inhibition or neutralization was recorded only for paramyxovirus type 5, the so-called Kunitachi virus. The virus was isolated following investigations into an epizootic of budgerigars in Japan in 1974 and 1975. A virus with similar properties was also reported from Australia in association with acute enteritis in budgerigars at a bird sanctuary.

This may be the first report on the isolation and identification of the so-called Kunitachi virus outside Japan and Australia. The prevalence and etiological significance of the virus in budgerigars has yet to be determined. However, where cases of vomiting and diarrhea occur in budgerigars and related psittacines, it is important that tests for the presence of this virus be carried out. --**Abstracted from Gough, R., et al, Veterinary Record 133 (1993) p. 123, as reported in Veterinary Medical Extension, Newsletter #396-V746, Oct 1993, Iowa State University, Ames, Iowa.**

STUDY SAYS VDTs CAUSE STARING, DRY EYES

Japanese researchers believe they have figured out why people get tired eyes from staring at computer screens.

Their observation of 104 office workers found that people blink less-but their tears evaporate faster-when they work on computers. As a result, their eyes get dry.

One solution is drops of artificial tears. But researchers suggest that an easier remedy may be simply to change the height of the screen. They say that when people look down rather than straight ahead, their eye openings are smaller. Therefore, the tear film on their eyes dries more slowly. So the researchers suggest users lower the video screen and tilt it upward.

The researchers found that people blink 22 times per minute when they relax, 10 times while they read a book, and 7 times while they look at a computer screen. The eye openings were the same size when relaxing or doing computer work, but only about half as large while reading.

The study was conducted by Dr. Kazuo Tsubota of Tokyo Dental College in Chiba and Dr. Katsu Nakamori of Taisho Pharmaceutical Co. of Ohmiya City. It was published as a letter in the *New England Journal of Medicine*.

The preceding article appeared in OSHA Up-to-Date May 1993. --As reported in **SafeTalk, Environmental Health and Safety Services, Volume 2, Number 2, October, 1993, Virginia Tech.**

EQUINE INDUSTRY DEVELOPING AN ACTION PLAN TO COMBAT DISEASE

Seventy-five people representing 21 different equine organizations met at the Maxwell H. Gluck Equine Research Center at the University of Kentucky, Lexington, KY, November 12, to develop and implement an action plan to react to outbreaks of equine infectious diseases.

Richard Duchossois, Chairman of Arlington International Racecourse, and James E. Bassett III, President of Breeders' Cup Ltd. and chairman of the Keeneland Association, opened the meeting by introducing the need to develop a team crisis plan to cope with any similar equine diseases that may affect any horse, not only Thoroughbreds. Duchossois has first-hand knowledge of the problems relating to outbreaks of infectious diseases as Arlington's showcase event, the Arlington Million, was threatened by an outbreak of Equine Viral Arteritis (EVA) this past August.

Sponsored by the University of Kentucky Equine Research Foundation, Arlington International Racecourse, the American Association of Equine Practitioners, the Grayson-Jockey Club Research Foundation, the Thoroughbred Owners and Breeders Association and Fort Dodge Laboratories, this all-day seminar brought together representatives from the US Department of Agriculture, various racing commissions as well as nine foreign countries. A scientific review was given with an update on the EVA outbreak at Arlington, followed by a call for a central management to take action and work along with shipping agencies to control and organize an effective plan during a disease outbreak. Also discussed was the regulatory aspects of guidelines that would need to be adhered to and enforced by the racing commissioners, state regulators and the USDA.

Presently, Dr. David Powell, an epidemiologist with the Department of Veterinary Science at the Gluck Center, will be the acting secretary organizing the team with a projection date for start-up in the early part of the new year. --TRC Media Update, 6(35):2, 1993, **Thoroughbred Racing Communications, Inc., New York, NY. Telephone TRC at (212) 371-5910 to request contact or follow-up information. As reported in Veterinary Newsletter, Vol. 7, No. 2, Dec 1993, VMRCVM, University of Maryland, College Park, MD.**

BEWARE OF SEVEN DEADLY SINS OF VETERINARY MARKETING

Misunderstandings about what are good marketing strategies in veterinary medicine abound, just as they do in most other service industries.

- #1 Mistake: Trying to save your way to prosperity.
- #2 Mistake: Focusing on transactions rather than clients.
- #3 Mistake: Not asking the hard questions.
- #4 Mistake: Defining the service from the inside out.
- #5 Mistake: Not knowing your clients.
- #6 Mistake: Price-cutting to combat competition.
- #7 Mistake: Neglecting strategic planning.

--Karyn Gavzer, AVMA Director of Marketing, JAVMA, Vol. 203, No. 9, November 1, 1993) as reported in Veterinary Newsletter, Utah State University Cooperative Extension Service, November 1993.

INSECT REPELLENCY OF AVON'S SKIN-SO-SOFT

For the past few years we've heard testimonials of the wonderful effect of Avon Company's Skin-So-Soft (SSS) as an insect repellent. Some people swear by it as personal protection against mosquitoes, chiggers, or whatever. Others rub it into their pets' haircoats to repel fleas and ticks. Veterinarians and Extension personnel in east Texas say that SSS works well in protecting "pets, emus and ostriches" from black flies. We have not placed the question in high enough priority to test it ourselves. Now we have obtained scientific information that addresses the repellency of active ingredients in SSS.

Dr. Gregg Henderson of Louisiana State University and colleagues, have worked with natural repellents produced by Polistes wasps and incorporated into their nests. Since 1981, several scientific publications have documented the effect of the wasp-produced chemical against ants. The repellent ingredient is methyl palmitate. Henderson and colleagues tested methyl palmitate and a related compound, methyl myristate, against house flies and flesh flies (*Sarcophaga bullata*). One-percent solutions of both products were 92% effective in repelling house flies. Only methyl myristate was somewhat repellent to the flesh flies. Previous studies had shown the repellency of methyl myristate to have less than 24 hours of effect.

Other related compounds, butyl palmitate and octyl palmitate, are included in natural ant repellents from wasps. A letter from Dr. Henderson states: "Avon's Skin-So-Soft (has similar compounds... I had been using the hand cream for years, and although it is short-lived (15 min.), it is quite effective against mosquitoes. The (SSS) hand cream has water, octyl palmitate and about 14 other compounds in lower amounts. The two main ingredients in the (SSS) bath oil are mineral oil and isopropyl palmitate." Apparently, many of the palmitates have repellency to various insects, difference palmitates having different durations of effect. Dr. Henderson also mentioned a new product, Skintastics, by Johnson Wax that contains isopropyl palmitate as a repellent.

Incidentally, Dr. Henderson also discussed repellency to yellowjackets: Avon's SSS bath oil is repellent to them for up to six days, both the mineral oil and the isopropyl palmitate being deterrents to yellowjackets. Dr. Henderson found a 1% solution of butyl palmitate in mineral oil almost as effective as Skin-So-Soft bath oil. "1% solutions are as effective as 100%," he says. "Depending on the substrate [e.g., skin, clothing, or glass] the lifetime of the repellents can be as short as 15 minutes or as long as six days."

--D.E. Mock, as reported in Notes from the Extension Veterinarians, Oct. 1993, Kansas State University, Manhattan, KS.

**CONTINUING EDUCATION OPPORTUNITIES
SPRING 1994**

<u>Date</u>	<u>Subject</u>	<u>Location</u>	<u>Contact Hours</u>
+*March 18-19	Clinical Hematology & Transfusion Medicine	Blacksburg	10
+*March 24	Small Animal Medicine Update	Charlottesville	4
*March 25-26	Cardiac Imaging	Blacksburg	10
*March 27	Small Animal Medicine Update	Charleston, WV	4
*April 15-16	Gastrointestinal Endoscopy (Basic)	Blacksburg	10
*April 22-23	Diagnostic Ultrasonography	Blacksburg	10
+*April 29-30	Diagnostic Cytology	Blacksburg	10

*Limited enrollment course featuring hands-on lab instruction.

+Open to veterinary technicians.

Note: Program brochures are mailed out six-eight weeks prior to the course date. No registrations accepted until brochures go out. For further information, please contact:

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(703) 231-7181

LLAMA BOOKS

LLAMA MEDICINE, Veterinary Clinics of North America/Food Animal Practice, vol. 5, no. 1, March 1989.
Edited by LaRue Johnson. \$24.00

Order from: W.B. Saunders & Co., The Curtis Center, Independence Square West, Philadelphia, PA 19106-9884. Phone orders: 215-238-7800.

MEDICINE AND SURGERY OF SOUTH AMERICAN CAMELIDS, edited by Murray Fowler. \$64.95.

Order from: Iowa State University Press, Department LAMA, 2121 South State Avenue, Ames, Iowa 50010. Phone order: 515-292-0155.

CARING FOR LLAMAS, A Health and Management Guide, Clare Hoffman, DVM and Ingrid Asmus.
\$20.40.

Order from: Rocky Mountain Llama Association, c/o Mike Pettigrew, 168 Emerald Mountain Court, Livermore, Colorado 80536.

LLAMA INVESTMENT ANALYSIS, W338 S9025 Highway E, Mukwonago, Wisconsin 53149. Phone 414-392-2438.

LLAMA HANDLING AND TRAINING, the TTEAM Approach, by Marty McGee and Linda Tellington-Jones.

Published by: Zephyr Farm Press, 4251 Pulver Road, Dundee, New York 14837.

--As reported in Veterinary Medical Extension Newsletter #396-V740, April 1993, Iowa State University, Ames, IA.

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