



# VIRGINIA VETERINARY NOTES

VIRGINIA-MARYLAND REGIONAL COLLEGE OF VETERINARY MEDICINE

July - August 1993

No. 64

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 Kent C. Roberts, DVM  
 Extension Veterinarian

### THOUGHT FOR THE MONTH

It is easier to believe a simple lie than to understand a complex truth.

--Alexis DeToqueville



VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

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VIRGINIA STATE UNIVERSITY

## **OBESITY IN COMPANION ANIMALS**

### **Part III of III**

Obesity is easily recognized by most veterinarians, but often not recognized by the owners of the pets. At times, this misperception by the owner leads to difficulty in putting the obese dog or cat on a reduction program. The most challenging aspect of a successful weight reduction program is owner acceptance of the diagnosis of obesity and compliance with a weight loss program. Owners must be convinced that the health problems associated with excessive weight are serious, and that without intervention, the problems may worsen leading to a poorer quality of life for the animal. Remember, obesity is truly a disease and should be dealt with as such.

#### **OWNER ACCEPTANCE**

Convincing the owner that his/her pet is obese is often a sensitive task. Having a documentation of the animal's weight and body condition is very helpful to show a weight gain that has occurred since the last visit. Because the owner sees the pet daily, most owners are unaware of the slow gradual weight gain that some animals experience. You can help owners recognize the change in weight and body condition by letting them see the numbers on the scale and demonstrating palpation of the typical areas of fat deposition. Additionally, a detailed dietary and exercise history can be taken to see how the calories add up. Getting the owner involved at this level increases the likelihood of success for weight loss. Too often, we are quick to say "Just feed less or cut out all snacks," when it is more appropriate to determine why the animal is gaining weight and select an appropriate diet. We don't want to create "hungry" pets that beg for more food and make the owner feel that the pet is being deprived. Owners may relate treats and snacks to affection for the pet, or they may use appetite as an indicator of health--"he must be fine, he's been eating like a horse!" Use care that you do not make any owner feel guilty about the obesity problem, or dietary therapy will fail. Some owners are obese themselves and often do not admit to feeding extra snacks or food to the pet. Surprisingly, most owners do not realize that these snacks/treats do contain calories and add to the total caloric intake of the pet. For example, flat rawhide chews for small-medium dogs contain 25 kcal each. For the average 25 pound dog that eats 1 daily there is not a problem; however, for the 25 pound toy poodle that consumes 3-4 daily, there are 75-100 kcal that the dog does not need. And, when the same dog gets a small bowl of ice cream each evening, the problem worsens. Find out what these animals are consuming--both dog food and human food--and show the owners how this consumption compares with the optimum amount of calories needed by the pet to maintain an ideal weight.

Additionally, determine the exercise status of the patient. Specifically ask about the length of time the pet is walked, the frequency of these walks, and the level of exercise intensity. Exercise is one sure way of increasing energy expenditure, and you must make owners aware of the importance of adequate exercise, not only for weight loss, but for the health of the pet.

#### **OWNER COMPLIANCE**

Increasing dietary compliance for the pet (by the owner) is best achieved through positive feedback and encouragement. Once an owner is committed to starting the pet on a weight reduction program, you and your staff must be available to answer questions relating to the diet and the progression of the weight loss. Spend at least 20-30 minutes with the owner in a client education discussion. Some keys for success include having typed handouts outlining very specifically the type of food to be fed, the amount, the frequency of feeding, and the exercise schedule. Another way to help the owner keep track of the weight is to have the pet weighed weekly. Record the body weight on a chart that you provide for the owner. This allows tracking of the weight and allows the owner to see the trend of weight loss. If the

owner does not have a scale at home, encourage the use of your clinic scales for the weekly weigh-ins (at no additional charge of course). Take a picture of the animal when it comes for the initial visit and then periodically while on the program. Post the success stories on a bulletin board in the clinic. Make the owners proud of what they are doing for their pets. Having photos also helps the discouraged owner remember how obese the dog/cat was, and then they can see the progress better. Provide a plastic measuring cup (some are available with your clinic name) and show the owner how to measure the food. Your description of a cup of food may not be the same as an owner's. Other helpful hints for successful weight loss: feed the pet separately--no access to other pets' food; do not allow the pet to be in the kitchen when preparing family meals or in the dining room during mealtime; keep a daily diary of everything the pet eats; and, finally, have the owner call you regularly so you can monitor the weight loss.

You, as the veterinary professional, must also show commitment to the weight loss program. Be available and willing to review and reemphasize the major points of weight loss. Have your staff call owners for progress reports on the pet. Encourage the owner and make suggestions that will get the animal back on track if weight loss has not occurred or has been slower than expected. Always be honest with the owner regarding the length of time for weight loss to occur. Too many owners get discouraged when the pet only loses one pound every 2-3 weeks--they often become tempted to stop following the regime that you have outlined when they don't see quick results. Assure owners that the plan is safe and you will re-evaluate the weight loss periodically, at no charge, to determine if there were any changes that need to be implemented. If you need assistance with developing a client education handout and weight chart, please contact the Editor of the Virginia Veterinary Notes. If you have a particularly tough case, I'd be happy to review the case with you and offer suggestions. Good Luck! --**Pamela A. Ray, DVM, Clinical Nutrition, VA-MD Regional College of Veterinary Medicine, Blacksburg, VA.**

### GOOD NEWS ABOUT CAT ALLERGIES

Clients who complain of allergies to cats may find some relief by washing their cats in distilled water. Researchers at Washington University School of Medicine in St. Louis report that a monthly 10-minute soaking proves to be sufficient. However, it may take several months before one's allergies to cats abate.

*Science News* reports that 30% of asthmatics are allergic to cats. The allergic response is triggered by proteins that are deposited on the cat's fur as it grooms itself. These proteins are secreted by the cat's salivary and sebaceous glands. --**Cats Magazine, June 1991, as reported in Feline Health Topics, Vol. 6, No. 3, Summer 1991, Cornell University.**

### RISKS OF HOUSING SMALL BIRDS IN GALVANIZED CAGES

Galvanized wire is widely used for making cages and flights for small birds. However, some small psittacine birds have become ill shortly after being housed in new galvanized cages. They became dull and lethargic, developed a persistent greenish diarrhea, and many died. The syndrome has been induced by feeding adult cockatiels (*Nymphicus hollandicus*) with small quantities of metallic zinc; doses as low as 2 mg/week could be fatal and the mortality increased as the doses were increased to 32 mg/week. Post mortem findings suggested impaired gastrointestinal motility, and degenerative changes in the liver, kidneys and pancreas, which contained high concentrations of zinc. The galvanized coating on bird cages should be brushed free of loose deposits before the cages are used to house psittacine birds. --**Veterinary Medical Extension, Iowa State University Extension, Newsletter #389-J737, January 1993, as reported in Animal Health Beat, Vol. 9, No. 2, February 1993, University of Nevada-Reno.**

## TRENDS IN VETERINARY MEDICINE

The author has stated in the past that practices would be moving away from the "margin of profit" perspective and going toward "margin of value to the consumer." He notes that most practices in crisis are still focused on the bottom line of an income statement, while those succeeding have learned to focus on being client-centered. He provides the following thoughts about emerging trends.

- I. Provision of in-patient and emergency services at single central facilities, owned by shareholders.
- II. Services for previously considered ancillary pets (caged mammals, birds, etc.) will be expanded.
- III. Conflicts to stop competition will be replaced by competitive marketing techniques.
- IV. Veterinarians will return to rural and industrial settings.
- V. Local associations will develop a single purchasing base to allow cost savings to independent practitioners. I have not seen anyone do it better than our colleagues in Minneapolis; they even fund supplemental projects for the good of members.
- VI. Veterinarians will participate more in community programs. Besides the interdisciplinary efforts of the Delta Society and similar human-animal bond organizations, individual veterinarians are stretching beyond the traditional clinical and medicine areas of interest to integrate pet therapy and human-animal bond-related business.
- VII. Total health care will become a marketing strategy. Wellness programs are beginning to flourish.
- VIII. Animal insurance programs will increase as participatory, prepay, HMO programs. Fireman's Fund is now backing one program, Lloyd's of London is backing another, and individual practices are beginning to offer Health Maintenance (Wellness) Programs.
- IX. Veterinary consultation in behavior-related evaluations will increase.
- X. Practice managers and consultants will become commonplace, to assist in computer applications, oversee or train staff, establish daily operations, ensure internal controls are in place, minimize risk to the practice, promote discretionary fund investments.
- XI. Social science principles will be used in developing marketing strategies at the individual practitioner level.

### Future Trends

- I. Corporate ownership will increase. Veterinarians will work split shifts, 40 hours per week, replacing the overworked and frustrated 55 to 80 hour per week veterinarian of the past.
- II. Industry will use more "real veterinarians" in developing product lines and services.
- III. Paraprofessional veterinary extenders will increase, practice acts will increase the latitude for trained technicians to deliver wellness care under the wide umbrella of a veterinary practice.
- IV. Most existing computer systems will evolve to true relational data base systems, with the entire data base being driven by the medical record's single progress note entries.
- V. The traditional veterinary medical association, and belonging because it is expected, will be replaced by a low-entry-cost professional organization with unbundled services. Journals and services will be offered independently by associations, to be bought by the veterinarian as they are needed. Associations which represent the practical (not political) interests of their members will prosper; those clinging to the format of the 1950's will disappear. Those services and products not used will disappear and the professional organization(s) which tries to save them will perish in a flurry of cost-control limitations.

- VI. The women's role will evolve to ownership and trend setting. The female associate (26% of the veterinarians in 1991) will become the female practice owner. The AVMA and other veterinary associations will evolve only if their programs (and boards) reflect the balance of their professional membership. The salary trends will equalize for new graduates as well as middle career veterinarians, regardless of sex.
- VII. Veterinarians will gain in self-image and assume the role of community leaders. As community leaders, and not professional competitors, veterinarians in a community can raise the veterinary I.Q. of the client base and start to charge for their services and make a decent living.

**--Abstracted from Catanzaro, T.E., Vet Forum 1992, as reported in Veterinary Medical Extension Newsletter, Iowa State University, #392-V740, April 1993.**

### **SARCOPTES MANGE IN PET PIGS**

Sarcoptes mange continues to be the most common external parasitic problem in pot-bellied pigs. Skin scrapings may or may not be diagnostic in affected young pigs. Clinical signs of pruritus and dermatitis may be the basis for a presumptive diagnosis. In at least half the calls I receive from practitioners about possible sarcoptes mange in pet pigs, the owners exhibit pruritic skin lesions on the arms or abdomen. Treatment of the pig with 1 ml/75 lbs SC (300 mcg/kg) of 1 percent ivermectin twice, at 10-day intervals, will eliminate the mange mite. Owners with lesions should be advised to seek treatment by a physician to eliminate the tremendous pruritus they suffer and to avoid the possibility of serving as a reservoir for pig reinfestation.

Sarcoptes mange commonly develops in young pigs that have been isolated from other pigs for several weeks after purchase. Owners are concerned about the source of infestation when this occurs. In a few cases it was known that the dams had clinical sarcoptes mange and exposed the pigs before weaning. Clinical mange in the isolate pig then developed several weeks after exposure. At the same time, owners were exposed and infested with sarcoptes mange mites.

It may be prudent to routinely inject young pigs with ivermectin to eliminate external parasites, in the event they have been exposed. Preventing sarcoptes mange infestation in humans would also save owners considerable money in medical treatment. **--Bruce Lawhorn, DVM, MS, Extension Veterinarian, Texas A&M University, College Station, TX, as reported in Veterinary Quarterly Review, Vol. 8, No. 2, April-June 1992.**

### **PATENT ISSUED ON PET STERILIZATION VACCINE**

A patent has been issued on a genetically-engineered vaccine which provides contraception to animals without surgery. It was developed by Zonagen, Inc.

The vaccine is based on specific proteins from the zona pellucida which surround the egg. The injected proteins stimulate antibody production against the animal's own eggs, in an autoimmune response. These antibodies bind to the egg after its release from the follicle, and thus prevent the penetration of sperm into the egg.

Laboratory tests with rabbits were 100% effective. The FDA has authorized clinical trials of the new vaccine in dogs. **--As reported in Veterinary Newsletter, Nov. 1991, Utah State University, Logan, Utah.**

### **CANINE BLOAT: RECOMMENDATIONS FOR HIGH-RISK DOGS**

The Morris Animal Foundation recently convened a panel of experts to review current knowledge of canine gastric dilatation volvulus, or bloat. Although many questions about bloat remain unanswered, the following recommendations were generated by the panel:

- Large dogs (those most at risk) should be fed two or three times daily, rather than once a day, and at times when someone can observe post-feeding behavior.
- Owners of susceptible breeds (all giant and large breeds as well as basset hound and dachshund breeds) should watch for actions that signal abdominal discomfort. These include evidence of fullness after meals, whining, pacing, getting up and lying down repeatedly, stretching, looking at the abdomen, anxiety, and unproductive attempts to vomit. Animals showing such signs should be examined as soon as possible.
- Owners of susceptible breeds should establish a good working relationship with their veterinarian and should discuss emergency measures in the event of bloat.
- Water should be available to dogs at all times, but should be limited immediately after feeding if the dog appears to over consume.
- Vigorous exercise, excitement, and stress should be avoided one hour before and two hours after meals. Walking is permissible as it may help stimulate normal gastrointestinal function.
- Diet changes should be made gradually over a period of three to five days.
- Susceptible dogs should be fed individually and in a quiet location.
- Special attention should be paid to these procedures after animals return home from being hospitalized.
- Because dogs that have survived bloat are at increased risk for future episodes, prophylaxis, in the form of preventive surgery or medical management, should be considered.

**--Veterinary Medical Extension Newsletter, Iowa State University Extension, #391-V739, March 1993, as reported in Animal Health Beat, Vol. 9, No. 4, April 1993, Nevada Cooperative Extension, University of Nevada, Reno.**

### **USING AN ATHLETIC SOCK AS A LEG BANDAGE IN HORSES**

Use a tall, ribbed-top athletic sock as a lower leg bandage for horses when a pressure wrap is not needed. The sock will keep leg wounds clean, protect sun-burned legs, and prevent contamination of any surface medication. This inexpensive sock provides an easy, fool-proof way for your clients to change bandages daily. The socks conform well to the limb and cannot be put on too tightly. They also work well as a first aid measure by keeping wounds clean and free of dirt and flies until you can examine the horse.

**--NDSU Extension Service, North Dakota State University, Vol. 2, No. 1, January 1993.**

**VIRGINIA-MARYLAND REGIONAL COLLEGE OF VETERINARY MEDICINE  
BLACKSBURG, VIRGINIA  
CONTINUING EDUCATION OPPORTUNITIES  
FALL 1993**

<u>Date</u>	<u>Subject</u>	<u>Location</u>	<u>Contact Hours</u>
September 30	Small Animal Medicine Update	Charlottesville	4
*October 1-2	Gastrointestinal Endoscopy Intermediate Course	Blacksburg	10
*October 8-9	Orthopedic Surgery Canine Hindlimb	Blacksburg	10
*November 5-6	Clinical Fish Medicine	Blacksburg	10
November 11	Small Animal Behavior Problems	Charlottesville	6
*November 19-20	Practical Eye Surgery	Blacksburg	10
*December 3-4	Clinical Hematology & Transfusion Medicine	Blacksburg	10
*December 10-11	Wound Management & Reconstructive Surgery	Blacksburg	10
*December 17-18	Small Animal Dentistry	Blacksburg	10

\*Limited enrollment course which features hands-on experience.

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

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(703) 231-7181

### EMERGENCY MEDICINE SYMPOSIUM

The student chapter of AAHA at the College of Veterinary Medicine will present a program on emergency veterinary medicine in Blacksburg on September 24-25, 1993. This symposium is open to practitioners for a \$75 registration fee. Speakers include Bernie Hanson, NCS University; Douglass Hopkins, emergency clinician in Charlottesville; Charles McGrath, VMRCVM.

For more information, contact Alison Smith, VMRCVM, (703) 552-8315 or Kent Roberts (703) 231-7181.

### FISH MEDICINE SHORT COURSE

A College-sponsored short course for veterinarians on clinical fish medicine is scheduled for November 5-6 in Blacksburg. Featured speakers are Dr. Brent Whitaker, Director of Animal Health at the National Aquarium in Baltimore and Dr. Stephen Smith, Aquatic Medicine, VMRCVM, Blacksburg.

Program topics include common aquarium diseases, environmental problems affecting fish, preventative medicine programs, and case discussions. This interesting and practical course will provide ten hours of CE credit.

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