

ABSTRACTS



CHRONIC RELAPSING PANCREATITIS IN A DOG. While chronic relapsing pancreatitis is a recognized disease entity in man, the condition is rather poorly known in animals. Chronic relapsing pancreatitis can be defined as recurrent attacks of acute pancreatitis, separated by periods of relatively normal health. A severe shock will usually terminate the life of the patient.

An animal showing symptoms of emesis, abdominal pain, excessive thirst and a temperature of 103° F. was presented to clinicians in Ontario, Canada. Diamycin and restriction of food and water were prescribed and there was improvement in two days. Six months later it suffered a similar attack which lasted for three days, and two months following that, the third attack occurred. This time the animal grew progressively worse with repeated emesis, oliguria and lowered temperature until death occurred on the fourth day.

Autopsy revealed an ill-defined reddish mass in the omentum which proved to be the pancreas. It was adhered to surrounding organs and its consistency varied from fibrous nodules and hemorrhagic areas to small pockets containing purulent material and partially digested fat. Microscopic examination revealed that the normal structure of the pancreas was almost completely destroyed.

Although no successful treatment has been described for this condition, this case is interesting in that the symptoms closely resemble those of acute poisoning, acute infectious canine hepatitis and acute leptospirosis.

[Nielson, Svend W., Pocock, Elizabeth F. Chronic relapsing pancreatitis in a dog. *The Cornell Veterinarian*, 43:567-572. (October) 1953.]

PUBLIC RELATIONS AND VETERINARIANS. We have lived to see the day when veterinary medicine and veterinary science have come of age. All agricultural authorities accept and fully recognize the value of trained veterinary service. In our cities, the hundreds of well appointed, small animal hospitals have become an accepted and appreciated part of contemporary urban life.

At the community level, the quality of service and the status of citizenship of each veterinarian is the yardstick that measures public relations. Multiply this to the state level and again to the national level and you have the gauge, the measuring stick of public opinion of our profession. If in any large city there are any small animal practitioners that are gouging the public; if in any country district there are general practitioners who are perpetrating unethical or unscrupulous practices, it is up to the veterinarians of

the city or state to get these erring brethren back into line. We can not expect public agencies to carry out these corrective measures for us.

Every good practitioner is an individualist. A man has to be an individualist to hang his shingle in a new community and make a success of practice. This is as it should be. However, there is one weak spot that applies to quite a percentage of individualists, namely, that some of them do not adequately realize the necessity or advantages of group activities. These activities will broaden outlets for all individuals of a group and will protect them from adverse external factors that may damage the status or "bread and butter" of both the group and its individual members. Every veterinarian must realize that time and effort contributed to constructive education of the people in his own community is the most valuable and directly effective method of promoting good public relations for the veterinary profession. It is not easy for a veterinarian who is physically tired in a busy practice to take time out to attend evening meetings of livestock groups, but it does pay good dividends in the long run.

The future for veterinary medicine in America looks bright and on a sound and solid foundation. In this great nation we can absorb and use no less than 50,000 trained veterinarians. If we can all set our ideals high and pull together as a team, locally, at the state levels and nationally, new horizons of professional prestige and public acceptance become a certainty instead of wishful thinking.

[Quin, A. H., D.V.M., President-Elect of the American Veterinary Medical Association. Public relations and veterinarians. The MSC Veterinarian, 14:15-16 (Fall) 1953.]

SOME NOTES ON THE REACTION TO TUBERCULIN. Trauma from the intradermal injection of tuberculin more than any other factor is confused with an actual swelling from reaction to the tuberculin test. Clean needles, clean tuberculin,

clean injection site and good restraint of animals that will not stand quietly are necessary to minimize trauma.

Beef animals and healthy cows usually give the most pronounced reactions, while the unthrifty animals give a lesser reaction. A cow severely infected with tuberculosis may give no reaction at all because it is no longer sensitive to the small amount of tuberculin injected, and this fact justifies removal of non-reacting cattle in a herd that has at least half or more of the herd reacting to the tuberculin test.

The scarcity of reactors due to the successful eradication of tuberculosis is making a problem for a veterinarian to learn what a true tuberculosis reaction is. To take advantage of any opportunity to see and feel a tuberculosis reaction would seem like a good idea.

[Some notes on the reaction to tuberculin. The Speculum, 7:24. (Fall) 1953.]

MICROCOCCIC (STAPHYLOCOCCIC) ENTERITIS FOLLOWING THE USE OF AUREOMYCIN OR TERRAMYCIN. Studies were conducted by members of the Mayo Clinic, Rochester, Minn., to learn more about the diarrhea which may occur in humans following the oral use of aureomycin and terramycin. This condition has also been observed in small animals.

The complications were found to be caused by resistant strains of micrococci in patients already ill with some disease, as peritonitis, or who had recently undergone a major operation. Except for *Proteus* and *Psuedomonas*, most strains of intestinal bacteria are quite sensitive to aureomycin and terramycin. In 1951, nine percent of micrococci isolated were resistant to these drugs, while in 1953, 45 percent were found resistant to these drugs at this institution. The report was based on a study of 40 patients who received these drugs and were hospitalized for some illness or surgical procedure. Of this group, seven deaths and varying re-

actions of mild to severe systemic complications were observed with *Micrococcus pyogenes* being isolated in each instance.

Events in these cases may be summarized as follows. Patients were admitted and the antibiotics in question administered as part of their therapy. The usual intestinal bacteria were suppressed and resistant strains of micrococci proliferated rapidly. It was presumed these patients received the strains of resistant micrococci from other patients or other healthy hospital personnel who harbored the organisms in the upper respiratory tract. The organisms then passed to the intestinal tract where in the absence of suppressed organisms they proliferated rapidly. Enterotoxin was produced causing gastrointestinal and systemic reactions.

Symptoms attributable are as follows. Diarrhea, though not always present, is a common symptom. Fatigue and exhaustion are also common symptoms. Fever is usually present. The temperature may vary with the severity of the reaction. Anorexia, vomiting and abdominal distention are frequently present. If the systemic reaction is severe, varying grades of shock may appear. Symptoms were alleviated following the use of erythromycin in doses of 300 to 400 mg. four times daily.

It is pointed out that not all diarrhea following administration of these antibiotics is due to resistant strains of micrococci. Similar diarrhea was observed before resistant strains were found.

[Dearing, W. H., M. D.; Heilman, F. R., M. D.; Sauer, M. D. Micrococcic, (Staphylococcic) enteritis, following the use of aureomycin or terramycin. *Gastroenterology*, 26:38-40. (January) 1954.]

PRODUCTION OF HYPERKERATOSIS IN CALVES WITH TOPICALLY APPLIED OIL-BASED INSECTICIDE CARRIER. Hyperkeratosis was produced in calves by topically administered oil-based insecticides. Mineral seal oil, a common insecticide carrier, produced the clinical skin condition of similar degree

whether or not active insect toxicants (lindane, methoxychlor, thiocyanate compounds) were dispersed in the oil at recommended levels.

Blood plasma vitamin A concentrations were somewhat depressed upon application of the oil or oil-based insecticides, but in general, they did not reach the critically low levels observed when highly chlorinated naphthalene or toxic pelleted feeds were administered orally. Likewise, the condition produced in this experiment had less effect on the appetite and general well-being of calves than that produced with toxic feeds.

The importance of dosage and frequency of application of this petroleum fraction is producing hyperkeratosis in calves is being further investigated.

[W. G. Hoekstra; R. J. Dicke; P. H. Phillips. Production of hyperkeratosis in calves with topically applied oil-based insecticide carrier. *American Journal of Veterinary Research*, 15:47-50. (January) 1954.]

VARICOSIS OF THE MILK VEINS IN DAIRY CATTLE.

In the cases of varicosis encountered during recent years, the histories have been uniform and consistent. The individuals involved have been heavy producers (70 to 90 pounds of milk per day) and usually of the heavier breeds. The onset is sudden and the course is usually short with the termination fatal. The symptoms are limited, and the animal shows no apparent local or general reaction to the condition as she remains on full rations and full production during the course of the affliction. The chief symptom is sudden and extreme distention of the involved vein.

In all cases that were closely observed and studied, it was impossible to find any indication of an injury or contusion as a possible cause. All involved animals were maintained under ideal farm conditions where possible external injuries were kept at a minimum.

The rupture usually occurs in the region of bubblelike swellings, which appear to be a prolapse of the vein through a weakened area in the overlying skin. Attempts at ligation of the vein

proved disastrous and injectable hemostatics were used with no apparent benefit. Immediate slaughter appears to be the only hope of salvaging the meat value of the animal.

This condition does not appear to be a farm, a neighborhood, or an area condition, as cases have been seen on various types of farms and in cows fed on different types of feed. It has, however, been confined to the higher producing dairy cow.

With a steady increase in the number of these cases each year, it is felt that this condition could become an economic problem in some of the better producing dairy herds.

[Compton, Lyle S. Varicosis of the milk veins in dairy cattle. *The Cornell Veterinarian*, 43: 362-365. (July) 1953.]

A SPASTIC SYNDROME IN CATTLE. Spastic syndrome (Stretches) in cattle is probably a disease of the central nervous system, usually of older animals. It is characterized by spastic contractions of muscles of one or both hind legs, the back, and eventually the entire body. These cramps last from several seconds to a few minutes and they cease suddenly, only to be repeated upon the proper stimulus. The attacks are mild for several years before a severe attack occurs. The severe attacks may last for several weeks, and then for several months only mild symptoms are evident.

Eventually, the attacks become so frequent and severe that the animal becomes useless and is sold for slaughter. The symptoms are most evident when the animal first gets up or is startled and are absent when it is recumbent. Apparently there is no seasonal incidence of the disease, although most severe attacks have been observed during the close confinement period of winter months. Cattle appear to be less affected when on pasture and receiving moderate exercise.

The prognosis on these cases is guarded to unfavorable since they are progressive in character. At the present time, treatment is largely empirical. No treatment

yet recommended has been known to have permanent effects. Attempts at treatment with sedatives such as chloral hydrate, alcohol and barbiturates have failed. Spinal depressants for temporary relief have shown the most promise in relieving the more severely affected cattle.

[Roberts, S. J. A spastic syndrome in cattle. *The Cornell Veterinarian*, 43:380-388 (July) 1953.]

A report in the *Journal of the American Veterinary Medical Association* indicates hatchability of eggs was increased about 10 percent when artificial insemination was used. Cage matings had produced 70 percent hatchability, whereas artificial insemination produced 80 percent. It also reduced the cost of maintaining roosters because fewer males were needed to fertilize the eggs. The first commercial test of artificial insemination in chickens was made in Alabama.

In a paper on surgical shortcuts, Dr. W. F. Riley Jr., of Michigan State College, describes a simple method to obtain a urine sample from the ewe to examine and test in suspected cases of ketonuria. Simply have an attendant firmly grasp the ewe's head under one arm and with the free hand clamp down over the nostrils, shutting off the passage of air. In a matter of seconds, the ewe will urinate and a sample thus easily obtained.

Due to triceps pull, fractures of the olecranon in the dog can be fixated only with difficulty by external methods. Pinning, in these cases, is the method of choice.

A recent study by Kline and Clifton in which radioactive phosphorus was built into the nuclei of cells, accurately establishes that the life of human leukocytes is 13.2 days.

Rumen microorganisms synthesizes B-complex vitamins and protein from non-protein nitrogen, as well as converting fiber to digestible nutrients.