

1951

Abstracts

Follow this and additional works at: https://lib.dr.iastate.edu/iowastate_veterinarian



Part of the [Veterinary Medicine Commons](#)

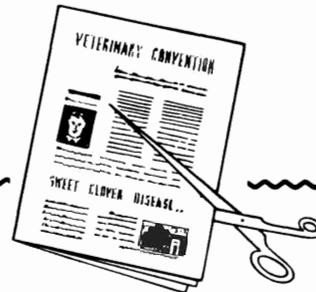
Recommended Citation

(1951) "Abstracts," *Iowa State University Veterinarian*: Vol. 13 : Iss. 2 , Article 19.

Available at: https://lib.dr.iastate.edu/iowastate_veterinarian/vol13/iss2/19

This Article is brought to you for free and open access by the Journals at Iowa State University Digital Repository. It has been accepted for inclusion in Iowa State University Veterinarian by an authorized editor of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.

ABSTRACTS



INTRAPERITONEAL DRIP FOR POSTOPERATIVE ADMINISTRATION OF FLUIDS. Studies on the value of the intraperitoneal drip as a means of parenteral administration of fluids were made in rabbits and dogs.

The following solutions were used for the drip; 5 percent dextrose in distilled water; isotonic NaCl solution; protein hydrolysate; two vitamin mixtures; pooled human plasma; 25,000 units of penicillin in 250 cc. of normal NaCl solution or aminosol.

The isotonic NaCl solution, the 5 percent dextrose in distilled water, the two vitamin compounds and penicillin were well tolerated by the peritoneum.

The average absorption of 5 percent dextrose in distilled water was 80-84 percent in four hours; of the vitamin mixtures, 50 to 66.6 percent in three hours and 100 percent in six hours, respectively; of penicillin in 5 percent dextrose, 28.6 to 55.5 percent in six hours, and of isotonic NaCl solution with penicillin and a vitamin mixture, 77.8 to 100 percent in six hours. Pooled human plasma and amino acids were not absorbed.

No infection was demonstrated at autopsy or on cultures either with or without penicillin.

The authors state that these findings indicate that intraperitoneal drip might be used in man as a supplement to or substitute for venoclysis. They recommend that penicillin be added to the fluid as a prophylactic measure.

[Narat, J. K., Cipolla, A. F., Cangelosi, J. P., and Vincenti, A. L. Intraoperative Drip for Postoperative Administration of Fluids. Arch. Surg. 60:102 (Jan.) 1950.]

JOURNALISM AND THE VETERINARIAN. The author, a reporter for a national farm magazine, explains how his feature story on dairying helped a young veterinarian gain national recognition.

The veterinarian must capitalize upon the public relations obtainable through journalism because his advertising is confined to a formal professional notice. The field of public relations, made possible by journalism, includes news in a local newspaper or informative articles about disease outbreaks, quarantines or new livestock sanitary regulations. Frequently it may be necessary for the veterinarian to write the article himself to insure clarity and accuracy. To do this type of public relations work requires a general knowledge of journalism.

Public health, research, advertising, and editorial staffs of magazines and sales work require veterinarians with the ability to express themselves in writing.

Writing and its part in general public relations is being recognized by the veterinary profession now to a much greater degree than formerly. The American Veterinary Medical Association has a good public relations program, which sees to it that the larger news and viewpoint reaches the press. Some state and regional associations do the same.

[O'Brien, H. R. Journalism and the Veterinarian. The Speculum, 2:4-5 and 36. (Wtr.) 1950.]

Chickens may be infected with brucellosis, and all nine strains of Brucella infection have been recovered from poultry carriers.

PROPHYLAXIS OF TETANUS WITH PROCAINE-PENICILLIN.

Because therapy in the fully developed case of tetanus is relatively ineffective, recent emphasis has been placed on more extensive use of prophylactic measures. Experiments were conducted on laboratory animals to develop this theory.

The prophylaxis of tetanus by means of the local administration of procaine penicillin G under the experimental conditions described in the article was far more effective than prophylaxis with antitoxin. Reduction of mortalities from 100 percent to as low as 5 percent was observed in many experiments as well as a concomitant increase in time for the occurrence of symptoms and death in those mice receiving penicillin. The inability of antitoxin to cope with a maximal infection indicates the practical value of penicillin as a prophylactic agent in tetanus, either to supplement the prophylactic dose of antitoxin or to be used in its stead in cases where it is desirable to prevent sensitization of the patient to horse serum.

The results shown here bear out the wisdom of removing the source of toxin with penicillin rather than depending entirely on antitoxin to neutralize the toxin without attempting to stop its further production.

[Taylor, Welton I., Navak, Milan. Prophylaxis of Tetanus with Procaine-Penicillin. *Annals of Surg.* 133: 44-49. (Jan.) 1951.]

STUDIES OF CANINE LEPTOSPIROSIS IN LANSING, MICHIGAN AREA.

The differential diagnosis of canine leptospirosis is difficult when based only on clinical symptoms. The authors conducted staining, cultural, and serologic procedures on the blood and urine collected from 30 naturally infected dogs to determine the value of these procedures for the laboratory diagnosis of canine leptospirosis.

The staining and cultural procedures are not considered reliable diagnostic methods. The agglutination test was approximately 50 percent accurate after the second week of illness and 100 percent

accurate after the third to fourth week.

The serums from 500 normal dogs were examined by the agglutination test in retrospective diagnosis. Of the 29.6 percent of the dogs demonstrating some titer to either *Leptospira canicola* or *Leptospira icterohaemorrhagiae* antigens, or both, 26.2 percent were positive with *L. canicola*, 2.6 percent were positive with *L. icterohaemorrhagiae*, and 0.8 percent showed an equal titer with both antigens.

Male and female incidence of latent infection was approximately 2:1. Incidence increased with age.

The results indicated that nearly one third of the dogs in the Lansing area are possible reservoirs of *Leptospira* infection, from which other dogs and man may acquire leptospirosis.

[Newman, J. P., Studies of Canine Leptospirosis, *American Journal of Veterinary Research.* 11:41-405 (October) 1950.]

Cockleburs or Salt?

Cocklebur poisoning in young pigs and growing shoats is commonly confused with salt poisoning. Careful analysis of history is all-important, for the two conditions produce similar symptoms and post mortem findings.

A 50 pound pig can eat a little over 5 pounds per 100 pounds of body weight per day as compared with only 2¾ pounds for a 200 pound pig.

Courtesy Hampshire Herdsman

Large doses of ascorbic acid (1000-2000 mg. every 2-4 hours) administered intravenously to human poliomyelitis cases are reported to produce a drop in temperature within one day, and when continued at 2-hour intervals the patients were "clinically well" in 3 days.

Cortisone retards the formation of granulation tissue in laboratory animals and humans. It also slows, but does not stop, epithelization and the healing of fractures.

Journal of the A.V.M.A.

Iowa State College Veterinarian