

veterinary sciences

Gathered at the Boston meeting of the American Veterinary Medical Association

COWS

Estrogen treatment in pregnancy

Estrogen treatment is claimed by some doctors as the elixir of youth for women. According to Dr. H. B. Risley of Bethlehem, Conn., it may also be the key to maintaining pregnancy in cows—those who have a history of early fetal mortality caused by a low level of progesterone. Progesterone is the hormone that prepares the uterus to receive and develop the fertilized egg.

Dr. Risley reports that doses of progesterone given 27 to 30 days after breeding and repeated every 15 days up to 200 days of gestation have successfully prevented death of the fetus in such cases.

Feeding with progesterone also proved successful in treating 70 percent of a sample of 38 cows with cystic ovaries.

RABIES

Guidelines for vaccine programs

Guidelines for the use of rabies vaccine have emerged from a program in which 643 volunteer veterinary students were exposed to such vaccines. Dr. Wayne V. Shipley of Kansas State University reports most success with a series of three injections of duck embryo vaccine given with an interval of one month between the first two, and six to eight months between the second and third.

Dr. Shipley reports that over half of a group that responded negatively following the initial series of vaccines showed positive response to an annual booster of the vaccine.

Two booster injections one month apart proved more effective than single annual doses for this group.

Studies of the length of time that the response remained positive following injection showed the importance of giving at least one booster injection after a known exposure to rabies virus, Dr. Shipley says.

SMALL MAMMALS

Specialization urged on surgeons

Specialization in small animal surgery is the only solution if the subject's phenomenal advances since World War II are to continue, according to Dr. Kenneth W. Smith of Colorado State University.

The time is rapidly approaching, he says, when the average practitioner can no longer expect to be proficient in all the known surgical operations performed on small animals. In addition to the knowledge and skill required for more complicated surgery, special equipment and trained assistants are necessary. Even so, in the average practice infrequent performance of certain kinds of surgery is a definite deterrent to success.

Group practices and hospitals accepting cases only on a referral basis could help, he says. Operations as difficult as orthopedics, heart surgery, plastic surgery, neurosurgery, eye surgery and organ transplants are examples of procedures most likely to be referred.

136/science news /vol. 94/10 august 1968

HORSES

Cortisone found harmful

Although cortisone has proved very successful in treating human arthritis, it is not a panacea for the aching joints of racehorses. James T. O'Connor, a veterinarian in Epping, N.H., reports that corticosteroids suppress secretion of the hormone ACTH in the pituitary glands of racehorses. This hormone controls the release of steroids into the body.

Although injection of corticosteroids into the arteries of horses with minor troubles in their joints initially relieves the symptoms, Dr. O'Connor reports it interferes with the normal protective mechanisms. Reinjection as the pain returns can set up a destructive cycle which finally leads to a steroid disease of the joints.

FEED

Pasturizing the diet

Feeds contaminated with salmonellas are frequent sources of infection in animals. Two researchers at the University of Massachusetts have looked into the worth of pasturizing animal feed by heat.

Drs. Tienszu Liu and Glenn H. Snoeyenbos contaminated samples of commercial feed containing varying amounts of water with salmonella and then heated the feeds for differing periods of time.

They found that whatever the moisture conditions the heat resistance of the organisms fell off exponentially with heating time. Further, the heat resistance proved to be a function of the amount of water added to the feed.

DOGS

Plea for standard animals

A plea for the use of research dogs specifically reared for the laboratory comes from Dr. Raymond D. Zinn of the National Institutes of Health. Most dogs used in present laboratory work are available dogs, according to Dr. Zinn, obtained from the street or pound with random health characteristics. These dogs show great variations.

The use of uniform dogs specifically reared for research, which have a definable state insofar as health and disease are concerned, would seem mandatory if the requirements of research are to be fulfilled, says Dr. Zinn.

COWS

Computerized birth records

A computer program developed by North Carolina State University enables farmers to detect any reproduction problems in their herds soon after they develop. The program gives accurate reproductive records on each cow in a herd and a mathematical index to evaluate the entire herd. Input comes from local veterinarians.

North Carolina State Professors J. H. Nicolai and L. C. Ulberg report the project.