Further Developments in

Canine Eye Prostheses

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continued research on Plastic prostheses for the canine eye in the Department of Veterinary Medicine at Iowa State College has resulted in the development of an intrascleral prosthesis, which, from the limited application thus far, shows great promise. The form and shape of the previously reported prostheses has been changed considerably. These changes, for the most part, have been aimed at providing more positive



Some of the newly developed two-piece canine eye prothetics



Fig. 2. Patient 1 month postoperatively

attachment for the ocular muscles and giving a better cosmetic effect.

A two-piece prosthetic, for use in growing animals, has been developed so that the anterior portion which corresponds to the cornea may be changed to keep pace with the growth of the normal eye. The various types of prostheses now under investigation are shown in Fig. 1.

The intrascleral implant is used following an evisceration. The simplicity of the technique makes this the operation of choice in those cases where the sclera is sufficiently intact to permit the operation.

Dr. Simpson is assistant professor of Veterinary Medicine and Surgery at Iowa State College. An earlier report on canine eye prosthetics, "Plastic Prosthesis for the Canine Eye", was published in the Iowa State College Veterinarian, XVII No. 1, 1954-55.

A minimum of specialized instruments is necessary, which makes the operation feasible in any small animal practice. Postoperatively, a minimum of care is necessary after the first 7 days.

The conjunctiva in the two cases thus far shows very little increase in susceptibility to conjunctivitis. The dog in Fig. 2 has not acquired sufficient discharge from the operated eye in 4 weeks to require cleansing.

Further investigation is being done to simplify and standardize operative techniques and to chart the typical postoperative course of the patient. Further refinements of the prostheses with regard to simulation of the natural eye and standardizing of sizes are in process.

References

 Simpson, H. D. Plastic prosthesis for the canine eye. Iowa State College Veterinarian. Vol. XVII, No. 1. 1954-55.

A vitamin A deficiency can be accurately diagnosed by blood analysis.

Brucellosis Testing in Iowa

During the year 1954, the State-Federal Brucellosis Laboratory processed 384,608 blood samples. This Laboratory figure exceeds the previous high year of 1941 by over 100,000. Although most of the samples were from cattle, there were 23,876 swine samples tested during the year.

The percentages of reactors in cattle tested has dropped from just over 16% in 1934 to 5% in 1954. Thus, it can be seen that progress has been made in the control of brucellosis in Iowa.

The interest in brucellosis eradication is also evidenced by the fact that 437 practitioners have signed up to serve as federal agents (veterinarians) for fee basis brucellosis work in Iowa

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