The organism has been repeatedly isolated from ticks taken from a diseased moose. It has also been isolated from guinea pigs which died after the tick *Dermacentor albipictis* from a diseased moose had engorged upon them. In every case in which death followed the injection of the culture, the organism has been reisolated. It grows very abundantly on all ordinary laboratory media. Its cultural reactions are now being studied. It may be stated that it is a vigorous fermentor, is capsulated, and that it apparently produces a toxin. The bacterium is a rod form with a tendency to assume a coccoid shape. The growth on agar is excessively mucoid; in broth it grows very well throughout the medium with a great deal of sedimentation. It produces Beta hemolysis on blood agar. Growth is exceedingly rapid, covering the entire surface of an agar slant within 5 hours. Indications are that it may be a member of the Klebsiella group.

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Chemical Changes in Infected Dogs' Gall Bladder Bile.*

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Previous experiments[1] have been reported showing that bile salts are absorbed faster than cholesterol from the infected dog's gall bladder. The importance of this lies in the fact that it is the bile salts that hold the cholesterol in solution and if the ratio falls below a certain critical level, cholesterol will be precipitated out of the bile. In former experiments the cystic ducts were closed so that no more bile could enter the gall bladder. In the experiments here reported the ducts were not ligated so that it was possible for bile continually to pour into the gall bladder and further concentration of cholesterol to occur, while the bile salts are progressively absorbed.

Streptococci and filtered emulsions of dog feces were used, the latter instead of pure cultures as they represent a better cross section of the intestinal flora. The injections were made by needle punc-

* This work was done in part under a grant from the Douglas Smith Foundation for Medical Research.

[1] Andrews, E., Schoenheimer, R., and Hrdina, L., PROC. SOC. EXP. BIOL. AND MED., 1931, **28**, 945.

ture and by insertion of a ureteral catheter up the common duct into the gall bladder. In the latter cases the common duct was ligated at the site of injection. The accompanying table shows that the bile salt content was reduced on the average to about 25% of normal figures while the cholesterol content was approximately doubled.

TABLE I. *Injection of Bacteria into Dog's Gall Bladder.*
Figures for bile salts and cholesterol in mg. per 100 cc. Duration of experiments, 4 days.

No. of Exps.		B.S.	Chol.	B.S./ Chol.
4	2 cc. cloudy suspension of streptococcus injected up common duct into gall bladder with catheter	1706	92	19
2	2 cc. same through needle puncture into lumen	1545	111	14
4	2 cc. filtered emulsion dog feces up duct	88	86	1
3	2 cc. same into lumen	217	118	2
2	2 cc. same subserous	1230	300	4
	Average	893	126	7
81	Normal controls	3630	55	66

In vitro control experiments show that no such changes are effected by the action of bacteria on bile.

That this rise in the cholesterol content is not due to secretion of cholesterol by the gall bladder wall is shown by the previously reported series of 57 experiments in which closed infected gall bladders showed no increase in the cholesterol content.

Conclusion. The infected gall bladder of the dog absorbs bile salts and continues to concentrate cholesterol to levels at which it can no longer be held in solution by the bile salts.

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Influence of Saponin on Absorption of Calcium Salts from the Intestine.

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We have followed the curve of blood calcium concentration in normal dogs following the administration of calcium lactate in quantities of 0.5 or 1.0 gm. per kilo body weight, given in water solution, 20 cc. per kilo, with the addition of saponin in concentrations varying from 1.0 to 0.01%. Two preparations of saponin were used, Merck's purissum album and Morgan's. In control