

Cultures were made and abundant growths of staphylococcus aureus were obtained; the bacterium coli commune was not present.

The infection of the peritoneum in this case was undoubtedly due to the fact that the dog gnawed away the dressings and some of the stitches on the second day after the operation, so that the incision became opened up, forming a free communication between the air and the peritoneal cavity.

8. Pug dog. The procedure carried out was the same as that described in experiment No. 7.

During the operation a considerable portion of omentum bound to the abdominal wall by adhesions was made free, resulting in the escape of some blood. The dog remained quiet during several hours following the operation, and continued languid during the next day. On the second day death occurred.

Autopsy: The dressings and stitches were found to have been gnawed away and the abdominal incision somewhat opened up. A couple of ounces of bloody fluid were found in the peritoneal cavity, but no signs of peritonitis were present. The fluid contained no formalin. Only a few staphylococci were found in it. The bloody fluid in this case had apparently come from the area of the separated omentum. The cause of death was not very evident.

The dog was in a weak condition at the time of operation, and probably had poor resisting power.

NOTE.—The above experiments clearly demonstrate that no ill effects follow free irrigation of the peritoneal cavity of the dog with lotions of formalin in strengths of 1 in 1000 and 1 in 2000.

Moreover, the absorption of a considerable quantity left in the belly is not followed by untoward results.

As regards the stronger solution—1 in 500—it is evident that in some cases it can be quite safely used.

The deaths which I have described in the case of two dogs in which this strong solution was used were probably due to accidental causes.

II.—Introduction of infective material into the peritoneal cavity followed by immediate irrigation with formalin solution.

1. Terrier pup, about six months old. The peritoneal cavity was opened and a broth-culture of staphylococcus aureus introduced (from a case of septic peritonitis). Shortly after the cavity was irrigated with 16 ounces of formalin solution (1 in 1000), a small quantity being left behind before closure of the abdomen. The dog recovered quickly from the effects of the ether and continued apparently quite healthy.

2. Terrier. A broth-culture of streptococcus was introduced into