

the peritoneal cavity, the bowel and omentum being pinched and scraped in several places. Soon after the cavity was irrigated with 16 ounces of formalin solution (1 in 1000), several ounces being left in the belly. Recovery occurred without symptoms.

3. Collie. The same procedure was carried on as in the last case, save that a fluid culture of bacterium coli commune was introduced.

Within an hour of the operation a violent fit of vomiting caused one of the stitches to be torn out. This was followed by the escape of part of the omentum through the abdominal incision; at the same time the dog tore off the dressings.

When the animal was found in this state the omentum was lying on the floor, cold and dirty; it was replaced uncleaned in the peritoneal cavity, and some fresh formalin lotion poured in before the abdominal incision was closed.

The animal recovered from the operation without a symptom, and appeared to be perfectly normal.

NOTE.—In the above experiments no attempt at cleanliness was observed during the operation as I was desirous of freely introducing infective matter.

I am quite aware that the successful results in the above cases might by many be considered to be independent of the use of the antiseptic solution employed, and it might be suggested that check experiments should have been carried out. In such cases, however, check experiments may not be at all conclusive, owing to the difficulty of getting two dogs so alike as to make it possible to establish similarity of conditions. Moreover, it is well established that the introduction of infective material into the peritoneal cavity of the dog usually leads to serious or fatal peritonitis.

It might also be alleged that irrigation with sterilized water might have proved as satisfactory as the formalin solution in cleansing the cavity. This is undoubtedly possible. The point which I desire to establish, however, is that the solution of formalin, being a safe antiseptic, is calculated to be more efficacious than water.

In carrying out the above experiments I had in mind those cases in which infective material escapes during operations within the peritoneal cavity of the human subject. If, in addition to the ordinary means, viz.: sponging, irrigation, and drainage, flushing with a solution of formalin of suitable strength can be carried out, an additional chance of safety is given to the patient. Moreover, it must be a source of satisfaction to the operator to know that several ounces of this solution may be left in the peritoneal cavity without danger. (It will afterward be seen that I have carried out this procedure in the human subject.)