

commercial value—not only of sugar and tea and household stores—but of drugs and dressings and instruments and all the thousand and one articles in use in a Hospital.

MR. C. B. LOCKWOOD gives the following interesting information concerning disinfection in his article entitled "Further Report on Aseptic and Septic Surgical Cases, with special reference to the Disinfection of Materials and the Skin," which lately appeared in the *British Medical Journal* :—

"Three times culture tests were applied to operations for the radical cure of hydrocele. This was done when the drainage tube was taken out forty-eight hours after the operation. All infected gelatine and agar-agar tubes. One case also infected culture media at the final dressing on the ninth day. All healed by first intention. Indeed, we have only had one slight suppuration in thirty-three operations for the radical cure of hydrocele, and that was in a patient who passed urine several times into his dressing.*

It is not unlikely that the infection entered these hydrocele wounds during the operation. Once a scrap of cellular tissue was cut from the wound during the operation, and once at the end. Both bits infected broth with staphylococcus albus. On each occasion the surgeon's hands also infected broth when tested before the operation.

It is exceedingly difficult to obtain sterile tissues from a wound. We failed with portions of varicose vein, but here again the surgeon's hands were septic before the operation. Once, however, a portion of hernial sac was sterile. It was obtained during an operation for the radical cure of non-strangulated hernia. At this operation the skin of the patient, of the surgeon, and of the assistant were all aseptic before the operation.

A castration wound was also tested when the drainage tube was taken out, forty-eight hours after the operation. Although the result was septic, the wound healed by first intention.

A fishing-gut suture was taken, on the seventh day, from a wound on the back of the hand, after the removal of a ganglion. The broth in which it had been placed was found by sub-cultures to contain staphylococcus epidermidis albus. The wound had healed by first intention. At the operation the patient's skin and the ligature was aseptic, but the skin of the house-surgeon, Sister, and Nurse were all septic.

On another occasion a limb wound was septic. A naevus was removed from the inner side of the knee of a child aged 8 years. When dressed on the seventh day it infected an agar-agar tube. The wound was soundly healed, but the skin around was raised in vesicles containing clear serous fluid.

* See also *Lancet*, October 19th, 1895, "The Operation for the Radical Cure of Hydrocele by Excision of the Sac, &c.," by C. B. Lockwood.

Lastly, a wound of the neck, made for the removal of cancerous glands, was also septic. At the operation the patient's skin was septic, but that of the surgeon, together with fishing-gut ligature, after having been used, and wool sponge were all aseptic.

A wound for the removal of a cancerous breast and axillary lymphatic glands was dressed at the end of forty-eight hours for the removal of a drainage tube inserted to let out blood, which continued to ooze. The clot in the drainage tube and serum, which ran from the aperture, were both septic. The depths of this wound healed perfectly, but, owing to the tension needed to bring the enormous wound together, the skin sloughed a very little in places, and a minute quantity of pus formed about the sloughs.

These are all the wounds tested with culture media. They were taken as they came, without selection. They comprise 22 operation wounds, of which 10 were aseptic and 12 were septic. This is, I believe, a higher proportion of asepsis than has yet been recorded. Of the septic cases 1 had slight suppuration. This proportion of 1 in 22 marks about the proportion of suppuration which I have of late had in Hospital practice in cases in which there was no pre-existing septic focus.

As the house-surgeons are often changing, and likewise the Nurses who prepare the sponges, bowls, and towels, this proportion cannot be easily diminished. With such a small proportion of suppuration it is particularly galling to have to report that one occurred after the wiring of a fractured patella. The operation was done because it was clear that the pre-patellar aponeurosis had got between the fragments. The patient, too, was anxious to be operated on, although the risk was clearly explained. The suppuration was very subacute, as is usually the case when asepsis is so nearly attained. The patient was never ill or in much pain, and she promises to have a movable joint. The patella itself is united and movable from side to side. At the operation the skin of the surgeon, of the house-surgeon, and of the patient were aseptic; the skin of the Nurse was septic. During the operation the 1 in 4,000 biniodide of mercury lotion was aseptic after an hour and a half's exposure to air, and also the same lotion mixed with blood clot. An inexperienced Sister introduced an undisinfected bowl into the field of operation before we were aware of the error. No iodoform was dusted on the skin. Also it may seem wise after the event to remark that before the operation the patient's temperature was raised and rather irregular, suggesting auto-inoculation. But my own belief is that some bleeding took place into the joint and wound, and thus the clot became infected with bacteria of inconsiderable pathogenic properties, but enough, however, to disintegrate the clot. On another occasion I shall drain and use iodoform."

[previous page](#)

[next page](#)