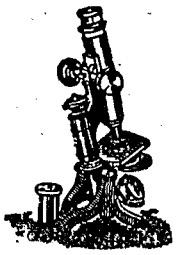
Medical Matters.

ASEPTIC SURGERY.



In the Lettsomian Lectures on Aseptic Surgery in Theory and Practice, delivered by Mr. C. B. Lockwood, F.R.C.S., surgeon to St. Bartholomew's Hospital, the lecturer says, under the heading

ON THE ACCURATE CLOSURE OF WOUNDS.

When the cut edges of the skin are brought together with perfect accuracy, they adhere at once and are an effectual barrier against air infection. In respect to this rapid adherence the skin is comparable to the peritoneum. But to secure this advantage the apposition must be perfect and exact. This point is well understood, but perhaps a word may be said with regard to another aid to asepsis which will, in the future, have an extensive use. I refer to the complete and accurate closure of the largest wounds by the transposition of flaps of skin, by undercutting, and by the gliding of extensive portions at the boundaries of the wound.

Many of us can remember the time when an amputation wound was sewn together with discontinuous sutures about an inch apart, and can recall the little area of raw surface which was left between the sutures. Nowadays this would be considered very poor workmanship. A number of discontinuous sutures might be used to adjust the flaps and obliterate the space between them, but every vestige of the raw surface would now be covered in by running a continuous suture of the finest twisted silk along the whole of the edges of the wound. The skin adheres with great rapidity, and is probably firmly united before any bacteria which may have survived in the sweat glands, sebaceous glands, or hair follicles could have had time to multiply and invade the deeper parts of the wound. We know how rare a perfect disinfection of the skin must be. When we come to consider the matter, it would but a short time ago have been rather rash to have aimed at such accurate apposition, because then, in all probability, it would have led to the retention of septic fluids within the wound, and to such a series of disasters as can be occasionally found recorded in the older works on surgery.

In many operations, especially in those for mammary carcinoma, a very large area of skin has to be removed, as it is now recognised that the skin over the cancerous growth cannot be saved with safety because its lymphatics are frequently the seat of cancerous infection.

The excision of the suspected skin often leaves a huge gap which can only be closed by the exercise of considerable ingenuity. When the wound is aseptic, flaps of skin and subcutaneous tissue, six or seven inches long and attached by quite a narrow base, can be dissected up and turned into the wound. These flaps hardly possess proper blood supply of their own, and only survive because, owing to the asepticity of the wound, they immediately adhere to the chest wall to which they are applied. From that source they do not at first acquire new blood-vessels, but are probably kept alive by the absorption of plasma. It is remarkable to observe how tight these huge skin flaps may be, and how livid they may become, and yet preserve their vitality. At the end of a few days they may appear to be upon the point of perishing, but nevertheless recover and unite firmly with all their surroundings. I have used similar skin flaps to close gaps in the chest wall. About eighteen months ago in removing a recurrent carcinoma portions of three ribs and a large piece of pleura had to be excised. A large area of the diaphragm and of the lung was exposed to view. Four or five sponges were stuffed into the gap, whilst a large thick flap was brought up from the chest and abdomen. The patient recovered without a single bad symptom. Without the aid of the flap this operation could not have been undertaken; and without asepsis the flap could not have been made.

The principles which govern the fashioning of these flaps cannot be entered upon now. The theory is simple, the practice difficult. I shall content myself with saying that there is room for a whole lecture upon this subject, which, by the bye, has been almost entirely neglected by surgical writers.

For the complete closure of gaping wounds asepsis allows us to use a further device. Besides being able to convert the surrounding skin into flaps, we can also undercut it so as to allow large pieces to slide in the direction of the wound. Doubtless this undercutting destroys in part the blood and nerve supply of the skin, but so long as the wound is aseptic no harm results.

In bringing together the wound and adjusting the edges of skin flaps a continuous suture of twisted silk is used. This has one great ad-

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