

separately brushed and scrubbed. The washing of the hands in basins, even if the water is changed several times, is not by any means as certain or as satisfactory as a stream running over the hands and carrying away impurities. The cleansing of the hands cannot be too thoroughly done and often is only half accomplished. A surgeon, of all men, should be careful of his hands.

During the operation sterile normal saline alone is used. That this is sufficient is fairly well proven by the fact that we have had many hundreds of operations without one case of sepsis, if the parts were not infected to begin with. Bringing powerfully poisonous and irritant substances, like bichloride of mercury, for instance, into contact with a clean wound is injurious and unnecessary. The idea aimed at is to keep the wound free from germs, poisons and foreign matter generally.

For ligatures and sutures, silk is invariably employed and meets every indication; it can be made absolutely sterile very rapidly, is easily manipulated and can always be depended upon.

In making openings through the abdominal wall, muscular tissues are separated and, if possible, not cut and the nerve-supply of parts interfered with as little as possible.

The wound is put together layer by layer, for in no other way can the natural relationship of parts be secured. Good surgery requires that the abdominal wall should be left as nearly as possible in its normal condition, and no one will pretend that through and through suturing will produce such a result. It is claimed by some that by this means the wound can be closed more rapidly, but even if that were true, which it is not, speed does not justify bad methods.

When each layer of tissue is brought together neatly, there are no cavities left in which blood can collect as so often happens in mass suturing.

Anyone who compares the accurate apposition secured in a wound where tissues are joined carefully as Nature intended, with one where clumsy, inaccurate, through and through suturing is done, will be convinced that theoretically and practically the former is the only method that should be employed. A surgeon who has grasped the true principle will never, in my opinion, use the slovenly through and through method.

When accurate apposition of layer to layer is secured, the fact that fascial integrity is restored prevents the possibility of hernia. A hernia, following an ordinary laparotomy, is a very unfortunate thing for the patient and is not creditable to the surgeon; and, yet, that is what too often results from the unscientific through and through sutures.

I once knew of a case where a practitioner, I had almost said a surgeon, removed an ovarian tumor, closing the abdominal wall by through