

which new epithelial cells are formed to cover the granulating area. An external or open wound cannot be said to have completely healed until new skin or mucous membrane forms over its surface. As skin and mucous membrane are composed of epithelial cells the restoration in the loss of their continuity must be by the proliferation of pre-existing epithelial cells. The nearest formative cells of this type are at the margins of the wound and it is from this source that the new material is produced. In the process of epidermisation new cells appear at the periphery of the wound and creep in to meet near the centre. At first these cells do not appear to be attached to the underlying granulations, but merely lie on them. Later they effect organic union. Occasionally in granulating areas due to a burn, islands of epithelial cells will appear which obviously have not originated from the edges of the wound. They are due to epithelial cells of some hair follicle which, owing to their location, have escaped destruction and act as independent centres of epidermisation.

Before the introduction of aseptic and anti-septic methods in surgery practically all wounds suppurated, and the old authors, seeing inflammation commonly coincident with healing, thought that it was an essential part of the process. It is hoped that the student will already appreciate the erroneousness of this theory, as it has been the endeavour to impress the fact that regeneration as it occurs in the healing of a wound is but an augmentation of a natural process which is always operative in the body to restore the normal physiological waste of the tissues. The old authors classified healing of wounds under three heads: First, direct or immediate union, or healing without the interposition of new material which is an impossibility. Second, healing by plastic inflammation, a term which has no place in modern pathology. Third, healing by suppurative inflammation, which on its face is an absurdity. The present classification of the healing of a wound is simple and consists in dividing the process into healing, first, by primary intention, when the wound is aseptic and regeneration occurs without inflammation; and, second, by secondary intention, when the wound is infected and regeneration is delayed by inflammation.

In union by primary intention the patient has practically no fever and the wound heals under a single dressing without the local symptoms of inflammation. There is no discharge save the escape of a little blood serum and none of the granulation cells are destroyed but all go to accomplish the end for which they

were produced; hence repair is effected with a minimum tax on the system.

In union by secondary intention the patient has fever and the attending constitutional disturbances. The wound is painful, hot, red, and swollen. The stitches cut into the skin and the margins gape and become everted. Pus forms, granulation cells are destroyed, and there is a profuse discharge which saturates and necessitates the changing of dressings. Healing is delayed until the infection runs its course or is eliminated by antiseptic measures. Owing to the destruction of embryonal cells these have to be reformed over and over again, thus putting a tax on the patient's system, which, together with the fever, pain, and long confinement, often causes great debility.

### On Attention to the Bowels and the Use of Laxatives.

Of the waste products of the body there is one class which, more universally than the rest, must come under the consideration of the nurse or Sister in charge of a patient, whether in private or in hospital nursing—that, namely, which passes the rectum. It is remarkable that the administration of drugs for the purpose of securing and regulating this waste is very commonly left to the discretion of the Sister, or the nurse, as the case may be.

And yet drugs are the monopoly of the physician, and the keeping open of the *prince via* is one of the first necessities in sickness, as in health. A serious responsibility, and one which she is too often ill-equipped to meet, is thrown upon the nurse, as a matter of course, and the patient suffers.

The care of the bowels is a study in itself, which, for the purposes of nursing, may be classed under four heads:—

1. History.
2. Present general and special condition of the patient.
3. Character and frequency of evacuations.
4. Drugs: Their administration and effects.

1. As regards the history of your patient, in this respect it is often difficult to come at the truth. And yet you may get valuable information, with patience and tact, always remembering that each case should be dealt with on its own merits, and the general law be applied with care to the particular instance. Your patient has diarrhoea. Yes, but with a previous history of unopened bowels for days, and sometimes for longer. Until the accumulation of faeces has been cleared away the diarrhoea will continue. It would be useless to attack the

[previous page](#)

[next page](#)