

perfect fixation in an easy position, and the maintenance of aseptic conditions during the process of union.

In "flap" operations the flap might be obtained from the neighbouring skin, and simply twisted into position, or by the formation of either a tongue-shaped flap or bridge of tissue elsewhere. In either case two methods of implantation were open to the operator, namely, (1) to implant the flap immediately upon the freshened surface prepared to receive it, and (2) to defer implantation for a time, to allow the flap to become thick and vascular and covered with granulation upon its under surface. The latter plan was, in the opinion of the lecturer, by far the better one; indeed, he considered that the introduction of the method of operation with granulating flaps was one of the greatest importance in the development of successful plastic surgery, and it was the method invariably employed by himself, except in certain cases (for example, restoration of the lip or eyelid). The flap it was desired to employ was first marked out, the most convenient position on the body being selected and the best shape and direction of the flap carefully planned. It was now separated from the subjacent fascia, leaving it attached at both extremities. Presently it became very thick and vascular, and might be safely separated at one extremity, the other remaining undivided till the flap had firmly united in its new position. The time for its final separation varied in different cases and circumstances, but a delay of from ten to fourteen days or rather longer was usually advisable, and during this period the flap was surrounded by aseptic dressings, and in the first stage a layer of protective oil-silk was placed between it and the surface from which it was detached to prevent it from re-uniting.

In the process of freshening a surface for implantation, the chief point was to thoroughly divide or excise all scar tissue. Where "bridge flaps" were used and at once applied to the gap made in the scar, it was usually best, after the needful interval, to separate one end first, a second period of from two to three weeks being

allowed to elapse before finally separating the flap from its original connection.

In some cases where there might be a doubt as to the complete vitality of the transplant, it would be better even after this interval to effect a gradual division of the "pedicle." This was accomplished by the use of an india-rubber band to partially obstruct the circulation a day or two previous to the section of the pedicle, or by dividing it in sections.

Certain special classes of cases were then alluded to, such as those demanding repair of mucous membrane; and of these, cases of defects in the buccal cavity and extroversion of bladder were taken as instances. The use of skin flaps were frequently resorted to, and a difficulty was formerly encountered when inversion of the flaps was considered necessary by the growth of hair, leading, in bladder cases especially, to phosphatic deposits. This difficulty was now overcome by fixing the raw or granulating surface of the flaps inwards, in which cases a smooth layer of epithelium, without any of the characteristic structure of skin, was gradually formed on the internal surface of the flap.

In special reference to the case of extroversion of bladder, it was recommended that a urethra should be formed first, and the bladder then closed by successive operations from below upwards. Trendelenburg's method of approximating the divergent pubic bones after section of the posterior sacro-iliac ligaments was also mentioned.

Finally, the operative treatment for repair of nerves was alluded to, the points chiefly considered being the various methods of repair to be employed in different cases, of which the following were described, the choice of method being decided by the special circumstances of each individual case:

1. Transplantation into the gap of a piece of nerve taken from the same or another species of animal.

2. Uniting the peripheral end of the injured nerve to an adjacent uninjured nerve.

3. Cross union of two different adjacent nerves cut at different levels where