

As much as 25 c.c. (6 dr.) of No. 1, 100 c.c. (3 oz.) of No. 2, and 500 c.c. (15 oz.) of No. 3, may be considered the maximum of these fluids to be used on the average adult. No. 2 solution is used in 95 per cent. of the cases, while No. 1 is used in highly inflamed and tender parts, and No. 3 only when in some large operation the limit of No. 2 is approached.

To proceed: after the first wheal is formed the needle point is again inserted near the edge and within the first bubble, and another formed, and so on in any direction desired until a chain of bubbles extends in the line of proposed incision which can then be made with absolutely no pain. This "œdematous infiltration" is applied to all operations, and, if the incision is very extensive, an application to the deeper tissues is necessary after the primary incision. The puffing and swelling of the parts resulting from the injections speedily subsides and does not interfere with primary union.

The anæsthesia lasts for twenty minutes, and, should the operation take longer than this, re-infiltration is necessary. Where infiltration is systematic and thorough it is a very satisfactory method for selected cases in minor surgery; but for major operations of longer duration, where more serious conditions demanding immediate attention may supervene, and in operations in cavities, especially about the head, other forms of anæsthesia are desirable.

Whatever local anæsthetic may be chosen, it is always well to look to the condition of the patient as the first precaution. The gradual reduction of the mortality in general anæsthesia is due, in a large measure, to the careful preparatory treatment of the patient, and, to reduce the risk in local anæsthesia to a minimum, certain precautions should be taken as a matter of routine.

The question of operating under local anæsthesia is influenced largely by the "grit" of the patient, but it is manifestly unfair to subject a patient, suffering from some organic circulatory trouble, to the depressing effect of a local anæsthetic, the pain and the mental shock without some supporting treatment. In all cases, and especially where the effects of shock are to be dreaded, all possible precautions should be taken to limit the depressing effects as much as possible.