

A FURTHER AID TO VENIPUNCTURE

It is frequently necessary to perform venipuncture on patients whose blood volume is reduced as a result of shock, anemia, dehydration, and so forth. Under such circumstances, venipuncture with an adequate gage needle is difficult, even after making use of the procedures which have been described to facilitate venipuncture. The following procedure has proved to be helpful.

A 21 or 22 gage needle or a smaller gage needle, if necessary, is inserted into a vein on the back of the hand or preferably in the cephalic vein at the wrist. This needle is connected with a standard venoclysis system containing physiologic saline solution. The fluid is allowed to enter the vein as fast as the capacity of the needle will allow. A tourniquet is placed around

the arm just above the elbow to cut off the venous return. The saline solution will continue to enter the vein at the same rate until the vein and its communications are distended. With the veins about the elbow now well distended, venipuncture becomes easy with a much larger needle, such as an 18 or 15 gage needle. After removal of the tourniquet, intravenous therapy with the desired fluid may be instituted. The preliminary venoclysis system is dispensed with and the small gage needle removed, as it has served its purpose.

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For the information of anesthesiologists who are contemplating examination for fellowship in the American Society of Anesthetists, Inc. or who are training physicians for the specialty, the following questions have been employed in the past in *Pharmacology*:

1. List the chief toxic effects of each of the following: (a) scopolamine, (b) divinyl ether, (c) morphine, (d) nembutal, (e) cyclopropane.
2. What is the average dose of preliminary medication for general anesthesia for an adult male of (a) seconal, (b) sodium amytal, (c) nembutal, (d) codeine, (e) pantopon, (f) paraldehyde, (g) atropine, (h) avertin (tribromethanol), (i) morphine, (j) luminal.
3. State (A) two advantages and (B) two disadvantages of (1) cyclopropane, (2) sodium pentothal.
4. Define analeptics. Name five analeptics. Describe the action of one from the anesthetist's viewpoint.