travenous sodium pentobarbital does not significantly affect the ionic calcium levels in the control or septic state. In no instance, either experimentally or clinically, was there noted a lowering of the calcium levels to within the limits of those seen in tetany." 16 references.

J. C. M. C.


"A correct estimate of the anesthesia problem in gastric surgery is more important than in many other fields. One needs relaxation for good exposure to correct adequately the situation at hand. There is no agreement as to the type of anesthesia which should be used or to the superiority of any one type. Local infiltration anesthesia is usually unsatisfactory because of the general distress of the patient and the marked abdominal rigidity. A large number of surgeons use nitrous oxide oxygen and ether. Wangensteen uses cyclopropane reenforced by ether with excellent results. Fallis favors spinal anesthesia because he found a greatly reduced mortality rate in a series of cases. Ross advocates the use of spinal anesthesia because he claims that it is a great factor in lowering the mortality. He used the following technic in 4000 cases. For upper abdominal operations in the average sized adult four cc. of spinal fluid is withdrawn in which 120 mg. of novocaine crystals is dissolved to which one cc. of nupercaine is added. It is felt that the height of anesthesia can be much better controlled by this method than when large amounts of dilute anesthetics are used. Allen prefers splanchnic block as advocated by Finsterer and modified by Ogilvie and others. He uses Ogilvie's splanchnic needle and instills sixty cc. of 1 per cent novocaine and 0.25 per cent quinine urea solution into the retroperitoneal tissues above the pancreas, between the aorta, and the vena cava. Rienhoff advocates the use of 100 cc. of 1:3000 pontocaine solution for this purpose. Labey prefers 1:1500 nupercaine spinal anesthesia in from 16 to 20 cc. depending on the height of the patient; 20 cc. being the maximum dose. The use of nitrous oxide oxygen and ether with novocaine solution injected into the rectus muscle gives excellent relaxation for these cases. It appears logical that in the absence of agreement each surgeon should use the anesthesia to which he is most accustomed." 124 references.

J. C. M. C.


A complication of a minor surgical operation could have been avoided had the literature been widely known.

Gangrene of the finger or toe following injection of a procaine-epinephrine solution for local anesthesia preparatory to a minor surgical operation has not been stressed in the American literature.

"Minor Surgery," by Christopher quotes Baran's article in the J. A. M. A. and states:

"A very definite warning should be given in regard to the use of epinephrine in too great concentrations. Epinephrine, in what apparently is a very weak solution, is capable of producing necrosis of the tissues. A safer rule would be 1:200,000, which would be 1 drop to 200 drops."

Commercial preparations of procaine and epinephrine are made ready for use in concentrations of 1 and 2 per cent procaine and with 1/20,000, 1/50,000 and 1/100,000 epinephrine.