

CURRENT LITERATURE

I. VEGETATIVE NEUROLOGY.

1. VEGETATIVE NERVOUS SYSTEM.

Nölle. SPLANCHNIC NERVE ANESTHESIA. [Deut. med. Wochenschr., July 1, 1920.]

This author has had disagreeable experiences with this procedure following the Braun method. A half hour after the injection of 0.02 gm. of morphin and 0.0005 gm. of scopolamin, an exploratory laparotomy for suspected cancer of the stomach was performed on a man of fifty-nine years of age. After opening the abdominal cavity under local anesthesia, 100 c.c. of a 0.5 per cent solution of procain and 0.5 c.c. of epinephrin solution (1:1,000) were injected retroperitoneally, in front of the body of the vertebra, on a level with the xiphoid process. No changes were found in the gastrointestinal tract. During the operation the patient lay in a light twilight slumber. As the stomach and the transverse colon were lifted up he emitted a few groans. After the operation he had no recollection of it. Four hours after the operation the patient regained full consciousness, but his face took on an anxious, pained expression. The abdomen was distended. At a slight touch spasmodic jerks of the whole abdominal musculature occurred. The muscles of mastication and the muscles of the neck were not involved. A heavy sweat broke out on the face. The syndrome resembled that of tetanus. As a precaution antitetanic serum was injected in large doses subcutaneously and intravenously. The condition of increased reflex excitability lasted for two or three days. Various hypotheses are discussed relative to the phenomena observed but no definite conclusions were reached.

Steinthal. BLOCKING OF SYMPATHETIC AND VAGUS NERVES. [Zentral. f. Chirurgie, Oct. 16, 1920, XLVII, No. 42, J. A. M. A.]

Steinthal has tried Stierlin's method but his experience has not been favorable. Stierlin holds that the better results securable by means of transverse resection in gastric ulcer as compared with gastroenterostomy are due to the fact that, in addition to the removal of the ulcer, the gastric nerves are severed. This he thinks results in an increase of motility, stopping of the pylorospasm and reduction of the acidity. By the interruption of both the sympathetic and vagus nerves the peristaltic activity is increased through the mediation of the mesenteric plexus; and the interruption of the vagus nerve alone reduces hypersecretion and hyperacidity. In place of transverse section, Stierlin therefore recom-

mends that, in such ulcer cases in which the removal of the ulcer itself is not absolutely necessary, a simple circular incision be made, high up on the stomach, through the serous and muscular coats down to the mucosa, so as to interrupt the nerve paths without opening the gastric lumen, whereupon the incision is immediately closed by suture. Steinthal made a practical test of Stierlin's ideas in two cases. A patient aged eighteen, with marked atony and considerable hypersecretion with hyperacidity, was operated on by the Stierlin method. After the operation, normal peristalsis was reestablished, but the hypersecretion was not affected. In the second case, a patient aged forty-five, presented before the operation increased peristalsis, a considerable six-hour residue and hypersecretion. After the operation, motility was unchanged and gastric secretion was if anything increased.

Billet and Laborde. BLOCKING THE SPLANCHNIC NERVES. [*Presse Médicale*, April 2, 1921, XXIX, No. 27.]

The authors believe in the value of this procedure for regional anesthesia for the upper abdomen. Their technic is as follows: The patient lies on his side and the needle is introduced just below the twelfth rib, 7 cm. from the line of the spinous processes. The needle, 12 cm. long, is pushed in until it hits the body of the vertebra. The needle is then slanted at a tangent to the vertebra, until the tip no longer meets with any resistance. Then the anesthetic is injected on one or both sides. It spreads throughout the paravertebral cellular zone, infiltrating the splanchnic nerves and the solar plexus. It is far from a blind method, as the needle is introduced into a well-determined region, and they regard it as one of the best, if not the best, method of anesthesia for operations in the upper abdomen. The only danger, they say, is from the renal vein, and they explain how to avoid contact with this vein.

Rodi, G. BLOCKING THE SPLANCHNICS. [*Arch. ital. di chir.*, IV, 1921, 32.]

Cadaver experiments with nondiffusible injections lead the author to the conclusion that the needle, which should be 12 cm. long and enter from 8 to 10 cm., according to the development of the subject, must be entered 7 cm. laterally from the line of the spinous processes—and not, as hitherto advised by Kappis, “at the lower margin of the last rib,” which is a variable point, but opposite the space between the spines of the twelfth dorsal and first lumbar vertebra. The inclination to the sagittal plane is about 45°. This injection, which should be from 40 to 50 c.c., will the better reach the semilunar ganglia and splanchnic trunks and coeliac plexus, the nearer the point of the needle approximates to the mid-line. It must be practiced on both sides to be efficient. When it is necessary to anesthetize the second and third lateral lumbar ganglia a further similar injection on each side should be made at the level of the first and second lumbar interspinous space.