ABSTRACTS

Editorial Comment: A fixed style of presentation for this department of ANESTHESIOLOGY has purposely not been defined. It is the wish of the Editorial Board to provide our readers with the type of abstract they desire. Correspondence is invited offering suggestions in regard to the length of abstracts, character of them, and source of them. The Board will appreciate the cooperation of the membership of the Society in submitting abstracts of outstanding articles to be considered for publication.


This investigation evaluated the results of intercostal nerve injection in 50 patients, with reference to the reduction of postoperative discomfort and pulmonary complications. The analgesia produced by local anesthetics in a water base is probably of too short duration, while those preparations in oil and benzyl alcohol may result in the development of neuritis. Consequently, a mixture of 1:1000 nupercaine in peanut oil was prepared and used.

Thirty cases served as controls and 50 cases of various upper abdominal procedures were selected at random. No selection was made on the basis of age, habitus, physical condition, etc. The first 40 cases were blocked in the midaxillary line; the last 10 blocks were performed posteriorly, 4 fingers from the spinous processes. 3.00 cm. of the mixture were injected in each interspace in the majority of cases, blocking T6 through T11. Bilateral injections were done only in the case of midline incisions or those transverse incisions crossing the midline.

Vital capacity was determined using the McKesson-Scott spirometer. Narcotic requirements were determined by the number of doses of an opiate or other narcotic, given according to the judgment of the nursing staff. The cases counted as pulmonary complications were those in which the course of the patient's recovery was impeded by changes in the respiratory system.

The results of the survey, when compared with the control series, showed: (a) marked reduction in narcotic requirements, which was shown to be statistically significant; (b) a statistically significant improvement of the expected postoperative drop in vital capacity; (c) reduction in pulmonary complications from 13 per cent to 6 per cent, which was felt to be clinically significant. The drug used had beneficial effects for forty-eight hours or longer and had no undesirable early or late sequelae.

Two cases of pneumothorax occurred as a result of errors in technic. No cases of sterile abscess, infection, pleuritic pain or pleural effusion were noted; there were no cases of wound evisceration connected with the decrease of abdominal wall sensitivity.

18 references.

C. C. L.


Stainless steel wire was introduced into surgery in 1932 by Babeock. It
is the purpose of this paper to show the use of steel wire sutures in hernia repair. A hernia repair can succeed only if the structures remain united until healing is complete—here suture material plays an important part.

In seven to fourteen days there is a distinct tissue reaction to catgut, whether plain or chromic. Necrosis of tissue occurs with silk in 50 per cent of the cases. Cotton has less tissue reaction than silk, but its tensile strength varies. Wire has great tensile strength and in 90 per cent has no reaction around it.

Cases reported by the author (376) were done under local infiltration and block anesthesia (1 per cent procaine) except the recurrent ones, these being done under spinal anesthesia. The Babcock technic of surgery was employed in the majority of the cases, No. 36 steel wire being the suture material used. Recurrences in cases that could be followed numbered 4.

With the use of the steel wire technic the patient was encouraged to get out of bed upon his return from the operating room. With the use of wire the danger of early ambulation is over. Eighty-five per cent of the cases in this series were up on the first day. This early ambulation materially reduces the bladder, chest and thrombosis complications. No references.

C. A. H.


"The occurrence of disordered motor states of the intestine as a puzzling, incapacitating, and occasionally fatal syndrome has long been recognized. . . . Enough well authenticated and directly observed material is available to ensure the importance of deranged intestinal motor function as a surgical syndrome.

"The use of a sympathetic block to alter bowel motility and transport was first suggested by Wagner in 1919. Eight cases of abdominal distention responded well to splanchnic anesthesia with procaine. Since then splanchnic or spinal anesthesia has been used many times in intestinal distention of varying sorts and with varying success. . . . Morphine and atropine, presumably by a direct effect on the bowel, can prevent the increase in intestinal motility induced by spinal anesthesia. The importance of withholding medication when attempting to use spinal anesthesia to increase bowel motility and transport cannot be over-emphasized.

"The technic of administering a differential spinal block consists of the subarachnoid administration of a large volume of a dilute solution of procaine hydrochloride (0.2 per cent). This is delivered from an elevated leveling bulb through a calibrated dripper to an inlying needle in the third lumbar interspace. The optimal initial dose is 16 cc. administered in about four minutes. The drip is then continued at the rate of 16 drops per minute until the desired block is accomplished. The drip is subsequently set at that rate which will maintain the block until it is no longer required.

"The use of this technic has made it possible to produce a sympathetic block and a block of the fibers concerned with pinprick sensation without grossly affecting touch, position sense, vibratory sense, or motor power.

"Following the block of visceromotor fibers to the intestinal tract by a differential spinal block, definite evidence of increased propulsive and coordinated bowel activity was obtained in 3 out of 6 patients.

"Visceral afferent fibers (subserving