

can occur as a result of phrenic nerve block if excessive infiltration of the region, or incorrect technic is practiced. We have, however, on four occasions, produced bilateral brachial plexus block without any untoward effects. . . . On one patient there resulted a mild contraction and paresthesia of the lower extremity together with a moderate lipotemia. We conjectured that the needle may have entered the spinal canal through an intervertebral foramen. . . .

"Of the neural complications that follow brachial plexus block especially interesting are the meralgias with paresthesias. . . . In five of our own cases the complications abated in 20 days. . . . A thesis previously cited, incorporates the results of a study of the effects of brachial plexus block on the chronaxie. We have never been able to observe any alteration. . . . Puncture of the common carotid, subclavian, vertebral, and inferior thyroid arteries can, and, in fact, does occur. It has very frequently happened in our own experience. Simple withdrawal of the needle alone is necessary, when it does occur. . . . Intra-arterial injection of the anesthetic produces only a transient state of anesthesia. On the other hand, intravenous injection is dangerous, for the anesthetic is carried to the heart. Moreover, part of the drug may reach the medulla oblongata and produce cardiorespiratory difficulties. Intravenous injection is eight to ten times more toxic than intra-arterial injection, according to Pauchet, even though only one-sixth of the drug ever reaches the cerebrum. We know of no case of death reported as resulting from this mechanism. In the absence of other explanations we believe that perhaps the single case of death in our own series resulted from intravenous injection of the anesthetic. . . . We consider the infraclavicular tech-

nic of Balog or that of Anglada, Santoni, and above all, the axillary technic of Hirschel to be very dangerous. . . . Our reasons for this statement are that the artery and vein are in proximity in the infraclavicular region, and that the nerves of the plexus form a network around the vein at the level of the axilla; thus the veins are more easily exposed to accidental puncture. All of the cases of death and accident, including our own, can be imputed to errors in technic which are easily averted."

J. C. M. C.

ECKENHOFF, J. E.; SCHMIDT, C. F.; DRIPPS, R. B., AND KETY, S. S.: *A Status Report on Analeptics*. J. A. M. A. 139: 780-785 (Mar. 19) 1949.

"In the light of the available published data the apparent mechanism of action of analeptics is a physiologic antagonism to depressant drugs, but in view of the needed investigation on the problem this can be no more than a tentative conclusion. Pierotoxin and metrazol (pentamethylenetetrazol) are the most valuable analeptics obtainable today, with pierotoxin being the most potent, judging from laboratory research. Pierotoxin is also more dangerous to use and should only be used in deep depressions and then by someone well versed in its actions. Before the true part played by these drugs in the treatment of depressions can be fully evaluated, more complete and detailed clinical summaries must be made and compiled. The use of analeptics in the treatment of depressions should be only a part of a carefully integrated schedule of treatment including oxygen therapy, pressor drugs, fluid and pulmonary ventilation if necessary, as well as more than one analeptic if indicated."

J. C. M. C.