ester of 4-amino-l-naphthoic acid. . . . At the Baltimore Eye, Ear, and Throat Hospital we have made a clinical study of naphthocaine as a local anesthetic in ophthalmology [53 cases]. . . . The striking features of local anesthesia with naphthocaine are its immediate anesthetic effect after injection, the excellent akinesia, the real anesthesia during the operation, and the long duration of the anesthesia. . . . Although naphthocaine works best when injected it has a good anesthetic effect upon instillation. . . . In the cases reported no patient developed toxic symptoms, nor any appreciable change in pulse, respiration, or blood pressure. The Nose and Throat Department has used 30.0 cc. of naphthocaine for injection many times and there has been no reaction to the drug. From this small experience with naphthocaine it would seem to be the best drug for obtaining local anesthesia in ophthalmology." 5 references.

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Peterson, O. L.; Finland, Maxwell; Barnes, Mildred W., and Wilcox, Clare: Sulfonamide Inhibiting Action of Procaine. Am. J. M. Sc. 207: 166-175 (Feb.) 1944.

"The original method of Marshall and its later modifications for determining sulfanilamide depend on diazotization and the coupling of the resulting diazo compound to produce an azo dye which can be easily estimated by colorimetric comparison. The reaction depends on the presence of an amino group substituted in the benzene ring and can, therefore, be used for the estimation of any derivative of sulfanilamide or for any related aromatic compound in which the amino group is free or can be freed by hydrolysis. Recognition of this fact has served to explain inconsistencies in the determination of sulfonamide drugs in body fluids. Procaine ('novocaine'), which is the local anesthetic most commonly employed in obtaining such body fluids, is β-diethylaminomethyl-p-amino-benzoate and thus has a free aryl amine which may enter this reaction. The procaine may contaminate the test fluid either from its presence in the needle and syringe or by admixture with the fluid withdrawn after procaine infiltration. Failure to recognize this possibility is probably responsible for gross misinterpretations and erroneous results. Other local anesthetics not derived from p-aminobenzoic acid do not have this interfering effect. . . . Whenever possible, patients undergoing operations under local anesthesia with procaine were used in these studies. . . . Briefly, 0.5 cc. amounts of fresh defibrinated blood were placed in pyrex tubes; serial decimal dilutions of a fully grown culture were added in 0.1 cc. amounts and other ingredients were also added in a volume of 0.1 cc. The tubes were then sealed in a gas-oxygen flame and rotated slowly in an incubator at 37.5 C. The tubes were observed for growth as indicated by color change at 24 and 48 hours and by cultures of the blood in the tubes which failed to show a color change. When human serum was used, sterile glucose was added to a final dilution of 0.1 per cent and growth was observed grossly or bacterial counts were done by making blood agar pour plates with dilutions of the resulting growth at the end of appropriate periods of incubation. Chemical determinations of sulfonamide levels were made by the method of Bratton and Marshall using a photoelectric colorimeter. The same method was used for the determination of procaine. When the blood contained both these chemicals, the total color change was read only with reference to the sulfonamide. . . . "Procaine, in amounts ordinarily employed for local anesthesia, may be absorbed into the circulation in suf-
cient concentration to exert a definite inhibiting effect on the action of sulfonyamide drugs that may be present in the blood. Infection introduced into an area which has been infiltrated with procaine may become established locally in spite of the continuous presence in the body of bacteriostatic concentrations of sulfonamide drugs. It is desirable to use local anesthetic drugs other than p-aminobenzoic acid derivatives for infiltration when performing exploratory punctures of potentially infected areas. Procaine, or similar anesthetics of the p-aminobenzoic acid series should also be avoided in extensive operative procedures on patients having severe infections, in which rapid and effective action of sulfonamide drugs is essential.” 23 references.

J. C. M. C.

THOMAS, G. J.: Pentothal Sodium—

“The intravenous method of administering an anesthetic agent has a strong appeal to the experienced anesthetist, the surgeon and the patient. This method has, further, the advantage of causing a patient to traverse from the first to the middle of the surgical stage of anesthesia within a period of one to three minutes... Pentothal sodium has a wide range of usefulness in surgery and medicine. ... Pentothal sodium may be administered rectally or intravenously. ... The intravenous method is the most practical. ... With pentothal anesthesia complications are rare. However, some occur and should be handled without serious results. The most common is respiratory depression. ... We found that oxygen administered through a mask or a catheter is frequently sufficient to stimulate the respiration, although we occasionally find it necessary to administer nitrous oxide and oxygen, in the meantime reducing the amount of pentothal. This technic has become quite popular with our staff. Other complications are coughing, laryngospasm, and hicups, which may occur either in deep or light anesthesia. These may cause alarming cyanosis and perhaps cardiac embarrassment, if persistent. Such complications are undoubtedly due to parasympathetic hyperactivity. Prophylactically, we find that the administration of atropine in proper amounts will readily control these complications. However, should they occur under anesthesia, we aspirate the mucus or other material in the pharynx, deepen the anesthesia and immediately administer nitrous oxide-oxygen under pressure. Trismus (a tetanic spasm of the jaw muscles) is another complication. This is undoubtedly a result of parasympathetic hyperactivity that can be controlled with atropine preoperatively. Should this occur during anesthesia, a nasopharyngeal tube should be inserted immediately and oxygen administered under pressure. Delay in this procedure may be serious. Sneezing usually occurs in eye surgery. This must be treated preoperatively. We instill two drops of 4 per cent cocaine in each eye thirty minutes before the operation, again ten minutes before operation, and again immediately before starting the anesthetic.

“Urticarial rash has appeared on three occasions in our series of cases. It occurred during the induction of the anesthetic and is an interpretation of the idiosyncrasy of the patient to that drug. ... Should the condition occur during anesthesia, discontinue the pentothal and immediately administer four to six minims of neosynephrin intramuscularly. ... Pentothal sodium should not be employed or recommended when there is a marked physiologic or mechanical interference with