given before the Medical Society told that oxygenized chloroform held no advantage over the administering of the chloroform on a mask. . . . The following year, Dr. Kate Lobinger told of the use of chloroform in labor. She devoted a great part of her paper to extolling the virtues of Sir James Simpson. In 1898 came the first local paper on ‘Infiltration Anesthesia,’ written by Dr. W. E. Harwood . . . . In 1897 Dr. Saling Simon read before the Colorado State Medical Society, a paper on ‘The Relationship of the Operation to the Anesthetist.’ This appeared in the ‘Medical Record.’”

J. C. M. C.

SULKIN, S. E., AND ZARAFONETIS, CHRISTINE: Influence of Anaesthesia on Experimental Neutropic Virus Infections. II. In Vitro Studies with the Viruses of Western and Eastern Equine Encephalomyelitis, St. Louis Encephalitis, Poliomyelitis (Lansing), and Rabies. J. Exper. Med. 85: 559–569 (June 1) 1947.

“The experimental neutropic virus infections previously shown to be altered by ether anesthesia are caused by viruses destroyed in vitro by anesthetic ether; this group includes the viruses of Eastern equine encephalomyelitis, Western equine encephalomyelitis, and St. Louis encephalitis. Experimental neutropic virus infections which were not altered by ether anesthesia were caused by viruses which are refractory to the in vitro virucidal activity of even large amounts of anesthetic ether; this group includes the viruses of poliomyelitis (Lansing) and rabies. Quantitative studies of the in vitro virucidal activity of ether indicate that concentrations of this anesthetic within the range found in central nervous system tissues of anesthetized animals possess no virucidal activity. The lowest concentration of ether possessing significant virucidal capacity is more than 15 times the maximum concentration of the anesthetic tolerated by the experimental animal.

“Concentrations of ether 50 to 100 times the maximum amount tolerated by the anesthetized animal are capable of destroying large amounts of susceptible viruses, the average lethal dose (LD₅₀) being reduced more than 5 log units. On the basis of the studies presented in this report, it cannot be concluded that direct virucidal activity of ether is not the underlying mechanism of the inhibition by anesthesia of certain experimental neuroporic virus infections. Indirect inhibition of the virus by the anesthetic through an alteration in the metabolism of either the host cell or the host animal as a whole appears at this point to be a more likely possibility.” 23 references.

J. C. M. C.


“Messrs. May and Baker, Ltd., manufacturers of cyclonal sodium, have added to the advances in anaesthetics by marketing intraval sodium, also known as thiopentone soluble. Intraval sodium is a mixture of 100 parts by weight of sodium ethyl 1-butyl thiobarbiturate and 6 parts by weight of exsiccated sodium carbonate. . . . Intraval sodium is a potent anaesthetic producing narcosis of the same depth as pentothal sodium, and from practical experience it would appear to be less irritating to the tissues and somewhat shorter acting in the single-dose technic. No doubt the alkalinity of the solution accounts for this, and it is likely that intraval sodium will be less apt to thrombose a vein and to produce a chemical lymphangitis or ulceration of the surrounding tissues. The author has used intraval sodium
now in about four dozen cases with 100 per cent success to the surgeon, the patient and himself.

"The author can... with confidence, recommend the use of this excellent British product to those experienced in the administration of intravenous anaesthetics and can assure them 100 per cent satisfaction. His impressions are that intraval sodium is as potent as any other intravenous barbiturate anaesthetic, that it is less likely to set up laryngeal spasm, and that it is less irritating to the tissues."

J. C. M. C.


"It is with the presentation of our experiences with the combination 'Pentothal, Nitrous oxide and Curare' in our first hundred cases that this paper deals...

In our review of past anaesthetic records we find that anaesthesia with the combination, pentothal and nitrous oxide has been used in a variety of cases.

Many of these anaesthetics were supplemented with cyclopropane and a few with ether. They provide a background for comparison with the new technic of pentothal, nitrous oxide and curare.

'Pentothal, Nitrous Oxide and Curare' has been used with and without pre-operative sedation.

After premedication the patient is brought to the operating theater, placed upon the table and an intravenous drip of normal saline is started.

The curare solutions employed have been either Intocostrin (Squibb), d-tubocurarine chloride (Squibb) or 4-tubocurarine (Abbott).

The pentothal used has been 5 per cent in all cases. In our summary of cases two main classes stand out, namely those cases which require early intubation to provide optimal working conditions such as the maxillo-facial and chest groups and, secondly, those cases where intubation is a nonessential. In the first class we have devised a technic using preanaesthetic curare in order to provide maximum muscular relaxation at the time of intubation. To obtain this, particular attention is paid to the timing of the administrations...

"The observed effects of curare begin from one to two minutes after administration and reach a maximum at about six minutes. Pentothal is therefore started at the end of four minutes (by the clock) and continued in small doses (1/2 to 1 cc.) p.r.n. When consciousness is lost the pharynx is sprayed under direct vision and by the time the curare effect is maximal the anaesthetic dose of pentothal has been reached (average 8 to 12 cc.) and the patient is intubated. This usually is done at the end of six or seven minutes.

Following intubation the pharynx is packed and the endotracheal catheter connected to the anaesthetic machine. The concentration of N₂O and O₂ used varied from 50-50 to an 80-20 mixture. This is run at a rapid rate with the blow-off valve of the machine open in order to insure an even maintenance. In the second class of cases, where tracheal intubation is a nonessential, the intravenous drip was started as above and anaesthesia induced with pentothal followed by maintenance with pentothal and nitrous oxide and oxygen. In most cases curare is given immediately following the induction...

"The disadvantages of the combined technic and the factors which limit its application are found in the patient, in the type of operation and the properties of the drugs employed...

We feel that upper abdominal cases are better handled with other technics than with pentothal, nitrous and curare." 4 references.

J. C. M. C.