

President's Address — Second Annual Meeting of the Canadian Society of Anesthetists*

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IN THIS, the occasion of the Second Annual Meeting of the Canadian Society of Anesthetists, I have the inestimable pleasure of addressing you, in this, our city of Winnipeg. I trust, although the natural beauty of situation cannot compare with some of the cities of the East and extreme West, that you will find something of attraction and, to some of you at least, the level country, with its long vistas extending to the distant horizon may not be found wholly without that charm and appeal which it undoubtedly possesses for many who enjoy the far-flung open spaces. Here, at the junction of the Red and Assiniboine rivers, the former with its slow, winding stream meandering between green, well-timbered banks, with the old Hudson Bay fort and trading-post as a nucleus, our city has gradually come into being and stands as the gateway to the western prairies.

Need of a Journal on Anesthesia

I TRUST your stay here, both from the point of view of profit derived from the papers presented, and from the perhaps equally pleasurable entertainment provided, will cause a kindly remembrance to remain of your, only too short, visit.

When the matter of accepting the nomination for the Presidency of the Canadian Society of Anesthetists was first broached to me, I accepted with considerable trepidation as, although we have here a good-sized hospital and medical school of which we are proud, still we are isolated from the large medical centers to the East and South

by many hundreds of miles, and, therefore, do not come in close contact with those working in the same specialty as frequently as we would desire. We must of necessity be satisfied with an occasional visit to other centers and with what may be gleaned from the current literature; and here I would like to ask the question, whether the time has not arrived when, instead of the anesthetists of this continent being represented by publications contained in a portion of a journal, issued every three months, a monthly, or possibly at first a less frequently issued journal, of our own should not represent us, and provide space for the papers it is found desirable to publish.

At present, as you are all aware, certain space is provided for us in the American Journal of Surgery,

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which portion is ably edited by our friend and colleague, Dr. McMechan. He it is, who, of our fraternity, best knows the difficulties and cost entailed in the publication of a magazine. We also have the N. A. R. S. Bulletin, published by the Society of that name, which is doing a most useful work. Before the sessions of this meeting are completed I should like, however, to see a Committee formed, with Dr. McMechan as chairman, who would go thoroughly into the question of the ability of the anesthetists of this continent to support a journal of our own, and the feasibility of starting the same at an early date.

There are several forms the Journal might take, — a publication at stated intervals, or at irregular intervals, as material came to hand; though I am of opinion that a plentiful supply of material would soon be furnished. A high class journal would to a certainty be offered papers which are now often published elsewhere, in addition to receiving those published in the present Journal. I use the words "high-class journal" advisedly, as I think it should be such, not only in quality of material but also in appearance, typography and illustration. Such a journal would attract much good material from European centers as well as those of the United States, Canada and other English-speaking colonies.*

* It is hoped that *Current Researches in Anesthesia and Analgesia* will measure up to the requirements Dr. Webster outlines for a Journal to represent the specialty. — Editor.

The Era of New Ethers

AT OUR last meeting, held in Niagara, Dr. H. E. G. Boyle, of St. Bartholomew's Hospital, brought us the news of a new ether perfected by Wallis and Hewer of that Hospital. After laboratory tests on animals had proved its efficiency, it was used on the human subject, and later put on the market under the name of *Ethanesal*. Its composition, as you are no doubt all aware, consists of an absolutely pure ether, with an admixture of 2 per cent of the middle ketones and a little carbon dioxide.

In its use, extending over some seven hundred cases, in which the age of the patient has varied from three weeks to eighty-one years, and the duration of the anesthesia from fifteen minutes to two hours, I have found it far more satisfactory than any other ether. The vinous odor is rather pleasant, appears to be much more agreeable to the patient, and is more readily taken; the induction period is shortened, the quantity used is about two-thirds that of the best standard ethers; the after-taste is less disagreeable and post-operative nausea and vomiting are lessened. The breathing is much quieter than that of ether, often approximating that of chloroform or the C. E. mixture. There is consequently less abdominal movement, a disordered state in all abdominal operations. In extra-abdominal operations, after the patient has been under some time, the anesthesia may often be permitted to be so slight that the patient will blink his eyelids, but remains motionless and apparently without pain. Frequently one may permit the lid and corneal reflexes to be

quite active when the operation is commenced, even in laparotomies, provided a deeper stage is reached by the time the peritoneum is incised. The muscular relaxation is much greater than with other ethers, more nearly approximating that of chloroform.

A little practice is required to obtain familiarity with this anesthetic, the tendency at first being to keep the patient more deeply anesthetized than is necessary. If not too deeply anesthetized, patients usually awaken more promptly than after other ethers.

Wallis and Hewer, by their work, have given us more than just a better ether for anesthesia. For the first time we possess an ether of which we know the exact constituents, and their proportion. In the past manufacturers of established reputation have provided us with specimens of ether and have vouched for their purity from all harmful products. Those in common use have no doubt been purified to a considerable degree, but some specimens, as shown by experimental chemists, have contained harmful constituents, such as thioethers and mercaptans. Until recently when The Dupont Company introduced Cotton Process Ether, and Savory and Moore the Ethanesal of Wallis and Hewer, no manufacturers have had the enterprise to market an ether of which the exact constituents and their percentages were stated on an accompanying leaflet. To use an ether of which we know the exact composition is a great advance on the old method of using an indefinite solution, which the label only stated was pure and fulfilled the requirements of the British or U. S. Phar-

macopæia; but which never even pretended to state the exact quantity of each chemical constituent present.

We owe a debt of gratitude to those whose research has provided another advance in the scientific aspect of anesthesia. In addition their pioneering attracted the attention of chemists to the subject and we may, I think, confidently expect it to stimulate others in attempting the further potentiation and purification of those anesthetic drugs now commonly in use.

And so we find no finality in our work. From prehistoric times use has been made of narcotic substances for the relief of pain, though the practice of true anesthesia belongs to comparatively recent times. When we look back on the improvement that has been accomplished in the last seven decades, and consider that possibly the advance of the next seven may be as great,—for the constant discovery of new facts, which linked up with those already known, continuously adds to our knowledge,—provides our specialty with an inexpressible attraction. Wherever we look, or whatever we achieve, we are always confronted with new problems and new advances. There seems to be no finality; nor is that to be desired, for if we ceased to advance it is probable retrogression would occur. Standstill in this, as in most things, is impossible.

Further Desirable Improvement in Nitrous Oxid-Oxygen-Ether Apparatus

THE PRINCIPAL improvement in apparatus of late seems to be more in the direction of perfecting the machine for the administration of nitrous

oxid-oxygen alone or with ether, and this has now reached a stage much in advance of the apparatus of even ten years ago. There are still minor details capable, or at least desirable, of improvement. The apparatus is cumbersome at the best. Is it possible that in time a method of further compressing gases may be discovered, thus lessening the size of tanks required, and that the other parts of the apparatus may be reduced in size and weight while retaining all their present efficiency? Possibly in a few more decades we, or those who follow us, will look back in wonder at the cumbersome machines now in use. New inhalers for the administration of ether are also not infrequently put forth as great improvements on the old. Some of these, particularly those in which a definite quantity or percentage of vapor can be delivered, are of undoubted utility, especially in the hands of skilled anesthetists. For the tyro the simpler methods are best, as a complicated apparatus takes too much of his attention and interferes with that close supervision so necessary to the patient's welfare and safety.

In fact the Specialty of Anesthesia is at present in no danger of becoming crystallized. The danger rather lies in the opposite direction. New methods are too apt to be hastily declared improvements on the old, and while no one will decry any attempt at improvement and advancement, and the science is continually improving, still, new methods and apparatus should be well tried out before their enthusiastic advocates claim too much for them. Frequently one sees much lauded apparatus put on the market which

is no better, sometimes not so good, as that already in use.

The Problem of Lay Anesthetists

DURING the past few years considerable controversy has arisen regarding the use of nurses, or others with no medical qualifications, for the administration of anesthetics. During the war the dearth of medical men was so great in England and Canada that nurses were perforce, of necessity, employed in this work. In most cases this was looked upon as a temporary expedient, necessitated by circumstances which we hope will never occur again. With the disbanding of armies, the medical man was again enabled to take up this work and there is now no scarcity of qualified men to fill all the available positions for anesthetic service.

Nurses undoubtedly should have instruction in the *nursing aspects of anesthesia*, such as the pre-operative and post-operative care of the patient, and it is perhaps advisable that in some of the unorganized portions of this Western country, where a medical man seldom visits, and where, in the event of a difficult obstetrical case, or injury, or an emergency operation, he has no assistance but that of the District or Victorian Order Nurse, she should have some instruction in the administration of anesthetics, as she will be the only available person to whom the medical man can turn at this juncture for assistance. This, however, should obtain only where a qualified medical man or woman cannot be obtained.

It has lately been suggested in some places that legislation be ob-

Anesthesia and Analgesia — October, 1922

tained giving nurses the right to administer anesthetics; so far, fortunately, without results. However the legal aspect of the matter is by no means clearly defined, for —

"Apart from any criminal intent, a bonesetter, or a beauty doctor, or a quack of any kind is as much at liberty to administer an anesthetic to his patient for the purpose of an operation as a qualified medical anesthetist."

This striking passage occurs in a Parliamentary paper issued early in 1910. It is contained in the report of a Departmental Committee of which Sir McKenzie Dalzell Chalmers was chairman. *The Committee advised that it should be made a criminal offense for any person to administer an anesthetic, who had not professional qualifications, or is not acting under the supervision of one so qualified.* A resolution to this effect was formulated by the Medico-Legal Society of London, in 1908,¹ so far without result.

However, certain decisions bearing on this matter have been handed down of late by the Courts, and are of interest as showing the trend of thought on the subject by the Judges who gave these decisions.

In the case of employment of a non-medical anesthetist, however experienced, where no emergency for such existed, and a qualified man could have been obtained, the Supreme Court of Louisiana awarded the plaintiff \$10,000 damages² against the company by whom he was employed.

In a suit brought against a surgeon, for employment in a hospital

of a medical student with little experience in anesthesia, and when death resulted to the patient, it was decided that the administration had been conducted properly and under supervision, as two qualified physicians were present most of the time and had a general supervision of the case.³

It would appear, therefore, that a surgeon employing an unqualified person to administer an anesthetic, when one qualified was obtainable, lays himself open to an action for damages in the event of some untoward occurrence.

Legislation is also being sought at present, particularly in the United States, to define clearly the relative responsibility of the physician and surgeon, in the event of any accident happening from the anesthetic, during a surgical operation. *It would appear reasonable that, as the law now stands, a qualified anesthetist would be held solely responsible in such instance, provided he selected and administered the anesthetic according to his own judgment. Should the surgeon, however, insist on a certain anesthetic or method, contrary to the expressed opinion of the anesthetist, he would shoulder the responsibility, provided the anesthetist brought a due amount of skill and knowledge to bear during the administration.*

Again, when a patient desires a certain anesthetic, which in the anesthetist's opinion is not the most suitable, and, being used, a fatality should occur, it would not absolve the anesthetist from full responsibility in that he deferred to the patient's wishes; the anesthetist, be-

1. Trans. Medico-Legal Society, London, Vol. 5, 1908; also British Medical Journal, 1908, Vol. 1, p. 747.

2. Medical Record, February 28, 1914.

3. American Journal of Surgery (Anesthesia Supplement) January, 1918, p. 59.

ing the one who possesses the requisite knowledge to determine on the most suitable anesthetic, and method of administration.

It is to be regretted that at present the responsibility for the results of administration of an anesthetic is not clearly laid down and legislation to that effect, it is to be hoped, will not long be delayed. The anesthetist should hold a medical degree, be required to have the requisite knowledge of his art, and be held solely responsible for any fatality that may arise in its exercise.

At present each case is left to the interpretation of a judge and jury, whose findings, one sees by looking over a number of cases which have come into court, though often just, sometimes err through lack of accurate knowledge of a science with which they are unfamiliar. All this might be avoided if our legislators, as previously mentioned, would take the matter in hand and lay down a definite ruling as to the minimum training required of those to whom the public entrust their well-being and lives when they are required, for any purpose, to take an anesthetic.

160 MAYFAIR AVENUE.

Anesthesia in Children

(Concluded from page 54.)

5. Ethyl chlorid is applicable for very short operations and for induction, but dangerous except in skillful hands.

6. Ether is perhaps the safest anesthetic if the anesthetist is only moderately expert. The untoward effects of a first class ether anesthetic are almost negligible. I prefer a preceding hypo of atropin.

7. Nitrous oxid-oxygen is the safest anesthesia as to immediate and remote effects when administered by an expert. Nitrous oxid with a little oxygen is preferable for induction as a routine. It is indicated in all septic cases.

8. Age in children, is not a contraindication to the use of either ether, nitrous oxid-oxygen, or local anesthesia.

9. Since there is a much narrower margin between surgical anesthesia and the danger zone in children than in adults, it is advisable that a competent medical anesthetist, familiar with the physiopathology of anesthesia, administer the anesthetic.

1618 ADAMS STREET

THE FUNDAMENTAL requirements for a successful life are: — Unimpeachable integrity, which is the foundation. Loyalty to those with whom you are associated. A liberal education in the finer things of life, of art, of literature, as sources of imagination. The making of friends and laughing at misfortune. Learning to concentrate and not being afraid to make mistakes. The finding of yourself in your work. Giving the best that is in you and letting nothing stand in the way of your going on. — Charles Schwab.