[Changes in Anesthesia Practice Since 1962]
Dr. W.E. Spoerel, 1982.

From year to year, little seems to change in anesthesia. Yet if we overlook two decades, our ways to practice have changed quite markedly and anesthesia in the eighties is very different from the sixties when 19 anesthetists were able to provide all the anesthetic services in the London hospitals.

About 1962 anesthesia came of age. For accreditation, anesthetic privileges were established at Victoria Hospital (and likely about the same time at St. Joseph's Hospital), which gave the Chief of Anesthesia some authority over who should give anesthetics. With reluctance I had to accept, that a number of general practitioners, self trained or with minimal instruction could retain limited anesthetic privileges which consisted of the administration of open drop ether in children particularly for tonsillectomies. We had earlier persuaded the hospital to treat a tonsillectomy like all other surgical operations and abandon the practice of using a short form which contained history, physical, the preparation of the surgical procedure and two lines for premedication and the anesthetic agent together with the signature of the anesthetist.

Open drop ether anesthesia in children continued for another year. I believe present day anesthetists would likely respond like one of our senior residents whom I had persuaded to anesthetize a 6 year old for a tonsillectomy with open drop ether; at the end of that operation he looked very pale when he left the operating room and told me that he would quit my program if he had to do that again. Drop ether was messy and unpleasant for the patient and the anesthetist, who reeked of ether for many hours afterwards.

With the advent of Halothane in 1956, the use of diethyl ether and cyclopropane had declined to I the point of a very occasional use by the staff anesthetists. The hospital discovered in 1965 that, I the conductive flooring in the OR was not up to standard. With the high cost of a replacement Ron Aitken and I suggested that it would be much cheaper to discontinue flammable anesthetic agents. The increasing use of electrical equipment in the OR and especially electrocautry made flammable agents obsolete and unsafe.

With this "ban", the use of open drop ether disappeared. To my surprise, the only comment I received was an expression of appreciation from two of the general practitioners, who had not liked what they were doing but felt they had to continue a tradition. Diethyl ether, as a slow action agent with good analgesic properties, was in a way replaced by methoxyflurane- an agent which gained only limited popularity and did not smell good. It was useful in obstetrical analgesia and Dr. Rirf.1l:dson became a master in its use. Due to the discovery of that metabolism of this agent caused the release of free flurides that are toxic to the kidneys. Methoxyflurane use has now almost disappeared.

In 1961, the utilization of continuous epidural analgesic in obstetrics reached the 10% level.
About 50% of all mothers were delivered under general anesthesia. However, most of the staff members had by then experience with the epidural technique and together with Drs. Nielsen, Slates, Clancy, and Keenleyside, we had published our joint experience with 213 cases. This was the second Canadian paper on continuous epidural analgesia in obstetrics; Bromage from Montreal had published a paper in the CMAJ four months earlier. This technique became more and more popular and by 1965, over 50% of all deliveries were conducted with epidural analgesia. With the almost exclusive use of continuous epidural analgesia, the labour rooms were no longer filled with the familiar moans and cries, and the nurses and obstetricians had to learn to assess the uterine activity by careful palpation.

Xylocaine and carbocaine lasted only 1 -2 hours; after that more local anesthetic had to be injected into the epidural catheter to maintain a painfree state. Nurses and residents helped with this task. This teamwork was destroyed by the nursing administration who felt that 2nd injection amounted to the administration of an anesthetic which nurses were not allowed to do. While trying with the help of Dr. Kinch, the Professor of Obstetrics, to persuade to College of Physicians and Surgeons to change this ruling, we were exploring the use of timed injection devices as a replacement for manual injections. The hospital administration saw nothing wrong with this approach. In fact, the superintendent, Dr. Carmen Kirk, suggested to me that I show him my machines in an attempt to get financial support and that perhaps the nurse could push the manual button to initiate the injection. Fortunately, the machines were getting into action, the restriction was lifted and nurses could now help us with repeat injections.

I believe the most significant change over the past 20 years has been to routine use of anesthesia ventilators. Although there was nostalgia about the educated hand squeezing the breathing bag, this was a highly subjective sensation and the continued and effective pulmonary ventilation by respirators made a marked difference in long anesthetics. With this experience in the operating room, we became more comfortable with breathing machines and their use in patients postoperative care, particularly in the newly established intensive care unit.

A respiratory committee had been formed in October 1959 to use intermittent positive pressure for the management of patients in respiratory failure. The stimulus for this had been the death of a patient suffering from polio myelitis who did not fit into one of our tank respirators which were then managed by the Department of Medicine. The successful use of the newly acquired Bird respirators became an increasing problem for the recovery room, where seriously ill patients were kept by the surgeons in addition to those needing a respirator because of the constant care by good and experienced nurses. After a presentation with slides to the MAC to demonstrate the hopeless overcrowding, the hospital constructed a seven bed ICU out of two four rooms. This unit opened in Fall 1962 and was soon filled with patients on breathing machines. Together with our residents we learned much about respirator care, control of infection, the overuse of oxygen, and the management of tracheostomies.

We discovered that the then popular infusion of a vasopressor for the treatment of shock can induce by itself a shock syndrome. Together with Drs.Linton and Walker, I reviewed the 20 patients we have ventilated during the first five years. Respirator care had been accepted and the hospital redesigned the 6th floor of the Middlesex wing for the large intensive care unit presently in operation (16 beds plus 2 isolation rooms). With the use of respirators, the need for technical help became readily apparent. Harry Grauds, a trained watchmaker and husband of the excellent head nurse of the recovery room, started to repair and maintain respirators in 1962. Since our new ICU had no service space, Harry's workshop was housed in the elevator housing above the 8th floor. He was the first respiratory technologist in London and became in 1966 a registered Inhalation therapy technician (later renamed respiratory technologist).

More technical help was needed with the new ICU then coordinated by Dr. Jim Bain, and since very few technicians had been trained by that time, we decided to start our own training program. It was fortuitous that the new nursing director appreciated our problem and we managed to attract a Mrs. Taylor from the Windsor Hospital where she had been nursing director. Several bright graduates from Beal Technical School responded to my offer and we arranged that they would take part for two days each week in a training program organized by the HSC in Toronto. The first group of students was successful and provided badly needed manpower. Fortunately, Fanshawe College was interested in expanding their Medical Technology Division in 1968, and was willing to start a program in Respiratory Technology. The Chief Technician of the Royal Victoria Hospital in Montreal was hired to direct the program which started in 1969. It has been very successful since that time, giving London hospitals a constant supply of first rate respiratory technologists.

St. Joseph's Hospital opened a new wing including a suite of 14 ORs, recovery room and a 14 bed intensive care unit and Frank Walker was appointed coordinator.