both groups of mice. . . . The ease with which viral pneumonia is produced in animals under ether anesthesia is referred to the ready aspiration of the viral suspension by the unconscious animals rather than to an increased susceptibility of the respiratory mucosa produced by ether."


"When the body tissues fail to receive an adequate supply of oxygen during the process of the interchange of gases we call 'respiration,' a condition of anoxia ensues. This state may be induced by various conditions, chief among which are: low oxygen tension in the inspired atmosphere, a poisoning of the inspired air by some inert gas, by high altitudes, and by various physiologic disturbances arising from asthmatic or pneumonococcic infections. For the dental anesthetist, the problem of anoxia resolves itself into a desire to be on the alert to prevent displacement of the essential oxygen content of the blood and body tissues by other gases which may hinder the normal functioning of heart, brain, and kidneys. . . . It is because anoxia is always present when nitrous oxide is inhaled for complete anesthesia that I feel the need very urgent for the profession to make an honest and courageous reappraisal of its attitude toward this agent. . . . It has been my procedure for some time, to administer as high as 50 per cent of oxygen with my anesthetic gases. This I do on the theory that if it will help the heart and circulatory system to supply an excess of oxygen reserve, I am in no way jeopardizing the patient for whom the ordeal of undergoing an anesthetic experience may be a strain. . . . We owe a duty to society to heed the message of caution. To fail to amend our anesthesia procedures in the interest of safety is unwarranted. We have a challenge that merits logical debate. It is going to be difficult to change the attitude of the profession toward an agent about which a century-old tradition has been built. But it must be done."

J. C. M. C.


The anesthetic management of a patient with acute anterior poliomyelitis and respiratory paralysis who required cesarean section is described. The condition was further complicated by pyelonephritis and acute glomerulonephritis, the absence of cough reflex and prematurity. Passive movement caused severe pain.

The existing nephropathy was considered reason for avoiding ether, chloroform and, to lesser extent, the intravenous barbiturates. Postanesthetic nausea and emesis, which may be serious complications for a respiratory patient without cough reflex, were further reasons for not employing volatile agents. Anesthetics thus were limited to the gases, intravenous and regional methods. The latter seemed undesirable due to time factor, the necessity for artificial respiration and the pain on movement. Intravenous barbiturates were opposed as an additional burden of detoxification and elimination and possible adverse effect on the fetus.

Of the gases, cyclopropane was the optimum choice, due to its potency, admission high oxygen concentration, adaptability to controlled respiration, and negligible concentration in fetal circulation.