

mouth is held wide open results in partial obstruction of the larynx. Inadequate depression of the reflexes in the throat may result in partial adduction of the vocal cords, thus contributing a considerable degree of obstruction to breathing. Clotted blood or pharyngeal secretion in the air passages in the lungs may prevent either partly or completely the exchange of atmosphere in a lobe, a lobe or even a whole lung beyond the obstruction. Any of these accidents may be superimposed on what would otherwise be an insignificant depression of respiratory exchange due to the central action of sedative drugs or of general anesthetic agents. Granted that such partial respiratory obstruction did persist during this operation, the cells of the centers governing respiration would suffer from lack of oxygen and from acidosis caused by accumulated carbon dioxide. The physiologic mechanism for the maintenance of normal breathing is dependent on these two factors, the tension of oxygen and of carbon dioxide. The possibility of such disturbances resulting in serious harm or even in death is appreciated by the experienced anesthetist. In answering the specific questions as accurately as may be, . . . reference . . . [is] made to the book *Fundamentals of Anesthesia* published by the American Medical Association Press, 1942."

J. C. M. C.

BANCROFT, F. W.: *Thrombosis and Embolism*. *J. Omaha Mid-West Clin.* 4: 63-71 (Aug.) 1943.

"Alton Ochsner has advocated paravertebral sympathetic block of the first and second lumbar ganglia in the treatment of thrombosis and thrombophlebitis. The rationale for this procedure is that it relieves the venospasm and allows for compensatory venous circulation in the affected limb. He states that pain is relieved almost instantly

and that in a majority of cases the process rapidly subsides. My experience with this method has not proved as successful as that of Ochsner. I believe that it should be used as an adjunct of either proximal ligation or heparin treatment and not as a single type of therapy."

J. C. M. C.

BIRD, H. M., KILNER, S. D., AND MARTIN, D. J.: *Post-operative Respiratory Complications in Service Cases*. *Brit. M. J.* 1: 754-755 (June 19) 1943.

"Being struck by the high incidence of post-operative respiratory complications in Service cases as compared with those occurring in civilians, and noting that Kaye and Binning have described similar experiences, we decided to keep a record of a series of consecutive cases in an attempt to find some causative factor. A record was kept of the age, operation, premedication, type and amount of anaesthetic, duration of anaesthesia, any unusual incident during anaesthesia, and any post-operative complications in a series of consecutive cases undergoing surgical procedures at an E.M.S. hospital. The patients were all members of H.M. Forces, the great majority of them anaesthetic-resistant subjects in the 'pink' of physical condition. Many of them had that type of 'dust and tobacco pharyngitis' described by Kaye. The wards were remote from the operating theatre, necessitating a journey in the open air to and from the theatre. . . . The cases developing post-operative respiratory complications all followed a very similar course. The temperature rose on the second, third, or fourth day to a point between 100° and 102° F., with cough and purulent sputum. All had moist sounds in the chest, which were usually most noticeable at the base on the side operated on. The signs were those of a simple bronchitis, and only

three had signs of consolidation. . . . In this series there has been no death solely attributable to anaesthesia. . . .

"Out of 2,000 consecutive cases undergoing surgical procedures under anaesthesia, 101 had post-operative temperatures of over 100° F. with cough and sputum, and 46 developed post-operative cough with no rise in temperature. It soon became obvious that the type of operation and not the anaesthetic employed was the essential factor. . . . The site of operation is the most important factor. Any operation involving the abdominal wall is more likely to be followed by a cough than one in any other part of the body. The type of anaesthetic used has little bearing on the incidence of these complications. Intubation, per se, is not a factor. The incidence is higher in Service cases than in civilians. There is an increased seasonal incidence in February, June, and July. Diminished ventilation of the lung is a factor of importance. This is probably the result of pain on breathing. When the pain is past and the patient is able to ventilate his lung freely the complications subside rapidly. The more serious chest complications can be minimized by starting active movements as early as possible." 3 references.

J. C. M. C.

BURT, E. F.: *Pathologic Lesions of Asphyxia Neonatorum*. Pennsylvania M. J. 46: 1053-1055 (July) 1943.

"In the last 271 autopsies, I noted the lesions that seemed to be characteristic of asphyxia. If there were any other pathologic causes of death, I

eliminated them from the series. There were 55 cases in this series that showed the pathologic lesions caused by asphyxia, or 20 per cent of the cases, with no other cause of death. Many of the other autopsies in which there was a definite cause of death, other than asphyxia, also showed lesions of asphyxia. Curiously, the lesions did not follow a set pattern. The presence of one lesion did not preclude the finding of another. . . . The most constant finding was excessive fluid in the subarachnoid space, with the vessels of the pia raised above the brain surface. This has been referred to as cerebral edema; 41 of the 55 cases showed this condition. Accompanying this condition, the vessels of the pia mater were enormously engorged. Eighty per cent of the 41 cases showed other evidence of asphyxia either grossly or microscopically. Cerebral edema seemed to be a common lesion in the premature, for the majority of these cases came under that heading. This may be because the premature has fewer muscle and elastic fibers in the vessels making up the brain blood supply; in fact, in small babies, many of these are no more than endothelial shells. . . . The use of various analgesics and inhalation agents, by suppression of the respiratory center, probably contributed to the production of asphyxia. Seven mothers received ether during cesarean section. Seven mothers received whiffs of ether during the last stages of labor. Six mothers received morphine during labor. Forty-one mothers did not receive any analgesic or anesthetic." 9 references.

J. C. M. C.