

SMITH, J. M.: *Post-operative Vomiting in Relation to Anaesthetic Time.* Brit. M. J. 2: 217 (Aug. 18) 1945.

"General anaesthesia is a temporary pathological state, but with the improvements in methods of administration of the last few decades there is a tendency for light general anaesthesia to be regarded as harmless. On the whole it may be true that no lasting harm accrues from prolonged anaesthesia, but it would appear, from observations made over a period of 18 months [in a series of 1,000 cases] on the incidence of post-operative vomiting, that the duration of anaesthesia is a definite factor in the amount of constitutional upset and post-operative discomfort in the patient. . . . The cases . . . were largely (90%) patients undergoing plastic surgical procedures, mostly in the head and neck regions and requiring endotracheal anaesthesia. . . . It might be argued that the increase in vomiting with increase in duration of anaesthesia is due to the production of slight degrees of anoxia by surgical shock. This may very well be true; but, generally speaking, plastic operative procedures rarely cause any demonstrable degree of shock unless associated with considerable haemorrhage. . . . Judged on the numbers [230 cases] available, the incidence of vomiting in children does not appear to be significantly altered by the duration of anaesthesia." 2 references.

J. C. M. C.

VALLE, ANIBAL ROBERTO: *Lung Abscess. An Analysis of 214 Cases.* Surg., Gynec. & Obst. 81: 278-286 (Sept.) 1945.

"Bronchoscopy. Most of our bronchoscopies are performed under avertin anesthesia administered rectally, 85 milligrams per kilogram of body weight. In poor risk patients or patients with severe heart conditions we

use local anesthesia, pontocaine 2 per cent. . . .

"Surgical treatment. . . .

"We use general anesthesia in all cases but at times use avertin as an induction anesthesia. We use either nitrous oxide or intravenous pentothal.

"We consider the following as possible preventives of lung abscess following surgery: (a) good care of teeth, gums and throat before a contemplated operation; (b) avoidance of the use of strong sedatives before and after operation because they decrease the cough reflex; (c) frequent aspiration of the trachea and bronchial tree by nasal catheter; (d) the encouraging of the patient to cough after operation; (e) early aspiration bronchoscopy in a postoperative atelectasis."

A. W. F.

HOWES, W. E., AND SHAPIRO, A. L.: *The Treatment of Advanced and Inoperable Cancer. A Resume of Current Trends Based on a Review of the Literature and Analysis of Personal Case Experiences.* Surgery 18: 207-228 (Aug.) 1945.

"*Pharmacologic Therapy.*—Foremost in importance among the medications given in advanced cancer are the analgesics. A cardinal principle to be followed in their administration is the postponement of narcotic utilization until the decreased potency of other drugs counterweighs the disadvantages of potential addiction. At the outset salicylates and barbiturates are generally adequate, later to be supplemented by codeine, which rarely causes serious habituation. Small doses of morphine, pantopon, or dilaudid may prove effective for long periods in the majority of cases. Whenever possible, relief of intractable regional pain by alcohol nerve block or neurosurgery is preferred to the deleterious effects of constant dependence on large doses of narcotics. On

the other hand, since the comfort of the patient is of paramount importance, opium derivatives or analogues and sedatives should not be withheld when other measures are no longer of avail. Recently demerol has been found to induce satisfactory pain relief, in some instances, without many of the well-known physiologic disadvantages of the opiates. For oropharyngeal lesions, local anesthetics, such as orthoform or cocaine, are helpful. Numerous medicaments have been sponsored as panaceas for the pain of advanced malignancies, the majority of which are the subjects of conflicting descriptions concerning their usefulness. Cobra venom falls into this class of substances which cannot be said to offer uniform palliation. Other preparations which have had considerable vogue but seemingly fail in the majority of cases are colloidal lead and gold solutions and Coley toxin. Recent trial of H 11 and heptaldehyde has been relatively fruitless."

A. W. F.

PRIMROSE, E. J. R., AND ANDERSON, A. B.: *Anaesthetic Convulsions*. Glasgow M. J. 144: 16-19 (July) 1945.

"The etiology of the so-called 'ether convulsions' has been the subject of much speculation since the first description of this condition in 1927. . . . In . . . two cases, practically all the factors which have been considered as predisposing to ether convulsions were present, namely: a young patient; a septic condition; high atmospheric temperature; pre-anaesthetic medication with atropine, and impurities in the ether. What part these impurities in the anaesthetic played in precipitating the convulsions cannot be determined with certainty, but we are inclined to attribute a major share to this factor in view of the rare occurrence of convulsions in the large number of operations performed in the

[Glasgow Royal] Infirmary where the other factors have been present. If this hypothesis be accepted, the results of the fractional distillation of the impure ether suggest that warming the ether with hot water was responsible for the convulsions in these two cases. Undoubtedly ether containers on Boyle machines should be cleaned out frequently." 2 references.

J. C. M. C.

MORTON, H. J. V.: *The Force of Expiration as a Sign in Anaesthesia (Abbreviated)*. Proc. Roy. Soc. Med. 38: 441-446 (June) 1945.

"One relatively neglected aspect of respiratory activity is the study of the changes which occur in the nature of expiration and particularly the force of expiration during anaesthesia. Inspiration is an active process depending, chiefly, on the activity of the intercostals and diaphragm. With each inspiratory movement the muscles of the anterior abdominal wall relax sufficiently to provide room for the displaced viscera as the diaphragm descends. 'Passive' expiration is effected by a combination of the 'elastic recoil' of the thoracic walls and actual muscular control. Increasingly 'active' expiration involves increasingly powerful contractions of the abdominal muscles. The force of expiration is clearly a very variable quantity. How may this force be measured and what is the significance of changes which occur in it during anaesthesia? . . . The maximum expiratory pressure which can be achieved by voluntary effort depends on vital capacity, physique, and physical fitness. Here one may deal with figures well in excess of 100 mm. Hg. Pressures of this high order, naturally, do not occur during anaesthesia, and it is more relevant to inquire what kind of pressure develops when opposition is offered to merely 'passive' expiration.