

to contain 1 grain in 50 minims—*i. e.*, 0.07 of a grain. On the 13th he injected 5 minims—*i. e.*, 0.1 of a grain. Each injection was followed by marked increase of power. An interval of seven days occurred, and during that time the patient remained in the same state as two days after the second injection. On the 30th, 6 minims—0.12 of a grain—were injected, and three days afterwards the patient had quite recovered. An interesting discussion was maintained regarding the strength of the solution and the asserted unusual magnitude of the dose. Mr. Barwell affirmed that the concentrated state of the solution was the condition which made the dose safe. It was pointed out, however, that the solution was not of the strength stated, as, from its mode of preparation, a proportion of the strychnia would be precipitated. The solution was accordingly referred to a committee consisting of Mr. Barwell, Dr. J. Burdon Sanderson, and Dr. John Harley.

This committee reported on the 22d April that the substance soluble in chloroform amounted in percentage rate to the quantity of strychnia stated to exist in the solution. A further investigation was thought to be required.—*Brit. Med. Journal*, April 30, and *Med. Times & Gaz.*, June 4, 1870.

31. *Phenic Acid in the Treatment of Smallpox.*—M. CHAUFFARD, of Cochon Hospital, has employed phenic or carbolic acid in the treatment of smallpox, and stated at a meeting of the Société Med. des Hôpitaux with excellent results. He administers it internally in the dose of one gramme daily in a draught of from 125 to 150 grammes, and applies lotions of it externally of the strength of 1 in 50 or 100 parts of water. Dr. C. resorts to this treatment on the very first appearance of the eruption, and asserts that the severe fever and attendant effects of suppuration abated and ceased rapidly. It was particularly efficacious also in the secondary fever of severe confluent variola. Drs. Douillard and Martinelli also extol the remedy warmly, and report cases in which it was eminently useful. Other practitioners do not report so favourably of it, but enough evidence has been adduced to claim a further trial for it.

32. *The Use of Hydrate of Chloral as a Remedy in Epilepsy.*—Dr. WEIDENER, of Jena, relates an interesting case of a lad, 19 years old, a gardener by occupation, who, since his sixteenth year, had been the subject of epileptic attacks. The fits, according to the patient's account, occurred at irregular intervals. Occasionally they would recur two days consecutively, in other cases not until after the lapse of several weeks. The countenance of the patient exhibited an expression of terror or affright. There was from time to time a rapid alternation in the temperature of the surface. Each epileptic paroxysm was ushered in by an *aura* of short duration, resembling a rush of cool air along the entire extent of the spine. Shortly after, the patient, with a loud shriek, was seized with epileptiform convulsions, which held him apparently breathless for some five to ten minutes. With almost every paroxysm the tongue was bitten; after the convulsions had subsided, there was observable a number of punctated ecchymoses over the eyebrows. During the intervals there would often be experienced, suddenly, convulsive movements of the muscles of the upper extremities and, also, often of the lower extremities. Physical excitement would often give rise to repeated convulsive distortions of the lips.

The father of the patient, it was ascertained, had suffered from epilepsy up to his twenty-seventh year; a brother, twenty-five years old, had been epileptic since his eighteenth year; and another brother, thirteen years old, since his ninth year.

A careful examination of the patient proved that nothing abnormal was to be detected in either of the organs of the chest, abdomen, or pelvis. The skull was symmetrical in shape, and of a smooth, even surface. Neither cicatrix, tumour, nor other mark of injury could be detected on any part of the body.

The fits, instead of remaining irregular in their occurrence, as at first, became, subsequently, somewhat periodical, recurring, every seventh day, always at the same hour—between three and four o'clock A. M. The patient then awoke with a sense of difficulty of respiration, great anxiety, with confusion of mind; after

uttering a loud scream or two, within the course of five or ten minutes, he was seized with a violent paroxysm of epileptic convulsions.

On Friday, November 12th, about one o'clock A. M., some two hours preceding the anticipated paroxysm, a dose (45 grm.) of the hydrate of chloral was taken by the patient. About fifteen minutes after taking it he fell asleep. Between three and four o'clock the respiration of the patient was regular—about fifteen respirations to the minute. He awoke at seven o'clock A. M., without headache, or any other of the ordinary symptoms of the epileptic attack. On each of the two succeeding Fridays (Nov. 19–26), and at the same hour, he took the same quantity of the chloral, and with the same result. No paroxysm had now occurred for a space of three weeks. From the 15th of November the patient had been placed under the use of bromide of potassium in large doses.

Dr. Weidener remarks, January, 1870, that on a close examination of the patient he could discover no remaining symptom of an epileptic character, he, therefore, believes himself justified in presenting the case as a fair example of the beneficial results that may be anticipated from the administration of hydrate of chloral a short time preceding the expected occurrence of the epileptic paroxysm.—*Deutsches Archiv f. Klinische Med.*, Feb. 1870. D. F. C.

## SURGICAL PATHOLOGY AND THERAPEUTICS, AND OPERATIVE SURGERY.

33. *Conditions which favour Secondary Hemorrhages after Surgical Operations.*—M. VERNEUIL exhibited to the Imperial Society of Surgery (Paris) a specimen derived from a patient who had died from secondary hemorrhage subsequent to ligature of the external carotid artery, which operation had been performed preparatory to excision of the lower jaw for osteosarcoma. At the autopsy all the viscera were found healthy except the liver. This organ had undergone an alteration which, after careful microscopic examination, M. V., with the concurrence of MM. Vulpian, Cornil, and Ranvier, designated as diffuse miliary hepatitis. The patient died from accidental hemorrhage; had he lived longer he would have died of disease of the liver. It may be asked what influence had this hepatic alteration on the production of the secondary hemorrhage. On comparing the result in this case with the results arrived at by Monneret in his researches on the diseases of the liver which show the important part which hepatic disease plays in the production of spontaneous hemorrhages, M. V. does not hesitate to ascribe the occurrence of secondary hemorrhage in his case to the hepatic disorder; and he calls anew the attention of the profession to this point of etiology, still so obscure, of consecutive hemorrhages which follow traumatic lesions or surgical operations.

M. Demarquay stated that he had often observed secondary hemorrhages in persons affected with disease of the liver. He had at this time a patient suffering from phlegmon of the parotid with cirrhosis of the liver, who had frequent attacks of epistaxis.—*L'Union Médicale*, March 24, 1870.

34. *Some Points in the Pathology of Tetanus.*—M. VERNEUIL, in commenting on a case of tetanus reported to the Surgical Society of Paris, called attention to the following points, which seem worthy of notice:—

1st. That the increase of general temperature in tetanus should not be ascribed to the general muscular spasms which have hitherto been considered as the sole cause of that phenomenon, but that it results solely from the excitation of the spinal cord.

2d. That the grave nature of tetanus depends less upon the number of muscles affected than upon the functional importance of those muscles. If the spasms affect only the laryngeal muscles the case must be considered as very serious; for there is then danger of asphyxia being caused, and therefore the