

ORIGINAL COMMUNICATIONS.

CASES OCCURRING IN THE MEDICAL PRACTICE OF THE SUSSEX COUNTY HOSPITAL DURING THE YEARS 1849, 1850, AND 1851; WITH REMARKS.

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THE following essay is compiled from three papers which I read before the Medico-Chirurgical Society, at Brighton, in the years 1850, 1851, and 1852. I was led to introduce these reports for discussion, as now I am to publish them from a conviction, first, that the results of hospital practice may be useful in their application to the exigencies as well as the statistics of a difficult and laborious profession; and, secondly, because I regard all institutions, supported by public charity, as having incurred a debt of usefulness to the whole community. The cases described occurred under my own care; and the nosological plan which I have adopted, is that of the Registrar General.

ATMOSPHERIC CONDITIONS IN 1849, 1850, AND 1851.

In 1849, the early part of January, and the latter part of March, were cold and dry, with sharp north-easterly winds, but the intervening period was unusually warm for the season, and the winds westerly. April, May, and June, were cold and wet, the mean temperature being below the average, with an excess of rain. The summer months, on the contrary, were warm and dry, without excessive heat, and with less rain than usual, the wind being from the east. The autumn set in very cold, but afterwards the season, till the end of the year, was, upon the whole, mild, and the weather damp and foggy, under a prevalence of wind varying from north-west to south-west.

In 1850, during the spring and summer, easterly and northerly winds generally prevailed, with dry weather. The autumnal and winter months, on the other hand, were characterised by frequent gales, and much rain. It may be predicated of the whole year, that it presented the phenomena of a mild, genial climate: for, excepting some sharp frosts, which did not last long, in January and March, the seasons were temperate, being remarkable neither for great heat nor cold, dryness nor moisture. The epidemic constitution of the year was not marked by any virulent outbreak of the usual maladies.

In 1851, the epidemic constitution was, upon the whole, favourable. The early part of the year, unusually warm and open, was followed by a somewhat ungenial spring. In the latter part of April, and the beginning of May, cold north-west winds, with chilling rains and sharp frosts in quick alternation, did much damage to vegetation, and destroyed nearly all the wall-fruit. Much rain fell during the months of June and July; and to this succeeded a long continuance of fine, warm, clear weather. Towards the end of autumn, the weather became very cold. November was remarkable for dry winds and sharp frosts: December, on the other hand, like the first month of the year, was singularly mild and open. The prevailing winds, till August, were westerly, with frequent heavy gales. During the fine weather which succeeded, they varied from north to north-east and north-west. The mean temperature of the two winter months, January and December, was 46°; that of the summer months was 61°.

EPIDEMIC DISEASES.

Looking at the vast extension of Brighton now going on, and the constantly increasing number of its inhabitants, amounting to 67,000, we must expect to approximate more nearly, every year, to the average rate of disease and mortality in other large towns. Of so growing a population, the most needy must be densely crowded, and not a small proportion of those in better circumstances

will be bestowed as to sanitary conditions. But, besides this, the free and constant intercourse with the metropolis and all parts of the country, and the cheapness and facility of travelling, bring us, besides a host of paupers, a continual influx of invalids, and convalescents from infectious maladies. Notwithstanding these extraneous sources of epidemic and contagious diseases, I believe that there has not, during the years embraced in this report, prevailed a greater amount than usual of these diseases, with the exception that thirteen cases of typhoid fever, some in its worst form, were admitted between June and December, 1851.

TYPHOID AND TYPHUS FEVER. In 1849, not a single case of typhus or typhoid fever came under my care; and, I believe, few, if any, under that of the other physicians. In 1850, two cases of typhoid fever were admitted: one a boy, eleven years of age; the other a young man, aged twenty-three. We could discover no eruption of a decided character in either case; but from the urgent abdominal symptoms—great tenderness and intolerance of pressure, severe diarrhoea, and yellow-ochrey stools—we inferred that Peyer's glands were affected; and, relying on Dr. Jenner's authority, we have denominated them cases of *typhoid*, not *typhus*, fever. In both cases there was delirium: but the boy exhibited the phenomenon of total loss of speech, without previous coma, on the sixteenth day after admission (being the twenty-fourth of the disease), his intellect remaining unimpaired. There was, however, very defective power of voluntary motion; he might have been said to be incompletely paralysed. When placed upright, his head rolled from side to side, or hung forward upon his chest. All his motions were impeded, and without precision. These symptoms gradually disappeared; and the boy made a good recovery.

Several cases were admitted under the head of gastric fever. They were not attended with symptoms of prostration, but were characterised by considerable disorder of the digestive organs, with fully developed fever. One case, towards the conclusion, became complicated with bronchitis; another was remarkable for a very frequent pulse, which persisted long after convalescence.

In 1851, fever of a typhoid type prevailed more extensively. According to the distinction now made between typhoid and typhus fever, I would say that five well-marked cases of typhoid fever came under my charge. Rose-coloured papulae appeared on the thorax and abdomen in three cases; red patches in one: and no eruption could be discovered in a fifth. Diarrhoea, with abdominal tenderness, especially in the right hypogastric region, occurred in four cases; costiveness, with abdominal tenderness, was present in one only. Profuse intestinal hæmorrhage happened in two cases, in one of which it was fatal. The admissions took place from the seventh to the eleventh day. One case terminated favourably on the eleventh day; another on the fourteenth; two on the twenty-first.

One poor boy, aged 16, died on the nineteenth day, from the effects of profuse hæmorrhage, which had begun on the fourteenth, at a time when the other symptoms promised a favourable issue. On examination of the body, thirty-two hours after death, decomposition had already commenced in the walls of the abdomen. The thoracic viscera were healthy; the liver showed no signs of disease; the spleen was softer, but not larger, than natural. The ileum, at its terminal portion, was extensively ulcerated. The ulcers were on the opposite side to the mesentery, of an elliptical form, the long diameter being parallel with the longitudinal axis of the intestine. Some were very long and very deep, the serous coat alone remaining intact. About the middle of the ileum there was a diverticulum about two and a half inches long, in which was a large and deep ulcer. The blood-vessels of the mesentery, and their ramifications between the intestinal coats, were enlarged, and injected with dark blood. Some large vessels were in immediate contact with the deep ulcers, especially those situated in Peyer's glands. The solitary glands were generally enlarged, and very conspicuous.

Three other cases of fever occurred, two in men, and one in a woman, which I have little doubt were mild examples of the prevailing epidemic; but as the chief characteristics of the typhoid type were absent, or only slightly manifested, they are classed as continued fever.

In the two men there was a complication of bronchitis. The woman had fever, without any complication. Two of the cases were admitted on the eighth day of the disease: the third, a groom, at the end of the third week. The case of the female terminated on the fourth day. The disease lasted longer than twenty-one days in both the men, being prolonged by bronchitis. Headache, constipation, and some abdominal tenderness, occurred in all three; but no eruption could be detected.

AGUE. In 1849, two cases were admitted. One was a servant girl, aged 19, who was attacked with the disease in Brighton. Besides these, two men applied as out-patients, with tertian ague, who had not been out of Brighton for five or six months.

ERUPTIVE DISEASES. In 1849, one case of small-pox, after vaccination, was admitted. It presented no febrile symptoms after the eruption broke out. Several cases of mild scarlatina, and of erysipelas, went through their course, without any phenomena worthy of remark; and the same was the case in 1850 and 1851.

ACUTE RHEUMATISM. In 1849, rheumatic fever, or that form of acute rheumatism attended with high fever and inflammation of the fibrous structures, in which the heart and pericardium are prone to be involved, was of frequent occurrence, especially among female servants, living exposed to draughts of air, in cold, damp kitchens, below the level of the street. Six cases were admitted; two males, and four females. Of the females, three, of the respective ages of 12, 15, and 16 years, suffered from pericarditis, or endocarditis, or both. One girl, S., aged 16, was seized with severe pericarditis, attended with copious effusion, soon after the appearance of the arthritic pains. Afterwards, and during the persistence of pericarditis, she was attacked with endocarditis, and subsequently with double pneumonia. She was discharged cured on February 13th, 1850, having been in hospital seventy-three days. I heard of her in the autumn as being quite well: but had no opportunity of examining the state of her heart. The girl aged 12 had pericarditis, endocarditis, and incipient pneumonia of the left side. The third, aged 15, had endocarditis, without any other complication. In the other three cases—two men and a woman, in the latter of whom the rheumatic attack appeared to be connected with uterine disorder—there were no cardiac symptoms. The duration of the arthritic affection was from one week to three. All the cases did well. It is worthy of remark, that, in the two cases of pericarditis, which preceded the affections of the endocardium and lungs, endocarditis and pneumonia were developed while the patients were under the influence of mercury and opium; and that all three cases of cardiac complication occurred in very young subjects.

In 1850, three cases only were admitted. In one of them, C. R., a woman aged 40, the disease was slight, and yielded speedily to purgatives, alkalis, and colchicum. A second, F. R., aged 18, had been bled and cupped for an incipient endocardial affection, and calomel and opium had already been administered before I saw her. The mouth became sore; the acute symptoms and pain were subdued in ten days. She remained thirty-four days in hospital. The endocardial murmur still existed, when she was discharged. The third, a young man, aged 20, suffered from a severe attack: both knees and ankles were affected, and afterwards the shoulder and wrist of the right arm. There was much external swelling and hardness about the throat. A harsh murmur with the first sound of the heart was heard on the third day after admission. This case was treated with purgatives in the beginning, followed by large doses of nitrate of potash. During the treatment, the pulse fell gradually from 88 to

40, and did not rise to 60, till nine or ten days had elapsed. All fever and pain had subsided in eight days. The cardiac murmur ceased long before his discharge, which took place on the twenty-seventh day after admission. I had no fair opportunity of trying the efficacy of lemon-juice in acute rheumatism.

SCORBUTUS. A case of scorbutus, in an old man of 73, was admitted, of greater severity than is often met with in our days. He had been ailing six months. His diet had been poor, and he had avoided vegetables, believing that they disordered him. Extensive vibices had appeared on his body, about six weeks before his admission, on July 2nd. These had been preceded for a month by very severe pains. These vibices, on the posterior and inner part of the left thigh, presented the appearance of large extravasations of blood. The skin covering these bruises, as they seemed to be, was hot, somewhat tense, and very tender under pressure. His sleep was prevented by constant pain; he suffered much from hiccup; and was extremely depressed in his spirits. His gums were spongy; livid fungous granulations had sprouted up around some bad teeth, and bled on the slightest touch. He was allowed a double portion of fresh vegetables with his food, and three oranges a day. He took the citrate of iron, with lemon-juice and cinnamon-water, thrice daily. In a month he went out quite well.

DISEASES OF VARIABLE SEAT.

CANCER. In 1850, a case of malignant disease of the œsophagus was admitted, in which the dysphagia became at length inability to swallow, from obstruction of the tube. This patient, a female, aged 50, had likewise prolapsus ani to an enormous extent. She died from inanition; yet, on opening the body, there was a copious deposit of subcutaneous fat in the anterior walls of the abdomen. The intestines were all of a dark colour, and much collapsed; the stomach was not larger than a portion of dilated intestine. About three inches above the cardiac orifice, was found a morbid growth adhering to the trachea, and surrounding and compressing the œsophagus for the space of two inches, so that its calibre was reduced thereby to about the diameter of a No. 3 catheter. In the middle of this constricted part, was a small excavated ulcer, which might have held a pea. This growth on section was of a buff colour, and had rather a firm consistence. In the cavity of the uterus, attached to the fundus, lay a small polypus, about as large as a horse-bean. On the os uteri was found a small ulcer, and on the surrounding parts were patches of abrasion of the mucous membrane, caused, seemingly, by the contact of acrid discharge from the contiguous ulcer. The rectum was of a very dark colour, exhibiting signs of intense congestion. The other viscera were healthy.

TUBERCULAR DISEASES.

PHTHISIS. In 1850, two men died from phthisis: one from profuse hæmoptysis. About the root of the left lung, were several irregular cavities; one of which, after the loose clots of blood were washed out, was found to contain a hard laminated coagulum adhering to its walls. The pulmonary artery was injected, with the hope of discovering the ruptured vessel, but without success. The other man presented an example of acute phthisis. Both lungs were filled throughout with innumerable miliary tubercles, which, at the apices, had commenced the process of softening. In this case, there had been intercurrent pneumonia; the dyspnoea was extreme. In nine other cases of phthisis, cod-liver oil was exhibited with more or less advantage, but in all the cases with some relief. Where cavities existed, the benefit consisted merely of an abatement of cough, fever, and expectoration; the physical signs remaining the same, and the body sometimes, though rarely, acquiring more flesh. Where the disease was less advanced, the good effects were more conspicuous; but only did the fever, cough, night-sweats, etc., subside, but

the patients became fat and strong. This was especially observed in a girl of one-and-twenty, Parker, whose condition when admitted was most unpromising.

In 1849, the following case of tuberculosis of the lungs and intestines was admitted :

CASE. A girl, aged 21, was admitted Jan. 31st, with severe gastro-enteritis, for which she had been under homœopathic treatment. There were signs of ulceration of the intestines, with circumscribed peritonitis. She had hectic fever and diarrhœa. On examining the chest, the physical signs of tubercles in a state of softening were present at the apices of both lungs, but especially the right. The cough was very troublesome, and added much to her sufferings. Throughout the month of February, the ulcerated state of the bowels, and the diarrhœa and peritoneal inflammation consequent thereon, demanded our chief attention; but on the 11th March, she was seized with a severe attack of pleuritis of the right side, followed by abundant effusion. There was extensive dulness on percussion, and absence of respiration posteriorly, except quite at the upper part of the lung; but anteriorly there was vesicular breathing, and resonance on percussion, which was afterwards explained by adhesions which had tied down the base of the lung anteriorly to the diaphragm. She died, on the eleventh day after this attack of pleurisy.

Autopsy. The head was not opened. There were old partial adhesions of the pleura on both sides. The right pleural cavity contained about a quart of serum. There were old adhesions anteriorly, binding the lung to the diaphragm. Both lungs contained numerous tubercles. There was a small vomica at the apex of the right lung. The liver had undergone fatty degeneration. There were adhesions of the convolutions of the intestines in several places, and also to the parietes of the abdomen in the left iliac region. The ulcerations of the intestines, which were confined to the ileum, were visible through the peritoneal coat. Some appeared to have undergone a healing process; others were large and deep, spreading in the direction of the circumference of the intestine, and destroying the mucous and muscular coats down to the peritoneum. The mesenteric glands in the vicinity of the ulcerations were enlarged. The case was probably in the beginning one of intestinal tuberculosis.

In 1851, five men and one woman were admitted with phthisis pulmonalis. With but one exception, none of them presented the stethoscopic signs of the last stage of the disease. One woman died of the acute form of phthisis, which appeared to be accelerated by the retrocession of a cutaneous eruption, which had long troubled her. An examination of the body was not permitted. The other cases, after a sojourn in the hospital of from two to ten weeks, were discharged, some more, some less, but all much relieved by cod-liver oil. In one man, Richard Vernon, the good effect of this remedy was very remarkable. He had had the usual signs of softening of tuberculous matter at the apex of the left lung for two years. In February he entered the hospital for the second time. There were cavernous respiration and cough, distinct gurgling, and painful resonance of the voice. On percussion, amphoric resonance was elicited. After two months' treatment with cod-liver oil, this man was discharged, much improved in flesh and strength. He has persevered in the use of the oil, as an out-patient, ever since, and has been able to follow his employment as a milkman through the whole of the winter. He still preserves his condition, but the signs in the left lung remain unchanged. On the right side, where dulness on percussion and bronchophony existed, the disease seems to have been arrested. With an improvement of flesh and strength, under the use of the oil, the night-sweats disappeared, but the cough was not diminished in the same proportion.*

STRUMA. Ebenezer Vincent, æt. 10, a puny, emaciated boy, presented the following symptoms. An enlarged and tense

* This man died, as I have been informed, in the second week of January 1853, rather suddenly, having been affected with phthisis for four years, during all which time he had been taking cod-liver oil.

abdomen, without fluctuation, very tender when touched; the superficial veins being distended and numerously ramified. He had a troublesome cough, with much expectoration. Sibilant and sonorous rhonchi were heard at the base of both lungs posteriorly. He had hectic fever, and profuse night-sweats. Cod-liver oil, syrup of the iodide of iron, and a mixture for his cough, were administered internally. A liniment of camphorated oil, with iodide of potassium and laudanum, was well rubbed over the abdomen, night and morning. Sea-water baths were also ordered. In two months, the boy was discharged convalescent,—his improvement having gone on steadily from the beginning.

DISEASES OF THE BRAIN, SPINAL MARROW, AND NERVES.

MENINGITIS. The following case occurred in the year 1849.

CASE. G. F., aged 37, a man presenting much hebetude of countenance, and evincing great sluggishness of manner and hesitation in his replies, gave a very unsatisfactory account of himself. The most we could make out was, that he had been for some time failing in his health and mental faculties; that he had had several convulsive fits; and that he had vomited frequently of late, though his appetite was keen and he was solicitous about his meals. When admitted, there was incomplete paralysis of the motor nerves in the lower extremities, sensation remaining. He passed urine involuntarily, though aware of the desire to do so. His bowels were obstinately costive; his tongue foul. He made no complaint of his head; but was inclined to be somnolent. These symptoms became gradually worse; and finally merged into fatal coma.

Autopsy. The convolutions of the brain were found to be flattened. There was more congestion than natural. There was an abundant effusion of serum into the ventricles, and the tunica arachnoidea at the base of the brain was thickened and opaque.

Here was a case of chronic meningitis, in which, so far as we know, there had been no delirium, though there had been considerable disturbance of the intellectual functions.

In 1850, two cases of meningitis came under treatment; one tubercular, the other simply inflammatory.

CASE. Mary Dyer, aged 22, had been ailing seven weeks; but the cerebral symptoms had only been developed about a week before her admission on June 21st. At this time she was in a state of half stupor, being incapable of answering questions, but not unconscious. The pulse was frequent; the tongue dry and brownish. The stools and urine were passed involuntarily. For some days, the symptoms seemed to belong as much to typhus fever as to a topical affection of the brain. On the 28th, however, the stupor became more decided, and was accompanied with strabismus and dilated pupils. The following day, there was drooping of the left eyelid, and the mouth appeared drawn to the right side. She died on the next day.

Autopsy. I am indebted to Dr. Ormerod for a most careful inspection of the brain, and for the following account of it. Much blood oozed from the vessels of the scalp. The arachnoid of the vertex was dry. On removing the brain, a good deal of fluid escaped from the spinal canal. The vertex of the left hemisphere, and the upper, outer, and anterior parts of the right, were of a deep greenish yellow colour. In some of these parts, the opposed surfaces of the arachnoid were adherent. The discoloured patches were interspersed with whitish granules; and all lay enclosed within the meshes of the pia mater. The same changes and adhesions were found anteriorly between the hemispheres; and about the base were many of the same whitish granules, besides older adhesions, without any greenish infiltrated fluid. The convolutions of the brain were distinctly flattened. The cerebral substance was generally firm, and free from disease. The septum, however, and the under surface of the fornix, were so softened, as to run into shreds. The lateral ventricles contained each about two-thirds of an ounce of reddish fluid, more stained in the right than in the

left. In a few points at the bottom of some of the convolutions, the yellow matter in the meshes of the pia mater shaded off gradually into the soft and discoloured cerebral matter; and round such points, the brain was intensely injected to the depth of three or four lines. There was no tubercle of the brain itself; but there was tuberculosis of other organs, the lungs and kidneys in particular, to some extent.

CASE. The other case of meningitis occurred in a girl aged 16. She had been ill a fortnight. We could get no history of the case: her friends, having consigned her to the nurse, departed, and the poor girl could give no account of herself. She lay on her back, shivering, with her knees drawn up. When touched, she screamed. There was complete ptosis of the right upper eyelid; the pupil of the right eye was greatly dilated, and insensible to light; the left also acted but sluggishly. The face was flushed, and hot; the pulse 146; the tongue coated. She passed urine and feces involuntarily. She died early the next morning.

Autopsy. On removing the calvaria, the arachnoid was found opaque, and covered in various places with flakes of coagulable lymph. There was but a small quantity of fluid in the ventricles. The substance of the brain appeared healthy. The pons Varolii was a little softened, particularly on the right side, beneath which part there was considerable effusion. Some recent adhesions were found between the anterior and middle lobes of the cerebrum. No tubercles were visible in any part of the brain, or of its membranes. The kidneys were highly congested: purulent matter could be squeezed from one. The uterus, also, was highly congested. The ovaries, and other organs, were healthy.

APOPLEXY. CASE. James Clements, a boy 9 years of age, was admitted, October 2nd, 1850, with incomplete hemiplegia of the left side. We had no opportunity of obtaining his history, till a week after his admission. His mother then reported, that he had always enjoyed good health till the middle of September, when he sometimes complained of headache, and that his left arm gave him pain when he moved it. At this time, she also observed that he limped in his gait. She said that he had never had fits, neither had he convulsions during dentition; that he had never received any injury of the head or back; and was not subject to worms. When admitted, he had recovered a good deal of power of motion in the affected limbs, but dragged the left foot in walking. Sensation had remained unaffected. There was no facial paralysis; his speech had never been altered. The pulse was 96; the tongue coated; the bowels constipated; the urine pale, alkaline, and of sp. gr. 1.016.

This seemingly slight and imperfect paralysis in a child, who made no complaint of his head, led me to hope that it might not have been caused by hæmorrhage, or tubercle of the brain. I therefore ordered mild mercurial alteratives and purgative medicines; and he improved under this treatment. On the 14th, he appeared better, and more cheerful than usual; but, about noon, whilst sitting on his bed, and talking with the patients, he suddenly complained of pain in his head. Vomiting soon came on, and was followed by purging. The breathing became embarrassed; and coma quickly supervened. Leeches were ordered to the temples, and a blister to the nape of the neck; but before these remedies could be applied, he died.

Autopsy, twenty-one hours after death. The membranes of the brain were much congested. On slicing the cerebral substance, numerous bloody points were seen; but nothing worthy of remark was discovered, till the brain had been removed from the skull, when, on its being placed base uppermost, a spot of effused blood became visible externally, being situated nearly in the centre of the pons Varolii, and seen through the membrane and unbroken cerebral substance enclosing it. On examination, there was a considerable recent effusion of dark blood, partly coagulated, and partly fluid, occupying chiefly the central portion of the pons, but extending into the right side. Upon narrower inspection, a second clot was found further to the right side: it was

white, and rather hard, as if of older date, and lay in a distinct cyst, with walls having a gelatinous aspect, which, upon examination with the microscope, were found to be composed of fibro-cellular tissue. Part of these walls appeared to have been torn by the recent hæmorrhage. The distinction between the first and the second clot was very striking. No disease of the neighbouring capillaries, or large vessels, could be made out. The heart was quite healthy. There were no tubercles in the lungs. A small calculus lay imbedded in the dilated pelvis of the right kidney.

This case is interesting and instructive. It is remarkable by reason of the infancy of the subject; of the seat of the hæmorrhage; of the partial and mild nature of the paralytic symptoms on the first occasion, and of their general distribution and rapidly fatal character on the last. It appears by the Registrar General's Reports, that out of a great number of cases of apoplexy at all ages, the deaths from 5 to 10 years are the least frequent of all. They appear to be not uncommon under 5 years of age, by the same Reports. Indeed, Messrs. Durnet and Tonellé have published some observations on apoplexy in infants from 1 to 5; this work is mentioned by Andral, but I have not seen it. From 10 to 20 years, deaths from sanguineous apoplexy are not infrequent. It may be stated in general terms, however, that Abercrombie, Rochoux, Copland, Lallemand, Andral, and Burrows, give no cases under 16. Andral, indeed, in speaking of the relative ages of subjects of apoplexy, says,* "One of the rarest forms of apoplexy, that affecting the cerebellum, has been seen in an infant 7 years old." But this case did not fall under his own observation, and is not included in 398 cases collected by him. Dr. West gives the case of a boy, aged 11, where extravasated blood was found in the right ventricle, with laceration of the substance of the brain; and Dr. Alexander Campbell† has reported the case of a boy of the same age (11 years), who died from sanguineous apoplexy; a clot being found in the middle lobe of the right hemisphere.

Dr. Richard Quain, in an able paper published in the *London Journal of Medicine* for January, 1849, gives the histories of two cases of apoplexy in children; one where blood was effused in the right hemisphere, occurring in a boy 9 years of age; the other in the arachnoid, in an unhealthy female child, aged 2 years and 7 months. He has also collected, from various sources, twenty-three cases of "meningeal hæmorrhage", and fourteen cases of "cerebral and ventricular hæmorrhage", in subjects of from 1 to 14 years of age.

But, besides the extreme youth of Clements, I would observe that the seat of the hæmorrhage is remarkable. I believe it to occur very rarely in that situation at any age. Abercrombie gives one case only in an adult. Solly quotes this case; and adds another from Ollivier, who refers to a few cases by Serres; but the other authors above named give no example of it. Dr. Craigie says that cerebral hæmorrhage, with respect to its relative frequency of situation, takes place in the following order: The corpora striata, thalami nervorum opticorum, the hemispheres, pons Varolii, crura cerebri, medulla oblongata, and cerebellum. But hæmorrhage into the cerebellum appears, upon investigation, to occur more frequently than into the crura cerebri, pons Varolii, or medulla oblongata. Rokitsansky says, that the cerebellum is comparatively seldom the seat of hæmorrhage, and the pons yet more rarely. Its occurrence in the corpora quadrigemina, the pons, and medulla oblongata, is quite exceptional; and it almost never happens in the corpus callosum, the fornix, and the hippocampi. Occasionally, however, when a large cavity is formed in the cerebrum, one or more small secondary cavities are found also in other parts of the brain, especially in the cerebellum and the pons.‡ This author, however, in describing the healing process of cysts, observes, as if oblivious of the former statement, that in the pons, where,

* Med. Gaz. xvii, 589.

† Ibid. xxxvi, p. 172, abridged from *Northern Journal of Medicine*.

‡ Sydenham Society's Translation, vol. iii, p. 387.

on the whole, apoplexy is *not very rarely* observed, only very small cavities heal completely.*

Referring to the narrative of the case, we find that the paralytic symptoms at first were on the left side of the body, the old clot being afterwards found on the right; that the nerves of motion had alone suffered, sensation remaining entire; and that the power of motion remained longer impaired in the leg than in the arm. The head and neck were never in the least paralysed; intellect, speech, and deglutition, remained perfect. While in hospital, the patient made no complaint of pain till the day of his death. The seizure terminated very rapidly: first producing incapacity of motion, then stertorous breathing and coma. So long as the extravasation was of small extent, and confined to one side of the pons, the arm and leg of the opposite side of the body were alone affected, and that incompletely; but at last, when a more considerable effusion of blood took place, and probably pressed upon the medulla oblongata, then general paralysis, and a fatal interruption to the respiratory function quickly ensued. This order of sequence has been observed before.

In 1851, two cases of apoplexy occurred, in a man and woman, of the respective ages of 66 and 64. The former was attended with hemiplegia of the left side; the latter of the right. The man left in six weeks, having recovered a fair share of motion and sensation in the paralysed parts. The woman required longer treatment before she received the same benefit, perhaps owing to a more liberal abstraction of blood than was absolutely required. A third case, that of a woman aged 43, was also admitted, and was under treatment when these reports were drawn up. Here there was hesitation of speech, with paralysis of the right side. The spastic rigidity of the fingers, the convulsive movements, and the contractions of some of the flexor muscles of the affected side, led us to suspect softening of the brain.

CEREBRAL ABSCESS. CASE. George Elphick, aged 28, was admitted Nov. 21st, 1849. He had a cachectic appearance, and an expression of great suffering. He complained of very severe, constant headache, and frequent giddiness, which had lasted six weeks. He had been subject to attacks of asthma, on catching cold, as long as he could remember; and had been for three months suffering from cough, with difficult breathing, and an abundant muco-purulent expectoration of a greenish yellow colour and offensive odour. The chest, except at the upper part on the left side, was universally resonant on percussion, indicating emphysema. The respiration, however, was feeble, with sibilus and rhonchus generally diffused. At the upper part of the thorax, on the left side, corresponding to the apex of the left lung, there was dulness on percussion, and the voice was more resonant than natural. He had great thirst, and a white, moist tongue; the pulse was 84.

The pulmonary affection yielded to the treatment. The expectoration gradually diminished, till it ceased entirely, and with it the cough and all febrile symptoms. The head affection, however, proceeded with increased intensity. The right side, before and behind, was the seat of incessant pain. His respiration was now easy; his pulse fell below 50. He complained of constant nausea, but invariably took his food with appetite. He only got snatches of sleep, and was constrained to keep, as much as possible, an upright posture. A fortnight after his admission, his left arm and leg became slightly paralysed; but subsequently, together with an amelioration of all the symptoms, he recovered the use of both. His intellect, memory, and speech remained unaffected throughout his illness. On the morning of the 4th December, no particular change had been observed in him: he took his dinner as usual. In the afternoon, he became dull, heavy, and somnolent, and afterwards gradually comatose, in which state he expired towards night, having been in hospital about five weeks.

Autopsy forty hours after death. The following report was furnished by Dr. Ormerod:—

Weather mild and damp. The surface of the brain was bloodless. About the vertex, the convolutions were flattened. The brain being removed, and placed upon the table, the right hemisphere fell outwards. On a section of this hemisphere, there appeared three distinct abscesses in the posterior lobe, containing respectively 3iv, 3ij, and 3j of green and rather foetid pus; there were distinct cysts to the two smaller abscesses. The surrounding cerebral substance was softer than natural. Posteriorly, there lay two or three small, hard, round nodules, about the size of peas—yellow without, softened within. The bones and membranes were quite healthy. In the chest, both pleurae were universally and toughly adherent. The front of each lung was very emphysematous. The right lung was nearly healthy, save a small number of nodules near the apex. The bronchi were congested, and full of bloody mucus and pus. In the left lung, the bronchi were similarly affected, and the hard nodules were very numerous, especially about the apex. Here the whole substance felt hard and heavy; but, on section, nothing particular was detected. Even on dividing these nodules, nothing was evident beyond a hard, somewhat transparent, whitish mass, like a cicatrix. There was no tubercle in the lungs or bronchial glands; and no ulceration of the bowels. This condition of lungs is accurately described by Rokitansky, who calls it chronic pneumonia.

This case presents several objects of interest and importance. The study of the diseases of the brain is beset with difficulties; great circumspection, therefore, is necessary in forming a diagnosis. In this instance we expected to find either tubercle or abscess, or both, in the substance of the brain on the right side; the pain having been seated there, and the hemiplegia having occurred on the left half of the body. But we rather leaned to the suspicion of tubercle, because we had regarded the consolidation at the apex of the left lung to have been caused by tuberculous deposit. In this opinion we erred, for it proved to be a rare form of pneumonia. During the whole illness, the intellectual faculties remained intact. Now, when the surface of the brain—that is, the neurine or cortical part thereof—or its investing membranes, are inflamed (and the one can hardly be inflamed without involving the other), delirium generally supervenes, and the intellectual faculties are always greatly disturbed. The remarkable exemption from disturbance of the intellect, therefore, had led us to attempt a localization of the disease in the medullary substance of the brain, apart from the surface or its membranes; and accordingly we found “the membranes healthy, and the surface bloodless.”

In this case, no convulsions occurred; and there were neither rigidity nor contractions, which usually happen in softening of the brain. Lallemand has hazarded the opinion, that when the sound hemisphere is not compressed by the disease going on in its fellow, it will carry on the intellectual functions, in the same way that one eye or ear would supply a loss of the other. He regards, in fact, the brain as a double organ, one half being capable of performing the office of both; thus anticipating the doctrine of the duality of the mind, propounded by Dr. Wigan.

PARALYSIS. In 1849, galvanism was employed with great success in a case of hysterical paralysis occurring in a girl of 18; and also afforded much benefit to a woman aged 45, affected with hemiplegia; but it failed to produce any relief in a man aged 33, who was under treatment for paraplegia.

In December 1850, a married woman, aged 40, was admitted, with hemiplegia of the right side of some months' duration. She stated, that she was seized while in bed, and could neither speak nor move the right side. She appeared confused at first; and, though she articulated distinctly, her speech was abrupt and quick. Her tongue was protruded naturally. Motion in the arm and hand was lost: partially so in the leg. Sensation remained in both extremities, but was by no means normal. There was no facial paralysis. This case was seriously com-

* *Ibid.*, p. 395.

licated with epilepsy. The menses had been absent six months. The epileptic attacks occurred about once a fortnight or three weeks, and rendered the prognosis most unfavourable. A long issue was made in the sinciput, as recommended by the late Dr. Prichard. Under this treatment, she was much relieved; but the epileptic paroxysms continued to recur at the same intervals.

A case of hysterical paralysis, in a girl of 19, was under treatment for six weeks. She was cured by cupping, repeated blisters, and purgatives of aloes with compound galbanum pill. She was of a florid and plethoric habit.

In 1851, some cases of paralysis were admitted, without any manifest head symptoms. A woman, Fawcett, aged 40, had incomplete paralysis of the right side, chiefly of the arm and hand, complicated with epileptoid fits, not of a severe character. Though she did not complain of her head, an issue was inserted in the scalp with the best effect. The woman left the hospital free from fits, and remained so as long as she was under observation as an out-patient. The use of the hand and arm was quite restored.

Another case of partial paralysis occurred in a woman aged 47. The right side had chiefly suffered, but for the last twelvemonth the left leg had been slightly affected. She had never had a fit, but was subject to attacks of giddiness, and now and then of double vision. She laboured under prolapsus ani, as the consequence of a long-continued and severe hæmorrhoidal affection. The treatment was chiefly directed to the restoration of her general health, which was much impaired, and the relief of the local symptoms. We thought the paralytic symptoms were relieved by a strong infusion of the flowers of arnica montana and valerian. She left the hospital convalescent.

Two cases of paraplegia, connected with angular curvature, gave no encouragement to keep them long in hospital in hope of benefit; a third, in a girl nine years of age, got speedily well, by rest and a dose or two of purgative medicine; a fourth, if it were a case of paralysis at all, was hysterical; but there was reason to believe that the subject, a girl 20 years of age, was a malingerer. The application of the hot iron and galvanism soon restored the use of her legs.

CASE. In a child, Sarah Meads, aged 9 years, the symptoms led us to suspect disease of the cerebellum. She seemed unable to walk without constant risk of falling. There was a singular titubation in her gait. She had the use of her legs, but not the perfect command of them. She made no complaint of her head. There was no pain, tenderness, nor irregularity of the spine; no pain in moving the hips; no tenderness either before or behind the trochanters; no flattening of the nates; no shortening of either limb, nor any appreciable difference of size. She was of ordinary intelligence; fed well; and slept well. She was reported free from worms, but passed one large lumbricus during her stay in hospital, which was extended to eighty-five days. Internally, purgatives and vermifuge medicines were exhibited—zinc, iron, tincture of cantharides, iodide of potassium, etc.: externally we employed shower baths, stimulating liniments and blisters to the spine, and an issue in the nape of the neck. She left the house without any permanent amendment. She could walk better, but the crooked gait and want of balance in progression remained.

EPILEPSY. In 1849, two cases occurred: one, from uterine disease; the other, according to the report, from worms.

CASE. — Marsh, aged 18, a fat, pale girl, of fair complexion, had been subject to epileptic attacks for a twelvemonth, either directly before or after the menstrual period. The catamenia were profuse, recurring every fortnight, and sometimes flowing unceasingly for a fortnight or three weeks. She complained of headache and palpitations. Each attack of epilepsy was preceded by an aura, beginning at the left knee, and ascending gradually to her chest, when she lost her consciousness. She was seen in one well marked fit after her admission, but never afterwards. The case was treated with infusion of digitalis,

beginning with a dose of ʒij, and gradually augmenting it to ʒiiss daily. Whilst taking the medicine, during a period of three months, she occasionally complained of vertigo and headache, but scarcely more than she had been liable to before. The pulse ranged from 72 to 100, and was slower at the commencement than at the end of the treatment.

In the other case, a girl 9 years of age, no fit took place in the house. She was smartly purged with calomel and jalap, and took sesquichloride of iron in infusion of quassia. Though she was reported to have worms, none were evacuated.

In 1851, the following case was admitted:—A farm labourer, 42 years of age, had been for nine years subject to epileptoid fits, in which he was insensible, but never violently convulsed. He had never bitten his tongue, and had never been observed to foam at the mouth. The fits occurred at irregular intervals, at night, generally in his sleep. He had a vacant countenance, and was rather deficient in intelligence. He had suffered from ague on three several occasions; the last being a month before admission. Turpentine, administered internally, did good for a time; then henbane and camphor. Moderate cupping and blistering relieved any weight or pain about the head. I prescribed the cotyledon umbilicus, which I have found very useful in several cases of epilepsy; but it did not receive a fair trial, as he soon left the hospital by his own desire.

DELIRIUM TREMENS. In 1849, two cases occurred, in which chloroform was administered by inhalation, with satisfactory results.

In 1850, a man died of delirium tremens, with typhoid symptoms. He was found to have a very large, fatty liver, which descended to the umbilicus, and spread laterally into the left hypochondrium. It weighed between six and seven pounds. Its inferior edges were flattened and thin; its upper surface was rounded. Its colour throughout was a faded yellow, like that of dried leaves. When it was bruised, a greasy mark was left on the scalpel. Oil-globules were found, on examination with the microscope. The gall bladder contained a notable quantity of bile, of the usual appearance. The spleen was of a loose, friable texture. The kidneys were healthy.

In 1851, one case of delirium tremens occurred in an elderly man, who, besides being addicted to spirits, took a great deal of laudanum. He was very noisy, and had had no sleep for five nights. His evacuations escaped involuntarily. The house-surgeon gave him immediately a drachm of laudanum in a pint of porter. He also ordered a pill, containing five grains of extract of hyoscyamus with one grain of opium, to be taken every second hour. The man took two pills, slept five hours, and soon recovered.

CHOREA. In 1850, two severe cases of chorea were admitted.

CASE. — Dale, a boy 10 years of age, had had rheumatic fever about three months previous to the attack. There was a slight but decided systolic murmur. He remained but a short time in the house, and was made an out-patient. Both sides of the body were affected, and he lost his speech; deglutition also became difficult. The shower-bath could not be persevered in, on account of the child's terror and resistance. He got well under the use of sulphate of zinc, in doses of from two to three grains, with extract of valerian and Barbadoes aloes.

CASE. James Mitchell, aged 12, was seized with chorea two months before admission, after an illness which, from the description, was probably rheumatic fever. There was no systolic or other murmur in the heart or vessels. This boy, in all his movements, whether of the head, trunk, or extremities, exhibited the most fantastic and ludicrous attitudes; but it was frightful to see him go down stairs, which, I understand, he contrived to do without ever meeting with an accident. The shower-bath, purgatives, oxide of iron, and sulphate of zinc, with valerian and Barbadoes aloes, were successively tried for two months—with benefit to his general health, it is true, but with very little effect upon

the convulsive movements. The liquor potassæ arsenitis was then administered, in doses of two minims three times a day. The improvement was marked and speedy. He was discharged, fat and in good health, in one month after this medicine was begun.

In 1851, three cases of chorea came under observation.

CASE. A youth, 20 years of age, was affected with involuntary twitchings and irregular movements of the left side of the body. His speech was hesitating, and he had occasional strabismus. These symptoms had existed for four months, as a sequence of rheumatic fever. This was the second attack of rheumatic fever. The first, a more severe one, had occurred ten years before, and affected all his joints. No abnormal condition of the heart could be detected. He was discharged well at the end of a month. The shower-bath was employed; and he took black oxyde of iron with Barbadoes aloes, which kept up a brisk action upon the bowels.

CASE. Reuben Weller, aged 12 years, had been affected for six months with chorea, succeeding to catarrh and severe rheumatic pains. He had great difficulty in articulation. Any attempt at voluntary motion was followed by the wildest contortions and the most ludicrous attitudes and grimaces. His sleep was sound, without any convulsive twitchings. Both sides of the body were affected: the left most so. The pulse was 67, regular. He took two minims of liquor potassæ arsenitis three times a day. The convulsions soon yielded to this remedy. In three weeks, he had recovered the command of the voluntary muscles, and he had improved in flesh, strength, and spirits.

CASE. Fanny Dowden, aged 10, a fair, weakly child, of nervous temperament, was admitted with chorea. This was the second attack; the first happened two years previously, and lasted six months. Both attacks were suddenly brought on by fright; the present one commenced three weeks ago. She had been troubled for some time with ascariæ. Her face was only slightly affected; the speech not at all so. Her gait was very unsteady. Both arms were violently tossed about, if she attempted to use them. Her sleep was very unquiet, with frequent moanings. After the worms had been removed by purgatives and turpentine injections, the black oxyd of iron and the shower-bath were ordered. The latter being relinquished in consequence of the terror it inspired, and the former availing nothing after a month's trial, we gave from one to two minims of liquor potassæ arsenitis three times a day. In one week, improvement was manifest; in three weeks she was quite well, her general health being much amended.

NEURALGIA. In 1849, all the cases of neuralgia, with one exception—a man aged 61, who had facial neuralgia from diseased teeth—occurred in young females. In two instances, the trifacial nerve was affected; in the rest, five in number, the intercostal nerves were the seat of pain: on the left side in four, and on the right in one. Neuralgia of the intercostal nerves likewise occurred in two hysterical cases; and a severe attack of tic douloureux of the right side of the face happened to a girl who was admitted with peritonitis. All the cases of intercostal neuralgia, save one, were affected on the left side below the breast. In this situation, the pain, though great, never equalled in severity that of the face, where it reached a degree which Cotugno expressively calls *fulgura doloris*. The mode of treatment was adapted to the condition of the patients, according to the signs of congestion or anæmia, gastric or uterine disturbance, rheumatic or serofulous diathesis, etc.; and consisted of local bleeding, derivatives, counter-irritants, purgatives, alteratives, tonics, and narcotics, singly or in combination, according to circumstances.

In 1850, the topical application of the hot iron, as recommended by Dr. Day, was generally attended with much benefit.

In 1851, an inveterate case of intercostal neuralgia, in a young woman who was labouring under leucorrhœa of long standing, and obstinate costiveness, began to yield to arsenic after the fruitless employment of purgatives, zinc, quinine,

iron, aconite, henbane, belladonna, the hot iron, and various injections. She, however, now left the hospital to go into the country.

Another woman, with a host of anomalous symptoms, and pains everywhere, who had been in hospital five times before, left it for the sixth time, apparently in very good condition; but, as she averred, not a whit benefited.

HYSTERIA. Among the cases of this description in 1850, was one of aphonia, one of singultus, and one of hæmatemesis. The first and second got well after a brisk succession of local and internal remedies: the third deserves a more detailed notice.

CASE. Mary Childs, aged 19, a stolid-looking girl, short and fat, had been ailing six months, during three of which the catamenia had been suppressed, though she reported that she had never been regular. Her prominent symptom was vomiting of a bloody mucus, every day, about half-past seven in the evening; after which, pain of the stomach and head, of which she complained, became easier. Our suspicions were very early excited as to the truth of her statements, for no portions of food were ever detected in the fluid said to be vomited: nevertheless, the fact of the amenorrhœa, which had been ascertained, gave an air of probability to her tale. Not being able to come to any satisfactory conclusion as to the source of the hæmorrhage from mere inspection, I requested Mr. Hodgson to submit it to the microscope. He found abundant pavement epithelium belonging to the mouth, and a total absence of the columnar epithelium proper to the stomach. She was watched, and detected in sucking her gums. Of course, after this the hæmorrhage ceased, and she was dismissed.

[To be continued.]

ON THE MEDICO-LEGAL SIGNIFICATION OF CLOSURE OF THE FORAMEN OVALE, AS A SIGN THAT A CHILD HAS BEEN BORN ALIVE.

By CHARLES KIDD, M.D.

A FEW remarks on the question of closure of the *foramen ovale*, as a sign that a child has been born alive, may prove of interest. I will first relate a case which came under my observation, and which was the subject of a trial.

CASE. A young woman, a barmaid at a tavern, had contracted an intimacy with a young man in her own sphere of life, under the promise of marriage; she continued in her situation, even under the watchful eye of her mistress, who gave evidence in the case, up to the day on which the child was born—about three weeks before the time when it was found. The night before her confinement, it appeared in evidence, she went to bed as usual with her fellow-servant at about twelve o'clock. At two o'clock in the morning she awakened the latter, complaining of pain in the bowels, and sent for her mistress, who prescribed something hot, and went to bed again. Her fellow-servant stated that she was tired, and went to sleep. At about four o'clock, the child, to her utter dismay, was born. She had presence of mind enough to know that, if the child were discovered at six o'clock, when the inmates of the house were usually stirring, she would lose her place, and be disgraced. She accordingly wrapped the child in a rough towel, and, descending two flights of stairs, hid it in an unoccupied cellar. She left the service next day, with her mother, and went to reside in one of the suburbs of London. The child evidently died of cold and neglect in a few hours after having been placed in the cellar; for, if it had cried or made any noise, it could not have failed to be discovered.