Report and documents accompanying it into consideration, think it right immediately to adopt the recommendations of the Committee, and begin the publication of the Journal fortnightly, at the commencement of the year 1847.

The Council also fully concur in the propriety of the recommendation of the Committee, that a Sub-Editor be appointed, but think it most respectful to the Association to leave that appointment to be filled up at the General Meeting at Derby, having full confidence that the Editor of the Journal will in the mean time make such arrangements for its improvement as circumstances seem to call for.

CHARLES HASTINGS, M.D.

(Published by order of the Council.)

A COURSE OF LECTURES ON CLINICAL MEDICINE.

By W. R. BASHAM, M.D., Physician to the Westminster Hospital.

LECTURE V.

Case of Apoplexy complicated with fracture of the temporal bone: Post-mortem appearances; apoplectic clot; ramollissement; extravasation of blood between the pia mater and arachnoid, &c.: emphysematous condition of the lungs; encysted carbonaceous deposit in right lung; spurious melanosis of some authors.—Observations on the coincidence of fracture of the temporal bone, and its importance in a medico-legal point of view.—Chemical characters of the carbonaceous deposit in the lungs; distinction between black pulmonary matter and true melanosis; reference to previously-reported cases; deposit probably occasioned by an impure and loaded atmosphere, principally in miners and others similarly employed. Case of anomalous cerebral symptoms occasioned by ulceration of the ileum and caecum: Post-mortem report.—Character of the symptoms during life, with general observations on the peculiarity of the cerebral indications in enteric disease.

The case of S. G., an old man seventy-five years of age, who was brought into the Hospital comatose, and who died a few hours afterwards, is, in respect of the *post-mortem* appearances, of some interest to the student in pathological anatomy. He was admitted into the Hospital on the evening of the 31st of October, and when brought in was quite insensible, breathing stertorously; pulse 40, full, labouring and jerking; limbs flaccid and powerless; extremities cold; temperature of the surface low; face pallid and cadaveric; pupils dilated and immovable. He was seen by a policeman to stagger and fall heavily on Westminster Bridge. He was raised up quite insensible by the policeman, and brought to the Hospital on a stretcher. Some blood was taken from his arm, and by midnight his pulse had risen to 72, but he did not rally, and died at three a.m., eight hours after the first seizure. It was subsequently ascertained from his

wife, that for the last few weeks he had suffered from vertigo, frequent sensations of giddiness, and a constant dread in the street of being run over; such feelings doubtless arising from the confusion of thought incidental to the state of brain then existing. He, however, had never complained of headache, nor any partial loss of sensation in any part; but had, for many autumns and winters been subject to severe paroxysms of cough, such as occur in asthmatics. He was an old soldier, having been for many years in the Sappers and Miners, and had enjoyed excellent health, his winter cough never preventing his attention to his ordinary avocations.

Post-mortem examination thirty hours after death.—

Body well formed, limbs proportioned, and muscular system highly developed. An extensive ecchymosis appeared on the scalp, about the posterior portion of the left temporal muscle; there was no external injury of the skin. On reflecting the scalp, the extravasation of blood between the calvarium and scalp was rendered more evident, a layer of coagulated blood being observed between the scalp and bone. No sanguinolent effusion existed between the skull-cap and dura mater, but beneath the latter membrane and the brain, especially on the left side, and extending over the superior surface of the left hemisphere, an extensive coagulated exudation existed. The arachnoid was of the ordinary aspect; beneath it, as well as in the ventricles, some small amount of serous cadaveric exosmosis was apparent. The pia mater was throughout injected, but not highly so, but towards the lower portion of the middle lobe of the left hemisphere, and near the fissure of Sylvius, some blood had extravasated between the pia mater and arachnoid; and at the most inferior portion of the middle lobe, at the point corresponding with the part that lies in the left temporal fossa, the cerebral surface was stained of a chocolate brown, was soft and pulpy to the touch, and when incised developed a small clot of blood, surrounded by softened and yellowish cerebral matter, to the extent of about the eighth of an inch. The vessels of the cerebrum that led from or into this clot, and within a few lines of it, contained coagulated fibrin, distinctly moulded in the vessels, and from which it could be drawn thread-like. No other evidence of diseased action could be traced in the cerebrum or cerebellum, excepting a general hyperæmia of all the tissues. The white matter of the cerebrum appeared of its ordinary firmness, and did not indicate any condition approaching *ramollissement* except in the spot indicated in the middle lobe. The temporal bone of the left side was fractured, the line of injury passing in the direction of the petrous portion of the bone, and running between the groove of the middle meningeal artery and the superior ridge of the petrous process of the bone, it passed through the squamous portion and upwards a short distance into the parietal bone, of the same side. Externally, the fracture had not descended so far as the auditory meatus, nor internally could it be traced to the anterior extremity of the petrous portion of the bone. Some blood was extravasated between the fractured edges. On raising the sternum

the lungs collapsed. They were spongy and elastic throughout; but on the external surface of the superior lobe of the right lung, as also on the middle lobe, were three remarkable emphysematous vesications, the largest equalling in size a hen's egg, the two smaller being about that of a pigeon's. They collapsed instantly on being punctured, and exhibited internally a loose and very expanded cellular structure. The bronchial mucous membrane was pale and of a healthy aspect, but the longitudinal fibres in the secondary divisions were developed in a high degree. It has been said that the lungs were spongy throughout, but two points were exceptions to this, for at the apex of the right lung, and posteriorly on the surface, or within the eighth of an inch of the surface, of the middle lobe, two spots declared themselves to the touch, dense, firm, and carnified, and also distinctly circumscribed. Neither of them exceeded in dimension a moderate-sized filbert. When cut into, these masses appeared encysted, and were bounded by firm cellular tissue; the contents resembled both in colour and consistence, a black carbonaceous pigment. Upon examining a portion under the microscope, the appearance was that of black amorphous grains, like carbon in a state of minute subdivision; bands of cellular tissue seemed to pass through this carbonaceous deposit. The bronchial glands were of ordinary appearance. The remaining viscera presented nothing worthy of note, except that the kidneys were much lobulated, and both were encysted, the left contained a serous cyst, the capacity of which was equal to ten ounces.

There are several circumstances and conditions in this *post-mortem* record of considerable interest to the student as well as to the more experienced practitioner. First, the state of the brain as expressive of the apoplectic condition; secondly, the existence of fracture through the temporal bone, presenting a complication of much medico-legal interest; and, thirdly, the state of the lungs as indicative of interlobular emphysema, with the extreme development of the longitudinal fibres in the bronchii, expressive of the asthmatic paroxysms during life, together with the presence of two encysted deposits of carbonaceous matter in a state of minute division, and a question raised thereon,—whether the circumstances under which he may have been placed as a Sapper and Miner could in any way explain the existence of these unusual appearances in the pulmonary tissue,—whether working oftentimes in an atmosphere loaded with particles of carbon suspended in the air, (as would be the case in many mining operations in military works,) could in any way have tended to the development of these deposits.

Let me first direct your attention to the state of the head, the scalp, and brain. In the former we have evidence of external local injury; in the latter proofs of an apoplectic cyst are unquestionable. I am anxious to point out to you the limit of the indications by which these two conditions are proved. The extravasation of blood beneath the scalp under the temporal fascia must have arisen from external injury, and when we find on minute examination that the temporal bone is fractured, the fact is established beyond doubt. On

examining the state of the brain and its meninges we observe blood extravasated beneath the dura mater, between it and the arachnoid, not upon the dura mater, between it and the bone. Blood has also effused between the pia mater and arachnoid, and at the most inferior point of the middle lobe of the left hemisphere, at the concavity of this lobe lying in the temporal fossa, and close adjoining to the line of fracture; the cerebral substance is observed discoloured, of a purplish brown, and the spot being opened, displays a clot of blood, surrounded by medullary matter—soft, pulpy, and of a brown-ochrey hue, presenting the condition usually recognised as *ramollissement*. These appearances are evidences of the apoplectic seizure. The presence of an apoplectic clot or cyst, without accompanying effusion of blood between the meninges or into the ventricles, is not incompatible with life. The cicatrices of many such cysts have been frequently observed in the brains of apoplectics. In a case examined by me two years since no less than five such cicatrices or remains of apoplectic cysts were observed, two in the left hemisphere, one in the thalamus, one in the corpus striatum of the opposite side, and one in the cerebellum. These were severally in various stages of obliteration, and corresponded in number and appearance to five distinct apoplectic fits that this individual had suffered from during the preceding three years. An apoplectic cyst, or sanguinolent clot, even though surrounded by a limited amount of softening, does not necessarily involve the cessation of the vital processes; but in the case before us the apoplectic condition of the cerebral substance was accompanied by effusion of blood between the pia mater and arachnoid, and between the arachnoid and dura mater. It is this transudation of blood beyond the cerebral mass and upon the surface, or into the cavities, of the brain that constitutes for the most part the fatal lesion in apoplexy; for experience proves that so long as the effusion remains encysted and confined to the cerebral mass, although paralysis usually supervenes, yet the organic functions still continue, those of sensation and motion being impaired. But when the blood escapes beyond the cerebral substance, and is transuded between the meninges, or into the ventricles, the functions of organic life appear to be incompatible with such lesions, and death speedily ensues. It follows from this that transudation of blood between the pia mater and arachnoid, or between the latter and the dura mater, must be accepted as a more fatal lesion than the existence of a clot in the medullary mass; in other words, a simple sanguinolent cyst in the cerebral substance is of less vital moment than one occurring in the superficies of the convolutions, and accompanied by escape of blood between the vascular and serous investments of the hemispheres.

I directed your attention to the soft ochrey-brown pulpy state of the medullary substance that surrounded the clot. This softened condition of the cortical portion must not be viewed as the result or effect of the sanguineous clot, but rather as a condition preceding, and predisposing, if not accessory, to the formation of the apoplectic cyst. There could be little doubt but that the brain had been undergoing some morbid

changes at this spot for some time previous. The mental symptoms spoken of by his wife indicate this. The frequent giddiness and uncertainty of gait, hesitation of manner, and a dread when walking of being run over, spoke of some changes going on in the encephalon inimical to its continued integrity. The opinion of the best pathologists is, moreover, in favour of this view,—that the *ramollissement* surrounding an apoplectic cyst must be admitted as a condition preceding, not following, the formation of the clot.

The coincidence of fracture of the temporal bone imparts to this case an additional interest; and had the circumstances under which he received this injury been less public, or had any mystery existed, as to the manner in which the accident happened, some questions of great medico-legal moment would have arisen, and would have embraced these considerations,—whether the apoplectic effusion, or the extravasation from the fracture, was the cause of death; and the question would comprehend the equally important one,—whether a blow, or any external violence sufficient to fracture a bone, could possibly induce such an apoplectic cyst as existed in this case, or whether it was not more probable, that the apoplectic fit first supervening, gave rise to insensibility and sudden loss of muscular power, under which the body might fall heavily, and thus account for the external injuries. In the case before us, the facts and circumstances under which the patient was found are sufficiently public and satisfactory, and preclude any speculation as to the probable origin or relation of any of the pathological appearances; but if this man had been found insensible and alone, and robbed, or any doubt had hung over the origin of the accident, then such questions as I have propounded would necessarily suggest themselves, and would imperatively demand a clear and explicit solution to satisfy the demands of public justice. In a medico-legal enquiry, the first point to be determined would be the nature and extent of the external injuries. Contusion of the scalp, with extravasation of blood beneath the temporal fascia and fracture of the temporal bone are present, all of which might equally result from a blow or a fall. These local injuries are unquestionably of themselves sufficient to cause death; but on examining the state of the brain, an apoplectic cyst is found, with transudation of blood between the pia mater and arachnoid, a lesion also incompatible with life. An important point thence arises, to which of these two competent causes are we to attribute the death of the person. I quote the following passage from a note in *Beck's Medical Jurisprudence*, p. 330. Article wounds:—

“If effusion of blood be found between the dura mater and the skull, and if a bruise on the scalp corresponds to the part, we may conclude that it has been caused by the blow; but if blood has been found between the dura mater and the brain, though we should discover the marks of blows, or even fracture of the skull, still the question may be, ‘might not the patient have been attacked with apoplexy during a struggle?’” A case is then quoted from Dr. Cheyne in illustration.

The unequivocal proofs of apoplexy, therefore, in this case would be accepted as satisfactory evidence,—that death was more likely to have been promoted by this cause than by the local injury; and this inference would be further established by detailing the condition of the brain surrounding the apoplectic spot. For it has been already shown that this softened discoloured condition of the cortical substance must have existed antecedently and could not in any way have been caused by the apoplectic effusion, still less by the local injury. The entire medico-legal question thus turns on the nature and extent of the cerebral complication in conjunction with the local injury. If the cerebral lesions are sufficient to cause death, and capable of being produced independently of external injuries, then we are bound to suppose that death ensued from causes originating in the brain, constitutionally produced. If, on the contrary, the cerebral conditions are such, that it is more likely they were caused by the external injury, such as simple effusion of blood, unaccompanied by any express circumstances proving a spontaneous origin in the system itself, we must then declare the external wound to have been the immediate cause of death, and death by violence, not from natural causes, would then be recorded.

The state of the lungs in this case were an excellent illustration of the conditions of interlobular emphysema, and the hypertrophied condition of the longitudinal fibres of the bronchi, even down to the smaller subdivisions, spoke of the existence of asthma during life, which was verified by the wife's account of the paroxysms of cough, to which he was subject. But there was one other condition of these lungs, or rather of the right lung, of peculiar pathological interest. In examining the lung of this side to determine its spongy crepitating condition throughout, the sense of touch was arrested at two spots, which felt hard and circumscribed. Their situation has been already noted: they appeared encysted, being surrounded by cellular tissue of a dense structure, and when cut into developed a black carbonaceous pigment, which, when examined under the microscope appeared to consist of amorphous granules of carbon, in a state of minute division. This deposit was not affected either by hydro-chloric acid, nitric acid, nor by liquor potassæ; but I much regret now that I did not submit it to more minute chemical analysis, with a view of determining its positive chemical properties. It was miscible with water, stained the fingers black temporarily, and the negative action of the acids and alkalis on it testify to its being similar to carbon, and if carbon, then in all probability, a deposit of carbonaceous matters inhaled by the respiratory function; for it had not the appearance of a matter deposited by secretion, nor any similarity to melanotic disease. Laennec has distinguished black pulmonary matter from true melanosis, one of the characteristics of the former being its isolated situation in the pulmonary tissue or bronchial glands, and its distinct carbonaceous character when chemically treated, while the latter is seldom or never found confined to one organ, but is distributed through several, and possesses distinct chemical characteristics of organic origin. Laennec also referred

the presence of the black matter found either in the bronchial glands or the pulmonary tissue to the inhalation of carbonaceous particles in minute division, floating in the air, and originating from the ordinary processes of combustion, whether for the production of artificial light or warmth. Laennec even considered the grey mottled appearance of the surface of the lungs of most patients to be dependent on minute quantities of carbonaceous matter, deposited and scattered irregularly through the lungs; and this mottled aspect of the surface he considered to be more prevalent in the inhabitants of towns than in those who dwell in the country, and he cites the appearance of the lungs of infants as corroborative of this view, in whom it is observed that the lungs are of a rosy pink and deficient in any trace of the mottled condition.

A case reported by the late Dr. J. C. Gregory, of a patient who died in the Edinburgh Infirmary, may be cited as one of the earliest recorded and best illustrated cases of this black deposit. In that case, "the lungs were found of one uniform black carbonaceous colour, pervading every part of their substance. The right lung was much disorganized, and exhibited in its upper and middle lobes several large irregular cavities, communicating with one another; a considerable portion of the pulmonary substance surrounding them was dense, hepatized, and friable. The bronchial glands were not enlarged, but partook of the same black colour as the substance of the lungs." The black matter was analyzed by Dr. Christison, and after determining the action of hydrochloric and nitric acid, and liquor potassæ upon it, and observing the negative results produced by each of them, a portion of that unacted upon by nitric acid was well washed, dried, and introduced into a small tube retort, with the beak subsequently drawn out fine; the bulb was heated to a dull heat, and all the products of the distillation from coal were obtained,—an inflammable gas, a volatile fluid like naphtha holding in solution a crystallizable matter identical in character with naphthaline. This analysis proved the carbonaceous deposit in this case to be coal dust in a state of minute division. The patient had been accustomed to work in the confined limits of a coal mine, and was constantly respiring an atmosphere impure and loaded with carbonaceous particles.

It is, however, to Dr. W. Thomson's report in the *Medico Chirurgical Transactions* for 1837 and 1838, vols. 20 and 21, "On black expectoration and black matter in the Lungs," that the profession is indebted for a more comprehensive account of the presence of carbonaceous deposits in the lungs of those engaged in the coal-mining districts. His paper furnishes unquestionable proof that the deposit is of more frequent occurrence among, if not specially confined to, those who work in mines, or in places the atmosphere of which is charged with carboniferous dust or vapours; those who work above ground, or in a purer atmosphere, seldom exhibiting these accumulations except in a trifling degree, and then principally confined to the bronchial glands. Dr. W. Thomson's record of cases also proves, that though many fall victims to the irritation which these extraneous particles create in

the pulmonary tissue, and die with many of the symptoms of phthisis, and whose lungs are found disorganized after the manner of those in whom tubercles are deposited, yet there is a class of cases in which the lungs are infiltrated with black matter without any marks or symptoms of pulmonary disease developing themselves during life. Among several cases of this class recorded, is one of a coal-miner, who died at seventy, and who had always enjoyed excellent health. He appears only to have suffered from some slight pectoral symptoms analogous to chronic bronchitis or pulmonary catarrh, and his death was occasioned by some hepatic disease. "Both lungs presented a perfectly black appearance externally, and when cut into, throughout both lungs were felt and seen hard masses of black matter, from the size of an almond downward. In the left lung were several chalky bodies encased in black matter. There was no black matter in the bronchial glands." From the record of these cases it would appear, that those who work in situations and at employments in which the air is loaded with dust or carbonaceous particles, are more subject to these black accumulations than others; and from the chemical nature of these deposits, we can hardly refuse to admit that their contents are extraneous, and the result of inhalation from without.

The occupations and duties in early life of the individual whose case has suggested these remarks, were especially calculated to facilitate these deposits; for although we have no history of his services, yet, as a Sapper and Miner, dying at the age of seventy-five, we may fairly infer that in early life he was actively employed in those military duties peculiar to his branch of the service, which would place him in circumstances oftentimes identical with the coal-miner, where blastings are frequently employed; and he would thus be equally exposed to all the conditions most favourable to the deposit of these carbonaceous accumulations.

The case of the poor girl, whose body has been examined this week, deserves also some remarks; for this case illustrates how extensive ulceration may proceed in the ileum and cæcum, without developing any well-marked symptoms for some period preceding death; and it also exemplifies how, even in the adult, the symptoms may indicate cerebral excitement and inflammation, rather than intestinal ulceration.

E. W., aged 19, a servant, was admitted November 24th. On being brought into the physician's room, she exhibited a dull, almost idiotic, manner, answering no questions, looking vacantly about her, but exhibiting no indications of physical debility or muscular prostration, for she walked to the hospital with her sister, and nearly up to St. Margaret's ward, unassisted, her condition indicating some obscure cerebral derangement. On being examined in the ward, the pupils were observed to be much dilated, the balls protruding, and she shrank quickly and sensitively when they were pressed. The skin was hot; the pulse frequent; the abdomen tympanitic, but soft and yielding, and no epigastric or cæcal tenderness could be detected; the tongue was red, but broad, and clean, and moist. She was ordered Hydrarg. Chloridi, gr.

iv.; Pulv. Ipecac., Comp., gr. vj., statim; with fever draughts every four hours.

The next day the pulse was 140; skin intensely hot; pupils insensible, being much dilated; the respiration much accelerated; stares vacantly about; answers no questions; protrudes the tongue when desired, which is clean and moist; face much flushed; eye-balls sensitive; skin bedewed with a copious perspiration; pulse 136, soft, but incompressible; the urine and fæces have been passed unconsciously, the latter have the ordinary aspect. The head was shaved; cold lotion applied. Antim. Potassio-Tart., gr. $\frac{1}{4}$; Opii Pulv., gr. ss., quartis horis.

The report on the 28th states that she passed a quiet night, but did not sleep; answers no questions; some little incoherence and muttering to herself; bowels have not acted, and the bladder was relieved by the catheter. Enemata were administered. At night on the 26th she appeared better, and was temporarily sensible, answering one or two questions in monosyllables. The night was passed quietly, and in the morning she was reported as much better; she even sat up in bed, and took a little arrowroot in the morning of the 27th, but soon after she suddenly became pale and death-like. There was no convulsion; but the pulse was small and rapid, and then imperceptible; the surface was bedewed with a copious death-smelling sudoresis. She gradually sank and died an hour after the change that appeared at 10 a.m.

Secutio cadaveris thirty hours after death. The body was well formed; no emaciation; on the contrary, the limbs were rounded and plump from subcutaneous fat. The cavity of the cranium exhibited well-marked indications of acute hyperæmia in all its parts; the vessels of the dura mater were much injected; the arachnoid was diaphanous and natural; the pia mater was highly injected, so much so as to present the appearance of a dusky-purple; the substance of the brain was natural, except the presence of innumerable red spots from the divided vessels, and the cortical part assumed a dark almost madder hue; the ventricles contained no more serum than could result from cadaveric exosmosis. The lungs and heart were healthy; the stomach and intestines distended with flatus; the lining membrane of the stomach was pale and natural in appearance, but easily detached and peeled off; the duodenum and jejunum was also remarkably pale and exsanguineous. The lower eighteen inches, however, of the ileum was studded with many warty ulcerations, this appearance arising probably from the enlargement of the follicular glands in the first instance and their subsequent ulceration; one ulcerated surface was more than an inch in extent, was oval-shaped, its margins considerably elevated above the surrounding membrane, and its cavity containing a dirty spongy matter, like gangrenous cellular tissue; the surrounding portions of mucous membrane were injected. The entire space of the cæcum was involved in one large, jagged, irregular, wart-like ulcer, its surface being wrinkled and covered with the same conditioned substance attached to the ulcers of the ileum. A nail's breadth beyond, the cæcum and the mucous membrane of the colon presented the

same pale state of the mucous membrane that marked the stomach and duodenum. The fimbriated extremities of the Fallopian tubes were both intensely congested; the ovaries contained minute serous cysts; the liver, kidneys, spleen, and pancreas, had a healthy appearance.

It is remarkable that inflammation and ulceration of the intestines are oftentimes accompanied by indeterminate and most obscure symptoms. From our knowledge of the functions of the intestines, and of the important part they perform in the animal economy, we might almost infer that the slightest deviation from healthy action would be expressed by some unequivocal symptom, which would emphatically declare the seat of the derangement; but such is not so. Of all the organs of the body under the influence of disease, the intestines exhibit the least expressive and most variable symptoms. This arises from the wide-spread influence exercised by the intestinal function over other and distinct organs, and the powerful sympathy excited in them by intestinal derangement; hence it is that certain portions of the intestinal tube, whether in a state of simple congestion, or even passing into ulcerative disorganization, may almost be said to possess no true pathognomonic characters, oftentimes giving rise to symptoms simulative of other diseases, and thereby masking the real though latent disorder.

The case before us is a well-marked example of the disguise under which intestinal mischief may present itself, and proceed to a fatal termination without developing any prominent abdominal indications. Except some trifling tympanitis of the abdomen all the symptoms declared for cerebral rather than abdominal disease.

It is commonly asserted in books that inflammation of the intestines in adults is easily determined and recognised in every part of their extent; but that in infants, and in the earlier periods of life, it is admitted that much obscurity often hangs over the symptoms. In children acute enteritis is frequently expressed by cerebral symptoms, but in adults, on the contrary, the greatest variety of sympathetic irritations develop themselves, and as a general rule it may be stated that the enteritis of children is more frequently expressed by cerebral irritation than in the adult; yet enteric disease in the latter not unfrequently declares itself by symptoms chiefly cerebral. It is usually asserted, and practically it is true, that inflammation and disease of certain distinct portions of the intestinal canal are sufficiently well-marked by specific pathognomonic symptoms. Thus, in inflammation of the duodenum, or as the stomach is usually involved in gastro-duodenitis, this condition is declared by the presence of more or less jaundice, pain and fullness over the region of the duodenum, irritable stomach, loaded urine, and clay-coloured dejections. If the stomach be alone the seat of inflammation, vomiting (obstinate and constant,) of a green bilious fluid, is the most prominent symptom. If diarrhoea, long-continued and exhausting, present itself, experience justifies us in fixing on the colon as the seat of the disease. Thus, when these isolated portions of the alimentary canal are involved in inflammatory or dis-

cases, the signs by which they are recognised, and the symptoms by which they are accompanied, are sufficiently distinct and unequivocal. *Post-mortem* examination testifies to the truth of this point in semeiology, for after frequent and obstinate vomiting the stomach is found inflamed and injected, and after long continued diarrhoea the mucous membrane of the colon is found in a similar condition. Now, conversely, this is true also, viz., if no vomiting or diarrhoea be present during life, we may safely infer the absence of any inflammatory condition of the stomach or large intestine. In the case before us there was neither vomiting nor diarrhoea, and the dissection proved the stomach and colon to be natural in appearance, and entirely free from any trace of disease.

The symptoms usually present in adults when the middle portions of the intestinal tube, the jejunum and ileum, are the seat of disease, are those of continued fever—hot skin; quick pulse; urgent thirst; tongue red, parched and dry; tympanitic abdomen, with iliac tenderness; great physical prostration and mental stupor. It is very rare that inflammation of the ileum in the adult proceeding on to ulceration, is unaccompanied by some of these symptoms more or less prominently expressed, and when a case occurs in which all are absent, and in the place of them a clean moist tongue, skin not elevated in temperature, no physical prostration, no abdominal tenderness, some slight resonance of the abdomen, a sharp quick pulse, with a remarkable amount of stupor and sudden death, with *post-mortem* proofs of extensive ulceration in the ileum and cæcum, and no cerebral lesion beyond congestion, the record of such a case becomes interesting from its deviation from ordinary examples, and is of much value and moment if it presents any analogy to cases of similar irregularity recorded by others. Dr. Stokes records a case of enteritis, in which extensive ulceration existed in the lower portion of the ileum; neither vomiting nor diarrhoea were present during life, and the stomach and colon were found perfectly free from vascularity. "In this case," he says, "the absence of vomiting and of diarrhoea in the more advanced periods is extremely interesting as connected with the healthy state of the stomach and colon." In the case under consideration, there was neither vomiting nor diarrhoea during life; the stomach and colon were free from all vestiges of disease, yet the ileum and cæcum exhibited many ulcerations in the lower portion of the ileum, and the cæcum was in a state of complete disorganization. Again, Andral relates a case of a patient, aged thirty-five, "who was attacked with pain of the head, followed by great loquacity and exaltation of ideas, and other symptoms of cerebral excitement. The tongue was natural and the abdomen soft and not painful. He had soon after furious delirium and indications of strong determination to the head. Copious general bleeding, and the application of leeches to the neck produced no alleviation, and the patient expired suddenly in the midst of a general spasm. The only local symptom of an affection of the bowels during the disease was a slight diarrhoea. On dissection, the brain and its membranes

were found perfectly healthy, but the lower third of the ileum was in the state of acute inflammation."*

As it is not doubted that much obscurity frequently attends inflammatory and ulcerative disease of the small intestines, it is of great moment to determine what signs are of most value by which we can distinguish the latent disease among the many sympathetic and anomalous conditions that involve it in obscurity. Is there any one specific indication on which we can uniformly depend? I believe not; nor do I believe that any series of symptoms is sufficiently constant to be relied on, as distinctly expressive of enteric ulceration. We have already seen, that although a hot skin, dry tongue, thirst, abdominal tenderness, and tympany, with indications of stupor, when present, may be accepted as proofs of enteric disease, yet the present case, as well as others elsewhere recorded, unquestionably declares, that ulceration may exist without any such catenation of symptoms. Now although ulceration of the ileum and cæcum may exist without a hot skin, with a moist, clean-looking tongue, without any morbid thirst, and with dejections, even natural and bilious in appearance, and no abdominal tenderness or tension, yet there are accompanying symptoms, chiefly cerebral, which, though oftentimes obscure, will, if closely watched, tempt us at any rate to doubt the presence of inflammatory action in the brain; and if so, to cause us to direct our attention to some other organ for an interpretation of this sympathetic irritation of the brain. I am anxious to ascertain if there be any peculiarity about the cerebral symptoms, by which we can distinguish them from those which arise in true inflammation of the brain and its meninges;—whether any distinction can be made between the symptoms developed in encephalitis or arachnitis, and those witnessed in cerebral irritation from enteric disease. In attempting this distinction, we must confine ourselves strictly to the mental symptoms; for the state of the pulse, skin, tongue, and excretions could only testify to the amount of concomitant fever. In cerebral inflammation, there is usually observed wild raving delirium; a great amount of physical violence; incoherence of ideas; extraordinary hallucinations; sleeplessness and general restlessness: these are succeeded by a condition more or less indicative of coma. The cerebral symptoms developed as sympathetic with intestinal disease, are characterised usually by a peculiar stupor; there is no raving delirium; the patient lies passive, dull and motionless; can be roused to temporary consciousness; will protrude the tongue when energetically required to do so; the nights are sleepless, but the patient remains quiet and apparently undisturbed; the pupils are oftentimes dilated and the eye-balls glazed. These are the usual characters of the symptoms in sympathetic irritation of the brain from abdominal irritation. Yet it is evident that these symptoms cannot always be relied on,—as in Andral's case, the symptoms were of exaltation of all the mental faculties, with incoherence and delirium. I cannot but advise you, however, to suspect something other than cranial disease, if a case presents itself with

* "Cyclopædia of Practical Medicine."

the peculiar stupor which I have described, and which has not been preceded by any more acute symptoms of cerebral inflammation; if, in addition to this stupor, there be abdominal tension and tympanitis, you may with great reason suspect the head-symptoms to be sympathetic; if, also, there be tenderness about the right iliac region on pressure, the patient shrinking when pressure is made there, and if there be a hot skin, rapid pulse, red dry tongue, with craving thirst, you need not doubt but that you have a case of enteric disease to treat, and that with such symptoms your prognosis cannot but be otherwise than unfavourable.

ON THE TREATMENT OF OVARIAN DROPSY BY OPERATION.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

"Nunquam aliud natura, aliud sapientia dicit."

I feel indebted to your correspondent, INQUIRER, for an opportunity of supplying an important omission in the review I took of my case of ovarian dropsy published in your Journal, the 16th of last December. If I rightly appreciate the tenor of his enquiries, he wishes to know the data on which I have arrived at my conclusions respecting the comparative absence of danger, and the superior advantages attending operations conducted on the principle I advocate. To form a complete collection of the cases which bear directly or indirectly on the exemplification of this principle, scattered as they are over such a wide field of research, would be a task incompatible with the discharge of my professional duties. The subjoined abstract, though incomplete, will however, I trust, not merely satisfy him that I had sufficient grounds on which to base my deductions, but also attract and fix the attention of my professional brethren to the subject, and induce them to give the operation in question a fair trial.

EIGHTEEN CASES OF OVARIAN DROPSY, TREATED ON THE PRINCIPLE OF MR. BAINBRIGGE'S OPERATION.

London Medical Gazette, Vol. 18, p. 469.—An operation for relief of ovarian dropsy is recorded. An incision of about an inch and a half was made below the umbilicus; the sac was opened to about the extent of three inches, and evacuated, and a ligature passed through it, and secured externally, in order to keep the sac in contact with the abdominal parietes. There was a discharge for about a month, when it ceased, and the opening closed. *The result was a permanent cure.* By Mr. Currie, Liverpool.

Memoires de L'Académie Royale de Chirurgie, tom II., p. 431 to 444, An. 1753.—A detailed report of two cases by Le Dran, in which an incision was made into the cyst, the contents evacuated, the wound kept open, and the suppurative process established in the cyst. *The result was a permanent cure*, a fistulous opening remaining in one of the cases for two years, and in the

other for the remainder of the time up to which he had observed the case.

It appears that subsequently to these two successful cases Le Dran was in the habit of operating in this way. He says, he always found the fistula remained permanent, except in the solitary case above given, where it closed in two years. To keep open the communication with the interior of the cyst, he sometimes employed a tent, at others left the canula or even leaden tubes in the wound, and occasionally used injections. He remarks on the inefficacy of tapping, and then says "J'ai osé tenter une nouvelle route et le succès a répondu a mon espérance," from which it is natural to infer that he was eminently successful.

Lancet, Vol. 13, p. 879.—Allusion is made to the above cases; and a similar one by Portal is mentioned, in which a cure followed.

Lancet, Vol. 20, p. 603.—A case by M. Rigollot, of St. Etienne, is given, in which after the use of the trocar irritating injections were employed. *The cure was completed in a month.*

London Medical Gazette, Vol. 23, p. 349.—A case of ovarian dropsy, treated by tapping the tumour in the vagina. Although intended merely to liberate the fluid by tapping, the wound kept open, and a continuous discharge took place. *Permanent cure.*

Edinburgh Medical and Surgical Journal, vol. 16, p. 367.—A case of operation by incision,—closure of the opening by the surgeon,—spontaneous re-opening of it subsequently, of about the size of a small pea from which, on the slightest exertion, matter flowed freely, which the operator considered an unusual effort of nature for her relief; it was followed by permanent subsidence of the tumour and restoration of health. By Dr. McKeever, Lying-in Hospital, Dublin.

In my case, as in the above, I regard the continuance of the discharge as an effort of nature to suppress any further development of the disease.

Medical Times, vol. 8, p. 235.—A case is quoted as having been given by Dr. Ollenroth, in which the wound was kept open, and the contents of the sac allowed to escape through it for a considerable period; followed by a permanent and radical cure.

London Medical and Surgical Journal, vol. 4, p. 428.—A case of permanent cure is recorded, by an incision into the sac, partial evacuation of its contents, and a tent left in the wound. Through the opening a fluid and portions of the cyst from time to time were discharged. The opening remained fistulous.

London Medical and Surgical Journal, vol. 6, p. 320.—A case, by Mr. Langley, of ovarian dropsy, complicated with pregnancy. He punctured the cyst in the vagina, the contents came away, and the woman was soon after delivered. The editor remarks upon it:—"The result of the case warrants paracentesis per vaginam; the advantage would be the gradual and constant discharge of the fluid by an opening so dependent." Of course he must allude to the fluid draining off as soon as formed again in the cyst, and