PROVINCIAL MEDICAL & SURGICAL JOURNAL.

A COURSE OF LECTURES ON CLINICAL MEDICINE.

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LECTURE IV.

Case of continued fever: history of the case; general character of continued fever; distinction between simple and complicated; necessity for closely watching the earliest symptoms of cerebral, pulmonary, or abdominal complication; dulness of the posterior region of the thorax, not necessarily an indication of pneumonia; difference of treatment if pneumonia be present.—Value of auscultation in fever.—Miliary eruptions in fever; petechiae and vibices indications of typhus.—Stupor and intellectual dulness expressive of cerebral congestion.—Treatment of continued fever. Case of acute rheumatism: history of the case; varieties of this form of fever and their characteristic features.—General principles of treatment in acute rheumatism.—Tendency to cardiac metastasis; value of auscultatory signs; importance of prompt measures on the earliest indications.—Treatment of cardiac complication.—Proofs that acute rheumatism is identical in pathological character with true inflammation.

Gentlemen,—There is a case of continued fever in Burdett Ward, now rapidly convalescing, to which I had frequent occasion to refer during the progress of the fever, for the purpose of explaining to you the nature of several special symptoms that from time to time were developed. The general character of the fever in this case, was that of *synochus*, and, like most cases of fever in London, it was of an adynamic type, but not sufficiently so to constitute typhus; yet if we look to the mere derivative meaning of that word, we may think it appropriately enough applied to this case, from the prevalence of a greater degree of stupor than is usually present in ordinary cases of continued fever. The term typhus originated in the Greek word *τυφος*, *stupor*, and was intended to apply to a form of fever remarkable for the protracted comatose or stupified state in which the patient continued. But, practically, the term should be limited to fever that presents features of a peculiar type, expressive of great want of power and tendency to collapse and prostration of the muscular system, low muttering delirium, and general failure of the intellectual perceptions. *Synochus* is the most appropriate term as applicable to the case before us, simply meaning to continue, and expressing the running on, or continuation through many days, even weeks, of a series of symptoms which

seem to require a certain duration of time to work changes in the system, apparently necessary to its relief. Or the term *synochus* may be taken as expressive of a distinction between a class of febrile disorders which exhibit distinct intermissions or periods of *apyrexia*—intervals of perfect remission of all the symptoms, and hence called intermittents, and those which possess no such intervals, but which proceed continuously from the first, without any or with imperfect mitigation of the febrile symptoms, and hence in reference to the former called *continued*.

The case of J. S., aged 24, a young labouring man, illustrates the character and special symptoms of continued fever. By his own account, the premonitory stage was well marked. He was admitted on the 7th Nov., having been ill eight days. At first there was great lassitude and weariness of the frame; indisposition to bodily exertion; there was anorexia. On the third day he had headache, then rigors, and great bodily prostration. He had medicine for these symptoms. On admission the countenance was dull and inexpressive; the eyes suffused and glazed; the cheeks flushed; the skin was hot and moist; the whole surface was covered with a minute miliary eruption; the tongue was dry and brown on the dorsum, but moist at the sides; the pulse was 126, weak and soft. The abdomen was neither tumid nor tympanitic, nor was there pain on pressure except at the epigastric region. Respiration was accelerated; there was dulness posteriorly and inferiorly on both sides; but no crepitation or bronchophony, or mucous gurgling. The bowels had been moderately moved with offensive dejections, and the urine was high coloured and of a strong odour. He was ordered—Hydrarg. Chloridi, gr. viij.; Opii, gr. ss., statim. Mist. Ammoniacæ Acetatis, oz. j., quartis horis. Haust. purgans si opus sit.

On the day after admission a copious evacuation from the bowels was followed up by a strong purgative saline, and an improvement in the fecal evacuations was the result. The general appearance of the patient had improved; he had slept well; the pulse had become fuller, although still high, 120; tongue was moister; but the skin continued hot, the countenance dull, and the eyes suffused. Ordered the *Mistura salina ammoniata*.

On the 9th the face was not so flushed, but the skin was still of augmented temperature, and the miliary eruption assumed a very florid appearance; intellect very dull, but was quite sensible when roused. Hydr. Chloridi, gr. ij.

On the 10th the eruption began to recede; the tongue was very dry, brown, and hard, some indication

of moisture at the sides; bowels open, evacuations still offensive; sleeps much, and heavily, and has become very deaf. On the next day symptoms became aggravated; some delirium during the night; sordes collecting about the teeth; tongue dry; face flushed; conjunctiva congested; skin hot, but evidences of moisture on the chest and abdomen; intellects as if stupified; much thirst, drinks greedily; dulness of the posterior region of the thorax still continues, but no other physical sign. Cold lotion to the head. Continue the mixture. Port-wine, oz. ij. Saline purgative.

During the two next days you observed improved alvine excretions; the skin falling in temperature; pulse becoming less frequent, soft, and indicative of more power; intellectual condition appeared less dull, but he had become so deaf that the attendants were compelled to roar in his ear to make him understand; the eruption had entirely faded.

On the 15th the countenance had acquired a natural placid expression; the eyes were no longer blood-shot and glazed, but the sclerotic was clear, and the eye bright and intelligent; the skin was of a natural temperature; there was no morbid thirst; and the perceptions of the palate had returned; he was also less deaf. He was ordered the Inf. Cinchonæ cum Acid. Nitric. dil., with improved diet, and he is now gradually progressing to convalescence.

In the systematic works on fever, you will find synochus mentioned as presenting two varieties, the simple and complicated. Now, there is no circumstance in the treatment of fever that should be more earnestly insisted upon, or more emphatically impressed on your memory, than the necessity for closely watching, and minutely examining, the nature of every symptom that may indicate the existence of inflammation in any internal organ. When such evidence is present, we have not a case of simple congestive fever to treat, but one perhaps of serious organic complication. In the early stages of fever, therefore, a careful examination of the condition of the more important internal organs—the pulmonary and abdominal—becomes absolutely necessary. The chest and abdomen should be daily examined, carefully and minutely.

In this case there was no abdominal complication, no tympany, no caecal tenderness; some trifling sensitiveness in the epigastrium was alone present. On examining the chest dulness was detected posteriorly and inferiorly on both sides, but there was no crepitation, nor any resonance of the voice; no mucous rhonchi to indicate bronchial secretion. These physical signs were unequivocal as to the absence of pulmonary inflammation; and we had here simply evidence of the ordinary concomitants of continued fever—a congested condition of the inferior and posterior regions of the lungs; a condition shared, for the most part, by all the internal organs, pulmonary as well as abdominal.

I most anxiously wish to impress upon you that it is of the last importance to decide the presence or absence of pneumonia in fever; or, in other words, to determine whether the fever be idiopathic, or complicated and symptomatic. Oftentimes the symptomatic or concomitant fever of pneumonia possesses all the features of idiopathic synochus, and as regards their general character, they do not, of themselves, testify or indicate any pulmonary complication; but auscultation at once determines the point. There is

dulness in both lungs posteriorly, but there is no crepitation, no bronchophony; there is no evidence there of pulmonary inflammation. Moreover, both lungs are not usually simultaneously the seat of pneumonia, but they are always equally the seat of congestion in the severe forms of continued fever. Practically it is of the utmost importance to determine these conditions of the lungs in fever. If symptoms of inflammation be present, our efforts must not be relaxed, whatever the type of the fever may appear, to modify and control that inflammation; and so long as there may be evidence of inflammatory action,—positive, unquestionable evidence of pneumonia, antimony, calomel, and opium, must alone be relied on, whatever be the concomitant febrile condition. Wine and stimuli would, under such circumstances, be only fuel to the fire, which, if not quenched by antiphlogistic remedies, must ultimately consume the patient. But if otherwise, if only evidence of congestion be present, if it be equally present in both lungs, if there be no crepitation, no resonance of the voice, no sputa, the accompanying fever being apparently of the same type as you may witness in pneumonia,—I say apparently, for it is not to the experienced eye at all analogous, yet, under these distinctive circumstances, distinctions which auscultation alone allows you to detect, the treatment requires to be far different, in some respects almost opposite. A moment lost in these cases, and the period inadvertently passed in which stimuli are available, the powers of the patient rapidly sink, and no efforts of ours, no dosing with brandy, opium, and cordials, can avail anything. The stethoscope thus becomes a most valuable agent in determining the necessity for one or other of two courses of treatment, and either of them injudiciously or erroneously employed, infallibly leads to aggravation of the symptoms, and a most unfavourable prognosis.

The dulness posteriorly evident in both lungs in this case, expressed only the condition of simple pulmonary congestion, in which all the internal organs more or less participate in all cases of continued fever; and the evidence of this state of the lungs from the first assured me, that as the fever progressed, and the symptoms declared themselves more and more of an adynamic character, wine and stimuli would become necessary, and might be unhesitatingly employed.

The presence of cutaneous eruptions of a miliary character is by no means uncommon in the severe forms of continued fever. The character of the eruption may oftentimes be accepted as a very good interpreter of the type of the accompanying fever: simple miliary efflorescence of the skin is the mildest condition, occurring as a series of minute red points or dots, not coalescing, but varying in intensity of colour—one day appearing of a bright crimson, then becoming faint and evanescent, and again appearing and receding during the progress of the fever. Petechiæ are but a similar condition of the skin, occurring in cases in which the symptoms are of a more asthenic character; and instead of the bright red eruption becoming fainter and receding, the spots become of a dusky, dark, and even purple hue, but still remaining distinct. In the worst forms of typhus, these spots run together and coalesce, and produce ecchymosed patches, such as are present in purpura hæmorrhagica; these constitute the vibices of authors, and are expressive of

the lowest condition of the vital powers, the tonicity of the capillaries of the skin being exhausted, and hæmorrhagic transudation infiltrating in circumscribed spots beneath the cuticle. In this case, however, the skin exhibited only the rose-red evanescent miliary eruption; yet, though this condition testified to a greater tendency to asthenia than if no such eruption had been present, it was of the mildest form ordinarily present in continued fever.

There was much stupor and dulness of the intellectual faculties, and that at an early period of the fever—it was evident even on admission—the face was flushed, the eyes suffused and inexpressive, the intellect dull, and deafness was co-existent with these cerebral conditions. They spoke of a condition of the cerebral cavity similar to that which auscultation detected in the thorax,—simple congestion—hyperæmia—a stagnation of the blood in the capillaries of a part—a passive condition not terminating in any of the products or results of inflammation, obtunding and diminishing the functions of an organ by the retardation of blood in the capillaries, but not destroying or impeding function, as is the case when inflammatory action is present. The category of cerebral symptoms also spoke and testified of debility and want of vital energy. There was but little delirium; the stupor was of a comatose character, the patient sleeping heavily and stertorously, from which it required some exertion to rouse him. He could, however, be made to comprehend questions put, and was never but for a few hours delirious. These symptoms then, were of a more favourable aspect, than if there had been much delirium or incoherence, wakefulness and restlessness; and if his powers could be supported we had not much to fear from the products of inflammatory action. Delirium was present for a few hours; so soon as this appeared, cold was applied to the head.

There is uniformly present in these cases evidence of vitiated secretions, both cutaneous, alvine, and urinary; even the exhalations from the lungs are offensive. The mucous secretion of the alimentary canal is especially depraved; the salivary fluid is both deficient in quantity and altered in composition; the amount of organic matter is much increased, even the proportion of ptyalin is augmented, and the inorganic salts, the tribasic phosphate of soda, ($3\text{NaO} + \text{PO}_5$), and the chloride of sodium, are, both relatively and absolutely, much increased. The alvine evacuations were in this case for some days dark coloured, of a dirty mud appearance, and occasionally black, and always most offensive. The urine is more highly azotized, or in other words, contains larger proportions of urea and uric acid than in health; exemplified by the high specific gravity, dark orange colour, and repulsive odour, and rapid tendency after voiding to become ammoniacal. These condition of the excretions are for the most part the result of the universal condition of hyperæmia of all the internal organs of secretion, and require for their relief, the agency of alterative medicines, purgatives, diaphoretics; and, of equal importance, acting in conjunction with, though not superseding any of the former, opium. For the successful action of other remedies it is absolutely necessary that the turbulent and irritable condition of the cerebro-spinal system should be allayed. Irregularity of secreting function cannot exist to any great extent,

or in several organs simultaneously, without inducing a large proportion of nervous disturbance, expressed by restlessness, fretfulness, and general irritability. Purgatives, whether saline or mercurial, and diaphoretics will, in many cases, if given uncombined with opium, appear to aggravate the nervous irritation, and excite a larger amount of febrile restlessness; but when judiciously combined with opium, the purgative power of the one is in no way diminished, or the influence of the diaphoretic over the exhalent vessels of the skin in any degree lessened. On the contrary, the action of both class of remedies becomes modified, and an increased action from the excretory organs is obtained without any additional drain on the already exhausted and over-excited nervous system. The condition of the alvine discharges in every case of continued fever demands our constant attention; they should be inspected daily, so long as their appearance indicates the necessity for further purgative action. This examination should never be intrusted even to the most experienced nurses; they know but little of such matters, their value depends upon other qualifications; your own experience and judgment are emphatically required in determining the condition of so important an indication as may be obtained from the character of the alvine evacuations.

In this case purgative doses of the hydrargyri chloridum were in the first instance relied on, followed up by ordinary saline laxatives; but you will recollect that those calomel purges were combined with a small quantity of opium, and followed by ordinary purgative draughts. In the progress of the case, about the fifth day after admission, the dejections again indicated the necessity for purgative remedies; the stools were black and offensive; delirium had supervened; and other indications of an unfavourable character. A brisk action was obtained by a dose of calomel and opium, and the patient revived in a few hours, as if the system had been relieved of some toxic agent, under whose influence the powers of life appeared to be rapidly succumbing; and there can be little doubt but that the retention in the large intestines, of the offensive and depraved educts of secretion is of itself alone capable of inducing these depressed symptoms of failing powers, by impregnating the system with the poisonous gaseous products, developed by the accumulated secretions in the colon. These secretions while detained there, rapidly generate sulphuretted hydrogen; this, instead of being discharged per anum, is absorbed into the blood, circulates through the organs, and gives rise to a similar catenation of phenomena as would be produced by the poisonous agency of the same gas, inhaled by the lungs and surface of the body. The necessity, therefore, for carefully watching the alvine excretions and the paramount necessity for the action of purgatives in cases of continued fever are, I hope, made sufficiently manifest to you. The excretions once assuming a bilious and fæcal character, may in all cases be taken as a favourable symptom. Judgment is now required not to push the action of depletory purgatives too far, and at this juncture of the case, in the majority of instances, stimuli will become necessary, either ammoniated or vinous.

In this case, on the 12th, we had an improved condition of the bowels, and a change for the better in some other respects. Wine in small quantities was now ordered, and additional quantities of beef-tea were

employed with palpable advantage. The tongue now became moist, the countenance more expressive, there was less heat of skin, less thirst—all most favourable indications. On the 14th the bark and acid were prescribed. On the 16th the deafness had left him; and now there is a craving appetite, clean tongue, healthy actions from the bowels, and a confirmed state of convalescence.

(To be continued.)

ON THE TREATMENT OF INTERNAL INFLAMMATION BY OPIUM.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

In answer to the letter of "A Member," which was inserted in the Journal of the 18th inst., I beg to send the accompanying paper, and I hope that the system of question and answer which it brings to our notice will receive from the Association that support which its importance demands. It is an excellent mode for obtaining opinions on particular points of practice, and if some of the questions were put so as to admit of brief replies, we might hope to obtain a portion of that experience—the accumulation of years—which at present we but too frequently lament to see taken by the general practitioners to the grave. We should, I say, receive the support of many who are possessed of ability and inclination to contribute, but who are prevented from doing so in consequence of the incessant claims upon their time, which a large general practice necessarily entails.

If the Journal should succeed in doing this, it will confer an inestimable boon on our profession, and add another laurel to the wreath of the distinguished founder of the Association.

I am, Sir,

Your obedient servant,

RICHARD CHAMBERS, M.D.,

Physician to the Essex and Colchester Hospital.
Colchester, Nov. 20, 1846.

We cannot, I think, rely upon opium alone in the treatment of any inflammation; we must only regard it as an adjuvant—but an essential and most invaluable one. Considered in a comprehensive sense, the value of opium depends upon its power of blunting nervous sensibility, and thus diminishing the sensation of pain. Pain exercises a double action; in some cases it exhausts vital power; in others, again, it re-acts upon the vascular system, and it keeps up inflammatory action. When we remember the extreme sensitiveness exhibited by serous membranes when in a state of inflammation, we would from this cause alone, be disposed to regard opium as more especially applicable in the treatment of inflammation when it attacks those membranes, and so it is universally found to be.

It is in peritonitis more particularly, that we are enabled to see the effects of opium, as the proximity of the brain, lungs, and heart, and the liability to co-existing inflammation in either of these organs, render opium less eligible in the treatment of inflammation affecting their serous coverings. If we were called upon to treat peritoneal inflammation, at its first onset,

one venesection, followed up by a full dose of opium, as recommended by the late Dr. Armstrong, would effect a cure. As it is, however, but very seldom that we are consulted in the primary stage, we are compelled to call in the aid of mercury or antimony, to restore the equilibrium of the capillaries.

Opium only professes to relieve pain; but we must bear in mind that in many cases, if this were not done, the system would yield to the disease before either antimony or mercury could exercise a curative influence—and in all, the duration of treatment is considerably abridged by it.

The principle here contended for admits of a very general application in the treatment of diseases, but more particularly in cases of neuralgia, in which affection I have frequently found the internal administration of tonics, combined with the local application of narcotics, cure cases that had previously resisted the use of every description of tonic.

I may refer your correspondent to the last volume of the Journal, for the particulars of a case of strumous peritonitis, successfully treated by the combined use of opium and mercury. So to speak, the mercury cured the disease, but the opium saved the life. In fact both were essential to the cure, and I am in a position to state, that a more apparently hopeless case never terminated so favourably; in fact it was pronounced to be irrecoverable by two experienced medical men.

I had an opportunity lately of seeing a case in which opium was freely used; and, although the patient died, I am not the less satisfied with the benefit which the opium afforded. A short sketch of the case may prove of interest.

A carrier aged 60, for years the subject of a reducible hernia, was admitted into the Colchester Hospital, November 8, 1846. About a week previous to his admission he was seized with slight indisposition, accompanied with abdominal uneasiness; it did not, however, prevent him from attending to his ordinary work till two days previously; the next day he was much worse, and for the first time discovered he could not return the hernia. On admission he felt weak, and complained of tenderness all over the abdomen; there was no sickness, and the bowels had acted the day before. He was immediately attended by Mr. Partridge, who resorted to the usual means for returning the contents of the hernia, but all attempts proved ineffectual, and as there were no very urgent symptoms demanding an operation, its consideration was deferred till next morning, the 9th, when he was met by his surgical colleagues in consultation. The hernia was still irreducible; and although the bowels were acted upon in the night, as there was an increase of the tenderness over the lower part of the abdomen, and the non-reduction of the hernia tended to depress the patient, an operation was decided upon, and performed by Mr. Partridge, with his usual coolness and dexterity. On opening the sac, there was an immediate issue of several ounces of sero-purulent matter; altogether about a pint was discharged. No stricture could anywhere be detected, and the intestine was quite healthy. It was found impossible to return the contents of the sac, from a cause that will be subsequently stated; a pledget of wet lint was placed over the wound, and it was resolved to afford him the only chance that there