AN ADDRESS

ON THE

USE OF OPIUM AS AN AID TO SURGERY.

Read before the West Kent District of the South-Eastern Branch.

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It has ever been my thought, that every man's personal experience, gained over a series of years in a large hospital, should not be allowed to run to waste, but that it is the duty of every one who has travelled through such rich fields of experience to render some account of his stewardship, in whatever manner may appear to him most desirable; more especially so, if his attention have been drawn to any particular points of practice. Unless there be some record of his observations, the fruits of his work fail to be of advantage for long, when otherwise they might effect some permanent good.

It is with these views, that I have ventured to think a few observations on the use of opium in surgical practice may prove of some slight interest on the present occasion; and although, I fear, I may have little new to say on such a subject, still I trust that what little I have to bring to your notice will give rise to discussion, and thus elicit the opinions and the results of the experience of others, equally capable of throwing some light on the subject and of adding to our practical information.

My attention was early drawn to the beneficial effects of opium, by my teacher and friend, Mr. Cutler, many years surgeon to St. George's and the Lock Hospitals, and also some time surgeon to the Second Life Guards, in all of which positions his opportunities of observation were considerable in the use of opium. These early impressions were strengthened in my mind when, as a student, I read the works of Travers "On Constitutional Irritation." Therein I found the practical teaching of the one confirmed by the writings of the other.

I shall hereafter have to refer to some observations of the latter on the importance of the administration of opium in certain conditions of the system; but at present I wish to restrict myself to the more practical question of what I have myself observed, and the general conclusions arrived at as to the advantages and disadvantages of opium in practice.

In Squire's last edition of the *Companion to the British Pharmacopœia*—a work of great value to the profession—he says "opium has three main physiological effects. It diminishes pain (insensibility), it causes sleep, it arrests secretion, excepting that of the skin, which it promotes" (p. 225).

This appears to me, a very inadequate estimate of the beneficial uses of opium. As far as my experience permits me to value its properties, it certainly has great influence, in what manner I do not venture to explain, not only in arresting secretion, but in helping to restore healthy action in most conditions of ulceration and slough; in giving tone and support under many circumstances, and especially in soothing and quieting the nervous system in gangrene or mortification of the extremities; with not unfrequently a very satisfactory local result. In the latter class of cases, opium frequently appears to help in maintaining life until the condition of the part is no longer an immediate source of danger, or it places the patient in a state which enables the surgeon to undertake with some hope the local treatment of the diseased extremity.

I feel sure that those whom I have the honour to address will support me as to the importance of the observation that the medical element in surgery cannot be too strongly insisted on. Robert Liston's observation to me on this subject is to the point, "that the work of a surgeon should be that of a physician, and something more." Travers truly says: "The medical treatment, a duty not less responsible than the operative, belongs to the surgeon."

It is in the various conditions of gangrene that opium may be said to stand alone as useful and powerful for good. Whether the gangrene be the result of injury in old age, or whether it appear in an ulcer in advanced life, kept open by neglect, or rendered more irritable from exposure—in fact, in almost every condition approaching to gangrene, or partaking of it, save two or three to which I will hereafter refer, the administration of opium may and should be had recourse to; always with safety, frequently followed by great advantages, and not unfrequently helping to restore the patient to health and prolonged life. "If I were to restrict my pharmacopœia for gangrene to a single drug," writes Mr. Travers, "I should choose opium without hesitation,

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as being that alone for which I could find no substitute, and of most general efficacy in allaying the irritation, and upholding the powers of the constitution. As for any other narcotics save opium, they are not worth the mention."

I must here also quote the forcible words of Dr. J. A. Wilson, formerly Physician to St. George's Hospital, on the value of this drug: "How full of wonder," he writes, "how worthy of admiration, is the drug whose rule is sleep. Opium, when in active circulation through the body, influences all nutrition, and modifies every secretion. Its effects on particular functions are so marked and various that, observing them separately, we fail to consider them in their combination. Opium is alterative in the widest sense of the term, and should never be prescribed for the use of a part, but in remembrance of its power over the whole. The more frequent application in medicine of the rule thus inferred from opium, would correct much that is now bringing reproach in its practice."

In the forms of gangrene above alluded to, pain is often a forerunner, and most frequently a very marked symptom, of the threatened evil. The patient will complain of great suffering, if the limb be lowered, or the foot placed on the ground. This condition appears to be due generally to some defective arterial circulation and nerve-disturbance. I have frequently examined the main arteries in such instances, and found them pervious; but with, perhaps, here and there, and generally, some evidence of atheroma. Probably, in all such cases, some arterial degeneration is usually present. In many, the pain is often, beyond any expression, in advance of, and far greater in proportion to, the local change.

The pain of diseased artery is a very marked point, and practically important; inasmuch that, in continuous pain, with obscure cause of explanation, I have usually been inclined to prognosticate the arrival of some later positive evidence of diseased artery, or, in its absence, the existence of cancer. The importance of pain as a symptom cannot be too closely considered; it will usually be found, sooner or later, a prominent feature in threatening or established gangrene due to arterial defect.

It is in cases of gangrenous ulcers that we have, in opium, a sure helpmate and a certain friend. Administered internally, it arrests or modifies any tendency to ulceration or sloughing; it soothes pain; it appears to husband the power of the patient; the irritable surface or gangrenous edge, under its influence, generally and soon becomes changed to a clean healthy granulating surface, surrounded by its characteristic whitish margin of skin. The external application of opium, in some convenient form, appears occasionally to assist towards such beneficial results, but seldom or never is potent, of itself, to curb the action of ulceration.

In senile gangrene, I know nothing, as regards medical treatment, which can compare with the internal use of opium. It alone will mitigate the severe pain of this formidable malady; it alone appears capable of affording that comfort which may render life tolerable, and, perhaps, tends to prolong it until the wished-for line of demarcation appears, and the condition of the patient becomes such that local treatment may be more advantageously called into action. Under any circumstances, in senile gangrene, opium may be used freely; under the worst forms, it should be used with the view to modify suffering, and ease the few remaining hours of life, when a fatal termination may be surely prognosticated. There are, however, certain conditions of gangrene in which the use of opium internally, as far as my experience tells me, does not appear to influence in any favourable degree. There are few rules in life without an exception; and I fear, as in medicine, so in surgery, our rules must be allowed to have many exceptions.

The condition of gangrene in which the use of opium must not be depended on for good, in which indeed, if trusted in solely, it would prove worse than useless is, first, that of traumatic spreading gangrene. If I may be allowed to express myself strongly on this particular point, I would say that it would be almost culpable to trust one moment to its administration in such a case. I shall be glad to profit by the experience of those whom I have the honour to address, as to treatment in this form of gangrene. It must be allowed to be a most urgent condition; formidable in character, and one that requires early and energetic treatment, if life is to be saved. With loss of time, we lose the favourable opportunity for acting while operative interference is alone justifiable and promissory of good. Delay is always dangerous; and any trial of medical rather than of local treatment will surely terminate in disappointment, even under circumstances in which it might be anticipated that the latter would fail to save life. Again, in the well known form of gangrene attendant on diabetes, opium brings little or no help. It may soothe, it may modify discomfort, but it is not required to relieve pain; pain is usually a minus quantity in this pecu-

liar form of gangrene. The latter is, like senile gangrene, frequently seen to commence at the extremities of the lower limbs, is moist in character, and often spreads rapidly under the integument rather than implicating it to an equal extent. In its progress, it is usually seen to extend along the planes of cellular tissue, and not to involve all soft structures alike. It is usually the forerunner of death in old and confirmed cases of diabetes.

In severe cases of carbuncle in association with diabetes, we meet with similar results. In such cases, no healthy attempt to limit slough appears capable of being established. It may be truly said, "the pitcher is broken at the fountain"; the urine gives evidence of excess of sugar. We may pretty surely write it down, that the commencement of slough or gangrene, in a diabetic patient, is usually the commencement of the end, and that the end is generally not far removed.

Gangrene, when the companion of diabetes, is the outcome of some deteriorated condition of the fluid which circulates, the original cause of which is no question of the present; but over this condition opium appears to possess no influence. The other, senile gangrene, is the result of vessels incompetent to supply sufficient fluid nourishment to certain parts, and consequently these parts die. In such cases, opium, however it may act, certainly must be considered our sheet-anchor in the storm the constitution has to encounter.

What has been said as regards the use of opium in traumatic spreading gangrene, and gangrene in diabetes, applies also to a great extent to gangrene the result of embolism.

In the various forms of phagedæna, I have seen most satisfactory results follow on the internal use of opium. I would especially urge the importance of, and benefit from, its free administration in all cases of this formidable evil. It has fallen to my lot to see much of sloughing sores—phagedæna in its every variety, in hospital and in private—as the result of syphilis or of dissipation, and attendant on accidents or operations.

The administration of opium in such cases is nothing new to advocate; it has been recommended by many besides myself. Sir Joseph Fayrer, in his *Clinical and Pathological Observations in India*, relates the particulars of a case of sloughing ulcer of the foot, in which the doses of opium were pushed to seven and a half grains every three hours before the sloughing process was arrested (p. 154.) But I have reason to believe it is not so generally appreciated as it deserves to be, and as it would be if more generally and completely tested. I say so for this reason: my experience as one of the examiners of candidates for Her Majesty's medical services has brought me into contact with gentlemen connected with all the schools of medicine in the United Kingdom. My communications with them, now extending over a period of several years, and consequently including a very considerable number of candidates, has resulted in the conclusion that the general teaching as to the treatment of such cases is rather towards dependence on local than on constitutional treatment. I do not presume to say that the former is wrong; I ought rather to say that it is right, when no other treatment can be had recourse to at the moment. It is severe, while that of the internal use of opium is the reverse. If the latter prove equally efficacious, it is, to my mind, much to be preferred for many reasons.

In the eleventh volume of the *Medico-Chirurgical Transactions* will be found a paper by Mr. Wellbank, on the advantages of the application of nitric acid in phagedæna. Mr. Wellbank does not appear to have used opium freely. However, whatever was his treatment by opium, it failed; while the application of pure nitric acid, in each case reported by him, was followed by an arrest of the sloughing. I only consider it just to Mr. Wellbank to state thus much; while, in contrast to his treatment, I can state that I have never once had recourse to the application of nitric acid in cases of phagedæna or sloughing sores, in private or in hospital practice; nor have I ever found the use of opium internally to fail in such cases.

It is some years since a young woman was admitted into St. George's Hospital with a sloughing sore of the labium, engrafted on some syphilitic contamination. She was placed under the care of Mr. Cutler, who at once ordered opium to be given freely internally, while externally a chloride of sodium wash was alone used. The case yielded to this treatment most satisfactorily, and the patient soon left the hospital well.

Within a fortnight of the admission of this case, a woman in the next bed but one, the subject of ulcer over the patella, the result of abscess of the bursa, was attacked by rapid sloughing of the sore. Being under the care of Mr. Cutler, she was placed under a similar plan of treatment to the former, without the application of any escharotic. She recovered in an equally satisfactory manner.

It would be tedious to relate how many cases of active sloughing sores, phagedænic in every character, were subsequently admitted into

the hospital for some months. Not only were they abundantly supplied from without, but all recent cuts or wounds admitted into the hospital had the tendency to take on similarly diseased conditions.

I had ample opportunities of watching a large number of cases. All that came under my immediate notice were simply treated with opium, in one form or another; no escharotic was used, nor did any appear necessary. Lotions of chloride of soda or lime were the usual local applications. I cannot recall a single instance in which the result was not satisfactory, with the exception of a very few cases which succumbed to pyæmia. In one case, large doses of laudanum, somewhat freely administered, produced rather alarming symptoms of narcotism for a short time, but the patient ultimately perfectly recovered.

As I have already stated, I believe that the treatment of phagedæna by opium has of late not been sufficiently considered, and I have been consequently desirous to bring the subject more prominently to the notice of the profession. I could not have desired a better opportunity to ventilate the question than through the discussion of it by the present audience. No one better than the military surgeon is able to test its value, or judge of its beneficial effects when adopted. He is able to weigh its worth under many climatic conditions denied to the private practitioner; and, from critical observations of cases placed entirely under his supervision and control, is able to note the results with an accuracy not often readily or successfully achieved by those not thus publicly employed.

In all cases of syphilitic phagedæna, in hospital and in private practice, I have alone trusted to the internal use of opium, and have never been disappointed. It has proved as certain in arresting phagedæna of the penis or labium, of syphilitic origin, as surely as it has been found to arrest a sloughing sore elsewhere, following a cut or any other local injury.

Of course, in all such cases, external applications, to ensure disinfection and to destroy smell, are not to be neglected. I know nothing better than a solution of sulphurous or chromic acid, to be followed by iodoform as soon as sloughs have separated. Chromic acid (1 in 2,000 to 4,000 of water) has the advantage of being a very cheap and most efficacious deodoriser; while, as a disinfectant, nothing, I believe, can surpass it. It destroys all smell of disagreeable or offensive discharges at once on application; and, as it must be used largely diluted, it becomes one of the cheapest disinfectants and deodorisers at present obtainable. I am indebted to my friend, Mr. Peter Squire, for my knowledge of the value of chromic acid as a disinfectant.¹

In private practice, it is always a matter of some importance to avoid such painful applications as pure nitric acid, however useful it may prove as a remedy, provided an equivalent can be gained by a more soothing plan of treatment. I would not wish to imply by this statement that we may employ that in hospital practice which we would avoid in private. But there are many facilities for recourse to measures of a severe character without giving pain, in hospital, which are not as readily accessible in private, and especially in country practice.

I have now to draw attention to the consideration of the use of opium in a class of cases in which, as far as my experience carries me, it has not been much adopted or advocated. All who have attended to the poor will have met with sad specimens of ulceration and sloughing of the mouth, in children of the lower and destitute classes.

In my younger days, I was taught to treat such with the internal use of chlorate of potash, bark, etc., introduced, as best they could be, in some form of fluid nourishment. Local stimulating or caustic applications were in free use. The results were most unsatisfactory—not unfrequently fatal; and, even in recovery, the ravages of slough and subsequent contractions told the tale of havoc and the helplessness of our measures.

A few years since, two instances of this character of ulceration of the mouth came under my care in St. George's Hospital. In one case, a child about eight years of age was admitted with extensive ulceration of the inner side of the cheeks, lips, and gums. The parts were so tender that it was with difficulty that the child could be induced to open her mouth. The breath was offensive, the saliva abundant, the cheeks and lips swollen. The surface of all the ulcerated spots was in a slightly sloughy condition, though superficial in extent. The inner surfaces of the mouth were generally tumid, and excessively tender on movement. The child could with difficulty, on account of the tenderness, partake of food, even in a liquid form; all solids were entirely refused, they could not possibly be masticated.

Having formerly, in similar cases, observed the futile results of tonics, local astringents, etc., I decided to try the effects of opium. If opium was potent for good in the treatment of sloughing of exter-

¹ Since these words were written, death has removed from us this much esteemed chemist.

nal parts, it occurred to me that some benefit should be derived by its administration in this instance. The child was ordered to take three drops of laudanum in a teaspoonful of water every four hours, until observed to be drowsy—the dose only to be omitted while drowsiness lasted. The benefit of this treatment was very marked in a few days. Pain had been so reduced, that the child was soon able to take plenty of nourishment. However, some days after the improvement had been fully marked, a slight relapse took place, and the sores were observed to be in a less healthy condition. On inquiry, it was ascertained that the nurse had, by some mistake, omitted the medicine. It was immediately ordered to be resumed, and was continued until the child was well, all ulceration of the mouth being healed.

It will be noted that the only constitutional treatment in this case was the administration of laudanum in water, continued until the last trace of ulcer had disappeared. When the child entered the hospital, it would scarcely partake of sufficient food to support life long; it had great difficulty in deglutition. The local treatment was simply a wash of warm water and Condry's solution of permanganate of potash, to modify the offensiveness of the mouth-secretions. Under the treatment pursued, it was most satisfactory to observe how soon these simple means subdued pain, rendered the child able to feed well, and how rapidly the ulcerated surfaces assumed a healthy healing condition. The accidental omission of the laudanum for a few days, was an additional testimony in its favour; for a marked relapse set in, but was at once arrested by its resumption.

The early arrest of pain in such a case as I have described is, in my opinion, one of the very great advantages gained by this form of treatment. While suffering from the pain, the child is almost starved; relieved of it, food is soon enjoyed by the little patient, and nourishment is well marked in its improved looks. Pain, added to want of sufficient nourishment, rapidly deteriorates and destroys life in the young; and it is the mitigation of the former which materially contributes towards an efficient supply of food, and renders this form of treatment so happy in its results.

Soon after the admission of the case just related, a second opportunity presented itself for the trial of this treatment, under almost identical conditions. The case was again that of a little girl under my care in St. George's Hospital. The condition of the mouth was very similar to that of the first case, equally ulcerated and equally painful, with as much difficulty in partaking of food, and extreme pain in all movements of the mouth. Similar treatment with laudanum in water was adopted, and no other drug was administered. The improvement was marked, steady, and satisfactory, and the child left the hospital well. I may mention that in neither case did contraction of the mucous surfaces follow on recovery, to an appreciable extent.

In 1882, I was consulted by a gentleman with a peculiar state of mouth, such as, in an adult, I had never previously met with. On the inner side of each cheek were patches of ulceration with superficial sloughy surfaces. The anterior half of the upper surface of the tongue was in a somewhat similar condition, though more superficial in extent. On the under surface of the tongue, on each side, there were somewhat deeper ulcerated patches, some deeper than others. Many teeth were defective; at their base the gums were more or less ulcerated. There was much salivation, fetid breath, much pain in and difficulty of articulation. Nothing but fluid food could be taken, nor had his diet for some time past consisted of aught else, so great was the pain on the introduction of solids into the mouth. "This condition," to use the words of the patient, "commenced as far back as the previous Christmas (1881), with thick white spots on the tongue, which gradually spread down towards the point." Ulceration slowly but steadily followed, until it assumed the condition above described.

Constitutional treatment with iodide of potassium and various local applications, terminating with that of pure nitric acid, had been tried without benefit when he called to consult me. The appearance of the mouth did not, to my mind, in any degree point to syphilitic complication; nor were there any indications elsewhere to make me doubt the statement of the patient, that he was entirely ignorant of any venereal taint.

The disease was in no respect associated with epithelioma. It appeared to be simply a thoroughly bad intractable specimen of ulceration of the tongue, gum, and cheeks, due to some obscure constitutional defect, and such as I had heretofore observed only in children of the ill-fed and poorer classes.

As the patient had previously been seen by Sir James Paget, I proposed a consultation with him about the case as a somewhat singular one, and to this consent was readily given. We both were agreed as

to the non-syphilitic character of the complaint, to whatever else it might be due. One only possible explanation as to its cause was, the well-water at the patient's country residence had been found to be much contaminated by sewage. It was, however, difficult to attribute anything to this circumstance, as the water had long ceased to be used for domestic purposes. Under the circumstances mentioned, I suggested the simple use of opium internally, with Condry's solution and water as a mouth-wash to mitigate the smell from the offensive saliva and discharge from the sores.

He commenced to take twenty drops of laudanum three times a day in water. With regard to diet, he was to take as much milk, raw eggs, etc., as he could comfortably digest. This treatment was commenced on May 13th, when the patient weighed ten stone thirteen pounds. Quinine was added to the opium a fortnight later, as he complained of weakness; but pain had much subsided, and he had greatly improved by being able to take more solid food. Gradually some of the defective teeth were attacked or removed by my friend Mr. Vasey; and, as each disappeared, so the ulcerated gum at its base assumed a healthy surface, and slowly healed without any local application.

In six weeks he had greatly improved; his weight had increased to eleven stone three and a half pounds. The laudanum was now reduced to forty minims in the twenty-four hours, and, on July 5th, to thirty minims. The decrease was in accordance with the improvement. The local wash was occasionally changed, but there was no evident advantage gained by the application; one of weak nitric acid and bichloride of mercury appeared to afford most local comfort.

To curtail a long story, I may say that the opium-treatment was continued till late in the autumn, when the patient was so greatly improved, that it was no longer considered requisite.

There have been occasional but slight relapses, and still some defective teeth would be better removed. But the patient has long since resumed his professional work; has no difficulty in masticating solid food, as far as the remaining defective, and a large deficiency of, teeth will allow him; and is in every respect in excellent health.

The steady marked improvement in this singular case, under the simple administration of opium, would help to justify the opinion stated, that the ulceration was not of a syphilitic origin, and that the result of the administration of the opium also justifies the statement that the treatment was appropriate and satisfactory.

I look back on this case as a typical one—one of great importance, as illustrative of benefit and comfort from the soothing, rather than an heroic, plan of treatment. The application of the nitric acid to the ulcerated surfaces within the mouth, to which the patient had submitted prior to his visit to me, was described by him as something horrible in suffering; yet, he added, had it been considered desirable to persevere in its use, he would endeavour to submit to it, to rid himself of the painful disease from which he had so long suffered.

I give the particulars of this case for what they are worth; as far as my experience tells me, and I may add that of Sir James Paget also, such cases do not often occur in adult life; they are by no means rare in childhood. But, whether seen in adult or in early life, the treatment by opium has so far proved successful, whereas, under similar circumstances, other measures have been known to fail. Under such conditions, the facts related appeared to me worthy the attention of those whom I have the honour to address.

The advantages of the internal use of opium in obstruction of the bowels is too well known and too highly appreciated to justify me in occupying time in dwelling long upon its beneficial effects. So, too, as regards its use in cases of hernia after operation, in inflammation of bowels from external violence, and in other injuries of the viscera. In my student days, the usual treatment, after an operation for hernia, commenced with small doses of Epsom salts frequently repeated. I have many notes of such cases; nor even at this period is it uncommon to be consulted about cases of obstruction, in which purgatives have been administered not wisely or too well, and when opiates would most probably have done more good.

Opium administered after an operation for hernia may be continued, and usually with advantage, until the bowels are naturally relieved, or by the aid of enemata. My rule has long been never to allow an aperient of any kind until a free passage has been independently established. So, also, in constipation due to the well known block in the caecal region, whatever the cause may be which gives rise to it. If a rule, hard and fast, and without an exception, might be laid down in treatment, it would, I think, apply forcibly to these cases—that aperients be withheld, and opium administered, until natural evacuations have been established.

Of the use of opium in cancer, I need say little but in its praise. Under many such conditions, patients may be said to live on opium;

some even fatten on it. It not only gives relief to pain, but renders life tolerable, under circumstances in which it would otherwise be one continuous term of suffering or agony till relieved by death. It need only be limited in dose by its effect; it is the only drug we can depend on to lessen the severity of a surely advancing disease, and need not be stinted by any rule which would apply to the treatment of disease not of a fatal or malignant character.

The tolerance of opium in many cases is very remarkable, the quantity being only measured by its quieting effects.

I wish to offer a few remarks of caution in the administration of opium, when requisite under any circumstances for a continuance. Constipation is one of the evils to be guarded against. Sir Benjamin Brodie was in the habit of advising us, in the wards of St. George's Hospital, to prescribe calomel occasionally, when opium was requisite for a continuance. It will, also, not unfrequently be found absolutely necessary to relieve the rectum by enemata, or even occasionally to break down hard accumulations of feculent matter plugging up the rectum, but incapable of being voluntarily expelled.

Under the latter circumstances, a frequent desire to defecate should arouse the suspicions of the medical attendant. A digital examination will at once clear up any doubt. I would urge the advantage of this examination whenever such symptoms are present, and the importance of not taking for granted that the bowel has been sufficiently emptied.

Not unfrequently does opium disagree in a capricious manner in certain individuals; in one, it may be the quantity, in the other, the quality of the ingredient.

As an instance of the former, I may mention a case related to me by the late Dr. Latham. A lady consulted him on account of a chronic diarrhoea of some standing. Her first request was that he would not prescribe any form of opium, as it acted like a poison upon her. Dr. Latham's reply was characteristic; he said, "Whatever is powerful for evil in medicine is powerful for good, if the right dose be ascertained." He ordered his patient to take one drop of laudanum in a teaspoonful of water after each motion. He did not see his patient again for many months, when he accidentally met her at a friend's house. She recalled to him the circumstances of her visit and his advice; upon which he replied, "I concluded you thought me an old fool, and threw away my prescription." "No," she replied. "I at once had recourse to it, and became quite restored to health and strength, and I am never without a supply of the medicine."

Again, it will constantly be found that one form of opium cannot be tolerated when another will effect all that is desired. A lady under my care, the subject of severe cancerous trouble, cannot take solid opium without great discomfort, depression, and vomiting; whereas Battley's solution of opium relieves from pain whenever taken, and procures refreshing sleep, and does not in any degree disturb the stomach. In the case of a professional friend suffering from extreme irritability of the bladder, due to alkaline urine, the result of too liberal indulgence in Vichy water, I found it difficult to overcome this irritability, even after the urine became acid. The bladder had acquired a most irritable condition, probably rendered worse by the nervous temperament and professional anxieties of my patient. No preparation of opium appeared to suit, but rather increased than diminished his general discomfort. At last, I had recourse to codeia, the result of which was most immediate and satisfactory. Codeia is often useful as a sedative in bladder-trouble, complicated with enlarged prostate, when other opiates fail to provide comfort.

I need say little of the abuse of opium. My task—a pleasurable one—has been to speak of its advantages when and where its use is indicated. But we must not shut our eyes to the tendency on the part of patients to continue its use when once commenced, but after it has ceased to be requisite. When I was house-surgeon at St. George's Hospital, a woman was admitted under the care of the late Mr. Keate with a large sloughing wound of the leg. The sloughing was arrested by the free internal use of opium. Some years passed, when I was consulted by the same woman as an out-patient. I casually referred to her original condition, when she replied that her leg had remained well since then, but that she had become a confirmed opium-eater from the time she quitted the hospital. In no respect did she appear the worse for the indulgence.

I have endeavoured to confine myself to what experience has led me to consider the practical value of opium in surgery. In sloughing sores, in gangrene, in almost every variety of acute ulceration, it will be found a help to the surgeon; and in his adoption of it in such cases he will rarely find himself disappointed. If this communication should in any degree aid to render that adoption favourably considered, the object of the writer will be entirely gained.

REMARKS ON UNRECOGNISED OR MASKED CEREBRAL TUBERCULOSIS.*

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I AM afraid that the title I have chosen for my paper this evening does not accurately suggest the object I had in view in writing it. In looking through the fatal cases that have been under my care during the last two or three years, I found that they included a considerable number in which tubercles were found either in the brain or in the cerebral meninges, or in both. In this, of course, there is nothing very remarkable; for cases of cerebral tubercle are unfortunately very common, and they gravitate largely to hospitals. But I observed also that there were several among them in which the presence of tubercles in the brain or its membranes was concealed, or rendered doubtful, during life, in consequence of the association therewith of other diseases which seemed adequate to explain the patients' symptoms; and one or two in which the apparent cause of cerebral symptoms might have been taken to exclude the possibility of their dependence on tuberculosis. It was to these cases that I determined to call your attention this evening; because, while several of them have clinical or pathological features of special interest, they all seem linked together by the common clinical difficulty which the name that heads my paper was intended to express.

The first two cases I shall quote are cases of children who, supposed to be perfectly healthy at the time, received blows on the head which were immediately, or almost immediately, followed by cerebral symptoms leading to death at the end of about three weeks.

CASE I. *Tubercular Meningitis; Symptoms following immediately on a Blow on the Head; Death; Necropsy.*—A boy, aged 10, a pupil at a board-school, was said to have had perfectly good health up to May 30th, 1879. On that day, his schoolmaster boxed his ears two or three times; and shortly afterwards he complained of headache, was sick, and went home. From that time until June 17th, he suffered more or less constant pain in the back of the head and neck; he was frequently sick; there was a marked tendency to constipation; and he lost flesh and strength. His pulse was observed to be slow, and his tongue clean. He had no fit. On the 17th, he passed into a state of partial coma.

On the next day, the 18th, I saw him with his medical attendant. He lay in bed, taking no notice of what was going on round about him; his respirations were for the most part attended with groaning; and occasionally he uttered some stereotyped phrase. When addressed loudly, he opened his eyes, but he made no answer, and took no further notice. His pupils were unequal, but there was no obvious squint, nor, indeed, any other definite paralytic symptoms; the conjunctivæ were congested. He had passed his evacuations into the bed since the previous day. There was no sign of thoracic or abdominal disease, no rash, no ear-affection, no sign of injury to the head. The tongue was coated. His coma gradually became more profound; and he died, without any important change of symptoms, on the afternoon of the 21st.

The *post mortem* examination (at which I was present) was made on the 22nd. The body was emaciated. On removal of the skull-cap, the surface of the brain was found flattened and dry, and the pia mater uniformly and much congested. There was slight inflammatory thickening along the intergyral spaces and large vessels. A good deal of inflammatory deposit occupied the convulges at the base of the brain; and numerous small but distinct tubercles were scattered over the medulla oblongata and pons Varolii, about the circle of Willis, and along the fissures of Sylvius. There was great excess of fluid in the lateral ventricles, with much congestion and thickening of the velum interpositum and choroid plexuses, and abundance of tubercles in the velum. The brain-substance was fairly healthy. There was no evidence of injury to the bones of the skull or to the soft parts within. The lungs, pleuræ, heart, and pericardium were free from tubercles, and healthy. The abdominal organs were not examined.

CASE II. *Tubercular Meningitis; Symptoms coming on after a Blow;*

* Read before the South London District of the Metropolitan Counties Branch.