IODIDE OF POTASSIUM IN THE TREATMENT OF CACHEXIE AND OTHER DISEASED CONDITIONS.

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FEW drugs have been more thoroughly tested by the medical man within the last thirty-five years than iodide of potassium; and we might reasonably have concluded that its uses and modes of application were definitely known to the profession. Yet some new applications have recently been made of it which give us further insight into its therapeutic power, and particularly as regards the dose and combination. Of these I propose in this communication to give a few cases, and to attempt something of a generalisation.

From its containing so large a proportion of iodine, the iodide was at first considered to be an irritant of the capillary circulation; and it was accordingly employed, locally or generally, to remove thickened structure and homologous deposits, particularly in glandular and fibro-membranous tissues. It was soon found, however, that important general results followed its use in the numerous and intractable class of chronic cachectic ailments, the sequelæ of past acute diseases, or the manifestation of hereditary taint. Thus chronic syphilitic and rheumatic diseases were found to be under its control; and it was hastily inferred that the remedy would be equally effectual in other cachexiæ. Hence it came to be, in combination with decoctum sarsæ, a too ready refuge in lingering, obstinate, and obscure affections indiscriminately; and disappointment and temporary neglect of its real merits were the inevitable result.

But the iodide had substantial merits of its own, so that its use never ceased from among us; and it is again, perhaps, in greater, certainly in more rational, request than ever. It has never ceased to be used as a prompt and certain remedy (specific?) in periostitis, and is relied on for this purpose much as quinine is for ague, or arsenic for squamous skin-diseases. It is, however, as a remedy in cachectic conditions, and as a controller of the secretion of mucous surfaces, that the iodide has lately attracted attention; and it is in these relations, particularly in the former, that I wish to speak of it in this communication. The cachexia of syphilis and of chronic rheumatism, whether in their early or in their later manifestations, always forms a large proportion of our hospital and dispensary practice. The latter, in fact, is the heaviest burden imposed on the labour of the officers and the funds of the institution. I have for some years treated such cases of chronic rheumatism with five-grain doses of the iodide and cod-liver oil, with tonics and good diet, as individual cases required; and generally with fair success. Still there always remained a residuum of intractables, on which little impression was made. Patients advanced in life, with broken health, impaired digestion, torpid functions, anæmia, and emaciation, and with painful and swollen joints, are apt to resist these and many other modes of treatment, except, perhaps, on their first application. So, again, cases of sciatica or other neuralgia, under like general conditions, where the strength has been much reduced, defy the same means, even when supplemented with any amount of iron or arsenic. With regard to syphilitic cachexia, we have not generally the same amount of depression or general derangement; but still cases are constantly occurring in which no recognised remedies appear to tell. This is particularly so where there are nocturnal pains rather than nodes, and where the skin is decidedly affected; but more especially wherever the general cachexia is the most strongly marked. Now, in all these cases, I have lately tried, and in some with marked success, *very large doses* of the iodide—i. e., from gr. x to gr. xxx ter die. This practice is not new. Dr. Elliotson proposed it many years ago, and it has been again strongly recommended lately in the metropolitan hospitals; but, so far as I know, no attempt has been made to fix on the class of cases adapted for it, or to establish the principle that it is applicable to the *cachexia*, rather than the local or specific disease.

There is a strong natural reluctance to the use of large doses of chemicals of which the components are individually active, not to say poisonous. One drachm of iodide of potassium represents a poisonous dose of iodine; and yet thirty-grain doses may undoubtedly be given three times a day with perfect impunity. Nay, more, the occurrence of physiological symptoms, as coryza, is almost unknown where the large doses are given. As I wish this paper to be practical, I shall abstain from any speculation as to the causes of this tolerance, and, indeed, from any attempt to determine the theory of the therapeutic action of the remedy; but shall at once refer to cases in illustration of my views.

CASE I. Henry Hoogensen, aged 29, was admitted November 9th, 1866. He was a robust, muscular, large-made seaman, but was now looking haggard, depressed, and attenuated. He had copper rash on the forehead, breast, etc., and nocturnal pain, with old swellings of the smaller joints, and scars of ulceration on the penis and tonsils. He had been three months under the treatment of an intelligent and experienced surgeon, but said he was getting worse. During this time, he had been taking five-grain doses of the iodide. He was put under cod-liver oil, decoction of cinchona, with nitric acid, and full diet, with a view of restoring his shattered health, before specific treatment was begun. The improvement was trifling; and, a fortnight after admission (Nov. 15th), he began ten-grain doses of iodide, which were rapidly increased by daily additions till they arrived at twenty-five grains three times a day. He improved sensibly from the commencement of the large dose system, and left the hospital in robust health, and without pains or eruption, in the fifth week—the third of the large dose treatment.

CASE II. James Anthorpe, aged 27, contracted syphilis four months ago. He had been more or less under treatment ever since. On April 18th, 1866, he came into hospital with old nodes, copper eruption, nocturnal pains, and general feebleness and wasting. He was put, after slight preparation, on the large dose system (gr. xx of iodide), and left the house in good health May 4th.

CASE III. A gentleman, aged 32, applied February 4th, 1867. He was covered with copper eruptions, and complained of nocturnal pains. He was in bad health, having lost flesh, strength, and appetite. He took the iodide in such doses (3ss) that a country druggist refused to make up the prescription, and sent it by post to me for correction. The early progress of this case was most satisfactory, and for one month he improved rapidly. He then had some return of his rash; but his health was re-established, and he had lost his pains. In this state he now continues (May 1867); but he insists on continuing the medicine from time to time, as he is convinced that it controls the rash.

CASE IV. A gentleman, aged 38. The case was very similar to the above; but the eruption on the face was more disfiguring, and was complicated with acne. His general symptoms quite disappeared in three weeks, under the use of twenty-five grain doses; but the skin-disease is more intractable. He, too, insists on continuing the medicine, from his conviction of its efficacy. He is now (May 30th) quite well.

CASE V. The case of John Bush, aged 30, shows that the maximum doses are not always required. He was admitted into the hospital December 18th, 1866, having slight constitutional symptoms and pains in the large joints, and copper stains on the forehead and arms. He had primary sores and sore-throat four months ago. He began with a three-grain dose of the iodide, which was raised to thirteen grains three times a day, but not further increased; and he was discharged cured June 10th, 1867.

CASE VI. F. Goring, aged 29—a more recent case, but still marked with cachexia. He had primary syphilis two months ago, and now presented two large nodes. He took twenty-five grain doses of the iodide three times a day, and left the hospital cured.

CASE VII. A young recently married gentleman had primary syphilis many months ago, and supposed himself well and justified in marrying. Both himself and his wife had copper stains and indurations about the genitals when he applied to me; and I had no hesitation as to their syphilitic character. They have taken the iodide in twenty-grain doses, and are free from the rash *while they are taking it*; but, as in the above cases, the rash re-appears when it is discontinued, though the other symptoms are cured. It would appear that the general or cachectic character of the symptoms should be our guide, rather than the history or duration of the case, though no doubt this character is more marked in proportion to the duration. Where, however, the characteristic rash and loss of strength and general health occur even while primary sore is present, the large dose system may be used with advantage (the inoculation having probably been from a tertiary case).

CASE VIII. A medical gentleman, in midwifery practice, had a suspicious sore on his finger in March last, and treated himself on the suspicion that a parturient patient might have affected him. In April, he had eruption and general loss of health. He began to take the twenty-grain doses, and is now well.

The following case may lead us to hope that the interesting and perplexing cases of syphilitic cerebral disease, on which so much light has recently been thrown, may prove to be under the same control.

CASE IX. Thos. Butterfield, aged 36, a robust town labourer, had been labouring under the postponed forms of syphilis in a severe form for many months, and, for the six months preceding the present notice, was the subject of necrosis of the parietal bone, eruptions, and nocturnal pains, for which he had taken the ordinary remedies with very indifferent success as an out-patient. We had lost sight of him for several weeks, when he reappeared January 7th, with strabismus, giddiness, loss

of memory, and confusion, and in a very emaciated condition; the external symptoms of disease remaining very much as before. After some preparative treatment, the full doses of iodide were given; and all special symptoms were removed, and his general health re-established, on February 10th—the necrosed bone remaining in the same state as before. He continues an out-patient, in good health.

With this case I close my list of syphilitic cachexiæ treated by this method. I have nothing so decisive to adduce in regard to rheumatic cachexia. In fact, I can only state in general terms that, where I have employed large doses, great amendment of general symptoms has usually followed, and sometimes much local relief. But there is undoubtedly more tendency to the recurrence of the disease: in fact, the local symptoms are never entirely overcome. In sciatica, I have succeeded by this method in two very obstinate and protracted cases, which had long resisted treatment.

CASE X. Henry Robinson, aged 27, after for many weeks suffering from acute pains in the sciatic and its branches, and being much reduced by loss of appetite and sleeplessness, began the large doses of iodide on March 13th, rapidly increasing them to twenty grains three times a day; and on the 18th of April he left the hospital free from the complaints. And Stephen Sprag, aged 30 (both farm labourers), had been suffering similarly, and almost to the same degree, for three months. He commenced the twenty-grain doses on the 21st of March, and on the 9th of April left the house in his usual health. In both these cases, and, to the best of my belief, in all here narrated, the iodide had previously been given for some weeks in five-grain doses without effect; and the change followed so directly on the large doses as to justify its being attributed to their influence. In neither case has there been recurrence.

In the treatment of these cachexiæ, I do not exclude regimen and dietetic adjuvants, though I admit I have made the treatment in the above cases as pure as possible, to avoid the risk of fallacy. But I do not doubt that the old methods of skin-elimination, by external or internal means, or by a combination of the two, as in the "Zitman method", would greatly assist. At all times, the vehicle of the iodide may with advantage be the decoction of sarsa or of the "woods".

I would add a few remarks on the action of the iodide on the mucous surfaces. In a certain proportion of cases, the salt, in ordinary medicinal doses (say gr. iii to gr. v), will produce irritation of the Schneiderian membrane and coryza; but, as I have already said, this is not the case where a large dose is used. This, I think, points out that the small doses are more likely to affect the mucous tracts generally than the large, and should lead us to employ them when we have this object in view. My observations have chiefly had reference to the pulmonary membrane; but there is good reason to believe that the other tracts, and perhaps more notably the genito-urinary of the female, are amenable to its influence. I will cite two cases of very severe capillary bronchitis, in which I believe relief was afforded more rapidly by the use of the iodide, combined with a very small dose of tartarised antimony, than would have resulted from the use of either remedy alone—certainly, than if the tartarised antimony only had been used.

CASE XI. J. Skerat, aged 48, a town labourer, subject to chronic bronchitis, was seized with a very violent attack of dyspnoea and lividity in the early days of March, and was admitted into the hospital in a very alarming state. There were physical signs of minute bronchitis over both lungs; and his general symptoms corresponded with this local condition. He had stupes and expectorants, with one-eighth of a grain of tartarised antimony, for several days, with partial relief; and on the 25th he began to take three grains of iodide of potassium, with one-twelfth of a grain of tartarised antimony, every three hours. From his commencing this treatment, his improvement was very marked, and he was convalescent on April 18th.

CASE XII. W. Hudson, a traveller, aged 48, exhibited on admission (Feb. 21st) a very similar condition. His respiration was 40; his cough incessant; and he expectorated half a pint of muco-purulent fluid in twenty-four hours. Small moist rhonchus was heard throughout. On March 2nd, he began the same doses as in the former case; and his improvement was equally immediate and satisfactory, as he was quite convalescent on the 20th.

I have notes of other cases in which some advantage seemed to result from the treatment, but none so decided as these; but the cases in which no benefit seemed to result were very few.

The efficacy of the large dose system in the cachexiæ, and notably in syphilitic cachexia, seems to be established, not by the few cases here adduced, but by their accordance with many others now on record, and to which I have seen an addition within a few days. The action of the drug upon mucous diseases I purpose still to continue to investigate; and I hope that ere long we may have arrived at that stage in the accumulation of facts which will justify an attempt to generalise with more confidence, and to extend by induction the application of the resulting laws.

ON STRICTURE OF THE RECTUM.*

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I DO not, upon the present occasion, purpose to do more than very briefly bring before the members of the Association a mode of dilatation which, in cases of stricture of the rectum, I have found to be most successful; and to exhibit to the members of the Association present the instruments by whose agency the advantages referred to may be brought about. The bougies in question can be employed in every case of stricture of the bowel that is accessible to the surgeon's touch, and which from its nature he may consider to be suitable for dilatation. In malignant cases, they also afford the means of giving much temporary relief.

The bougies, then, which I now exhibit, differ from those previously in use in being hollow, the extremity open, and terminating with a feather edge; the diameter of the aperture being equal to that of a No. 12 catheter or urethra bougie, and passing freely over a central guiding-rod.

The principle here adopted was, I believe, first employed by the late Mr. Hutton in the construction of his railway catheter. It at once gives to the surgeon the power of conducting the bougie safely and certainly through a stricture, no matter how contracted the orifice, how tortuous its course, or how diseased the coats of the intestine itself may be. The stricture once penetrated, the guiding-rod becomes no longer necessary, and now, upon its withdrawal, free exit is given through the central passage for mucus, pus, blood, or other secretions, gaseous or fluid, which may be occupying the pouch-like dilatation, which exists in almost every case of aggravated stricture.

Not only can all irritating and obnoxious secretions be thus got rid of, but a stream of tepid water can be gently injected up into the cavity of the bowel above the stricture, dissolving and breaking down any fecal lumps which may have lodged themselves above the obstruction. The patient is thus freed from that accumulation which produces the main source of suffering in this disease. It permits, too, the use of sedative or astringent injections being employed, and brought into direct contact with the ulcerated portions of the intestinal tube.

In using the tubular bougie, the forefinger of the left hand is to be passed up into the rectum until its tip is firmly pressed against the stricture, and the extent and density of the contraction thereby ascertained. The point of the thumb is then to be applied to the forefinger close up to the arm, and retained as the finger is withdrawn, thus taking an exact measurement of the distance of the stricture from the anus. The guiding-rod is next to be placed alongside of the finger, and an indentation made upon it into the nail of the right forefinger, at the point corresponding to the extreme length previously inserted. This done, allowance must be made for the extent of the stricture itself; and to this a further amount of at least an inch must be superadded for the passage of the guiding-rod beyond the stricture up into the bowel. In this way, an exact knowledge is gained of the length of guiding-rod required in order to secure a certain transit through the contracted portion of the intestine. A distinguishable mark is now to be placed upon the guiding-rod, by tying a piece of fine, but strong, white ligature silk tightly around it, the elasticity of the gutta percha readily permitting of this being done, without the bougie displacing the silk in its subsequent passage over it. A similar mark is next to be tied round the bougie itself at such point as the surgeon may determine, according to the degree of distension which it may be desirable to employ. These distances being once noted, the marks remain *in situ* until removed, so that the preliminary steps here detailed are required only at the first examination. When proceeding to dilate, the left forefinger is to be introduced into the bowel, up to, and if possible into, the stricture, the guiding-rod (well lubricated at its extremity), slid up by the side of the finger until it reaches the contraction, when, manipulated by the right hand, it is to be passed into and through the stricture until the requisite distance for its introduction into the bowel shall be demonstrated by the silk mark being about to disappear within the anus.

The tubular bougie (well lubricated also with an anodyne or sedative unction) is now to be placed over the projecting end of the guiding-rod, and passed along it into the rectum and through the stricture. The length of its insertion being determined, in like manner to that of the guiding-rod, by the silk mark fixed upon it.

As to the period of its retention; the nature of the injections to be employed for the clearing of the contents of the bowel, and the subsequent healing of ulceration; the attention to the state of the secretions, and the consistency of the evacuations—all these are matters which must be

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