of the bladder is congested, with often a copious secretion of thin watery mucus; that the prostatic and other venous plexuses within the pelvis are enlarged and engorged in consequence of the frequent afflux of blood to these parts; whilst the peripheral irritation of the genital nerves has caused functional disorders of various kinds.

The occasional introduction of a catheter as large as the urethra will take, is often of the greatest service; it should be passed into the bladder and allowed to remain for five or ten minutes, according to the tolerance of the patient; its mechanical pressure helps to unload the congested capillaries and small vessels of the urethra; its contact deadens and destroys the extreme sensibility of the urethral nerves, and renders them less susceptible to the influence of slight excitants; whilst, by stimulating the muscles, it provokes their contraction, and so renders material assistance in emptying the larger veins. A silver catheter is the best instrument for the purpose, as it exerts firmer pressure than an elastic bougie; and, as the urine can be drawn off through it, the patient will not require to micturate for several hours, which is a point of some importance, as the urethra is often very tender after the passage of an instrument for the first few times. The frequency with which it should be employed depends upon the amount of discomfort its presence occasions; and, if the pain be great, it should not be left in more than a few seconds, lest rigors, swelled testicle, etc., be occasioned. Sometimes the urethra is *extremely* sensitive, and much pain attends the use of the catheter; but this is an additional reason for persisting with it, though a smaller one may be employed at first, so as to cause less pain. I have sometimes found that smearing the catheter with blue or calomel ointment, or with half a grain to a grain of nitrate of silver rubbed down in an ounce of lard, to be of use in obstinate cases; but I prefer the blue ointment to anything I have yet tried. Some camphor, extract of opium, belladonna, etc., may be combined with these ointments if thought desirable. Care should be taken that these applications do not reach much beyond the curve of the instrument, and it should be thoroughly well oiled before using it. The over-secretion of mucus is always checked by the use of the catheter, whether armed with ointment or not.

Cold bathing, cold douches, etc., should not be employed on going to bed. The ordinary bath in the morning does good; but cold applications at night should be forbidden, as the reaction which follows them will increase the local circulation, and so cause congestion and erection of the penis, and increase the probability of emissions.

Not only must the position assumed in sleep be attended to, but undue warmth in bed avoided, whether by using very soft beds or too large an amount of clothing. The bowels should be carefully regulated, to prevent any accumulation within the rectum; and the urine examined from time to time so as to detect an excess of uric acid, the presence of oxalates, etc., which may render its passage irritating to the hypersensitive urethra. Over-distension of the bladder must at all times be guarded against, and the patient warned to pass urine on waking in the morning, lest he doze off again with a full bladder, which is one of the most certain provocations of erection and emission.

Before commencing to treat this affection constitutionally, it is generally necessary to allay the digestive disturbances which are so common and often so severe, by giving such remedies as may be applicable to the condition of the patient, either with or without the more special medicines. By neglecting to do so, we may not only add to the dyspeptic troubles and obtain no benefit from the drugs given, but a valuable medicine may do harm and be brought into disrepute, in consequence of its being administered at a time when the stomach cannot tolerate it.

Internally, I have found astringents of more use in this disorder than tonics; or they may be combined. Gallic acid, the dilute mineral acids, especially the sulphuric, may be given. Tincture of matico will often be of service, and more so, in my experience, than any other plant rich in tannin, as it appears to act upon the genito-urinary track, rather than upon the bowels, as is often the case with the others.

Ergot is one of the most valuable remedies for this affection, and the liquid extract of the *Pharmacopœia* is a very efficient and convenient form for giving it; whilst the dilute sulphuric acid can be added, if thought advisable.

When the urethra is very sensitive, and the passage of urine painful, small doses of copaiba are often most comforting; or the other oleo-resins may be tried if it disagree; but none of them, in my opinion, is equal in value to copaiba, when it can be borne.

I am not disposed to regard strychnine in these cases with very great favour; when there is much irritability of the nerves, I believe it often adds to this; but when this is subsiding, it may be of use as a tonic: so may quinine or iron, but in no other way. I have never given the tincture of iron in the enormous doses (from one to two drachms three

times daily) recommended by some, and so I cannot speak personally of its value in such large quantity.

Cantharides, phosphorus (except the dilute phosphoric acid), and the so-called aphrodisiacs, do harm by acting as stimulants to the nervous system generally, and therefore to the local nerves. Cantharides, also, by its action upon the bladder is, especially when given in large doses, a very injurious drug in these cases. For the same reasons, I disapprove of local blistering; whilst the sore left by the blister acts, moreover, as a source of irritation, and adds to the liability of emissions.

Belladonna, in my hands, has proved to be an uncertain remedy; in some cases it has appeared to do good by allaying irritation, whilst in others there were no beneficial results from it. The dryness of throat, disturbance of vision, and diarrhoea, which are often caused by it, constitute an objection to its employment in full doses, and without them its value is very questionable.

Camphor is a most useful drug; three or four grains made up into two pills, with half a grain or a grain of opium and one or two of aloes, have more frequently allayed irritability and prevented emissions, than anything I have yet tried. Opium alone does not succeed as well, and a larger dose is necessary, so that the untoward symptoms sometimes produced by it are more likely to be incurred.

I have tried chloral in a few cases, and with very great advantage: in doses of fifteen or twenty grains at bedtime, it has answered its purpose admirably.

Bromide of potassium, in thirty or forty-grain doses, will sometimes be of service; but it seems to me a less certain remedy than chloral, which I am disposed to regard as one of the valuable agents we possess for these cases, though as yet my experience of it is limited.

Suppositories vary much in their action whatever drugs they may contain. Occasionally they answer well; but often they do not lessen, and I am not sure that they do not sometimes increase the irritability of the parts.

Galvanism I have not employed myself; but in the few instances where I have known it tried by others, it has seemed to me to do more harm than good, by adding to the nervous irritation.

Lastly, as to cauterisation by the *porte-caustique*, I need scarcely say that I am strongly opposed to this method of treatment; for, if my view of this disorder be correct, this instrument can relieve it in no other way than as the passage of a catheter does. I do not believe that ulceration or other morbid conditions of the ejaculatory ducts are the causes of seminal losses. We have no evidence that these pathological conditions exist except, it may be, in very rare instances; and, if so, the application of nitrate of silver to the prostatic mucous membrane in every case of nocturnal emission must be unnecessary, and, in spite of its alleged harmlessness, I consider it to be a dangerous treatment. I have known two persons die from the effects of the *porte-caustique*, and I have seen others suffer severely from its employment. This may not be the usual result; but I do say that the application of nitrate of silver to the urethra, whether in stick or in strong solution, is, at least, a very sharp remedy, and will often produce violent inflammation, and sometimes lay the foundation of a stricture or of a chronic irritation of the bladder. If, then, caustic be applied on an incorrect surmise as to the condition of, and its effects upon, the prostatic mucous membrane and ejaculatory ducts, it is not only an unnecessary, but, in my opinion, an unsafe method of treatment.

WHAT CASES SHOULD BE SENT TO LUNATIC ASYLUMS? AND WHEN?*

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THE question of sending a patient to a lunatic asylum is one of very great interest from a medical, a legal, and a social point of view; and, unfortunately, its interest to us is by no means that of an abstract question. It must be solved by us frequently and at short notice; and by its wrong solution most grave consequences may, in some cases, happen to ourselves, our patients, and the public. It cannot be unprofitable, therefore, to discuss it shortly; and I propose to confine my remarks chiefly to the medical aspects of the question.

Less than fifty years ago, the question of sending an insane patient to a lunatic asylum was a very simple one. It was determined solely by the fact of the patient's being dangerous to others or to himself, chiefly by the former consideration. After that, there was a decided tendency among the medical profession to simplify it in quite the opposite direc-

* Read at a meeting of the Cumberland and Westmorland Branch.

tion, by accepting the dictum of many persons enthusiastically interested in the well-being of the insane, that all mad people should, as a matter of course, be sent to lunatic asylums, as being the only places where there was any chance of proper care and treatment being bestowed on them, or where there was any hope of cure. Now, we have arrived at a time when we have no such simple rules to guide us. We must take many things into consideration, both in regard to the mental symptoms present and their probable causes, as well as the circumstances of the patient. Several things have brought this about. In the first place, we cannot now regard insanity as a separate entity or disease at all. A more careful study of its pathology has shown it to consist of various disorders in the brain, and sometimes to be a symptom of disease elsewhere in the body. Then it has been found out that many cases of insanity will get better quite as well, or better, out of asylums as in them; and that with certain well-marked advantages for treatment, asylums unite many as decided disadvantages in certain cases. And here I may say that, for the exhaustive discussion of this question, we require to have the experience of the general profession as much as, or more so than, that of asylum physicians. We cannot arrive at the truth without hearing what both have to say. My only title to speak on the one side of the question at all, is my seeing and hearing of cases treated out of asylums.

Home-Treatment and Asylum-Treatment: the Advantages and Disadvantages of each.—At home, the patient is placed in his usual circumstances, is not disturbed and confused by unusual and unknown ways and surroundings. He has the care of relatives, whose affection and solicitude may make up for all the skilled attendance in the world; whose persistence may be a match for even insane obstinacy; whose watchfulness has none of the eye-service of the hiring in it; and whose forbearance is the result of higher motives than rules and regulations. He has no fellow-patients to irritate or annoy him; he is not lost in a crowd. He is treated as an individual, and gets sympathy for small ailments that he would get nowhere else. When recovering, he has the natural and healthy stimulus of known and friendly faces, and ordinary small avocations. I am presupposing, you will observe, that there is a home worth calling by so sweet a name, "be it ever so humble."

The disadvantages of home-treatment are, on the other hand, the want of special rooms and appliances; of skilled attendance and supervision; of means of controlling sudden outbursts of violence; the usual abundance of means of committing suicide; the impossibility of making friends understand and guard against the cunning and method that are so often found in madness; the difficulty of giving food and medicines, and of making the patients take proper out-door exercise; the absence of medical help in sudden emergencies; and the absurd fear of the insane which those not accustomed to them often have. Then there is the great difficulty of properly disposing of the patient at night, and giving him proper attention without keeping him awake by over-much watching. In many cases there is a strong dislike to those nearest and dearest to the patient, and an extreme impatience of control by any relative or friend. I must not omit the decidedly bad effects on some cases of too much sympathy with small or imaginary ailments or discomforts.

A good asylum has the advantages of a healthy situation; of a good dietary; of regularity, system, and order, in its arrangements, which on some patients make an admirable impression. It has proper rooms for violent patients, skilled attendants, and medical and general supervision. It has suitable amusements and occupations. Above all, the patient can be subjected to proper and regular medical treatment, in a far more satisfactory manner than at home.

Its disadvantages are the want of that affection in the attendants which none but relatives can exhibit; the want of the healthy stimulus of home life and affections; the risk of annoyance, neglect, or hurt from fellow-patients, or from incompetent and cruel attendants; the risk that, at a certain stage of the malady, listlessness and want of interest should degenerate into dementia, for want of healthy brain-stimulus, so that the patient should become "an asylum-made lunatic" (a risk, by the way, that should not occur if the asylum-physician take a right view of the case, and recommend his discharge). But, perhaps, the greatest disadvantage of all in an asylum is the damage and discredit that are supposed to result to the patient from his having been an inmate of one. This is unquestionably a most serious matter to most persons. It results partly from a popular prejudice, and partly from the known fact of the tendency of insanity to recur in many cases; so that it is thought the patient "cannot be trusted" again. In so far as this feeling exists, and to the extent that it is a mere prejudice, it would undoubtedly save infinite pain to sensitive relations, and much annoyance to those who are unhappily liable to attacks of insanity, could we, as a profession, help to eradicate it. It certainly has no rational foundation. Why should a hospital for certain disorders of the brain be looked on with any degree of opprobrium? Why should an institution, that is in its design most

philanthropic, have ideas attached to it that savour of disgust and aversion? Why should not poor humanity have an unmixed blessing in the harbour of refuge which it has provided for those who are wrecked in mind? One way in which we can overcome this prejudice is by dwelling on the purely medical and curative aspect of the asylums. Another is by sending people to see them for themselves, so as to familiarise their minds with what they really are.

The above are general considerations in regard to home and asylum treatment; and before I attempt to apply those considerations to particular cases, I shall state a few general facts applicable to all cases of insanity, of whatever form.

Circumstances that indicate Asylum-Treatment.—In the first place, as a profession, we can never be justified in departing from this rule: that, if we are satisfied the life of the patient can be saved by sending him to an asylum, while there would be great risk of his dying if not sent, we must send him thither. And we would be equally untrue to the fundamental conditions of our art were we to keep a patient at home if we believed that, by means of asylum-treatment alone, he could recover from his disease. To save life and cure disease must be paramount with us. If an insane patient be so excited and dangerous that he has to be tied down for more than a day or two, then I think he ought to be sent to a lunatic asylum. If he be very suicidal, and cannot have extraordinarily watchful attendance; and if this tendency persist for a long time, however good the attendance may be, then an asylum is the only safe place. Safety is not absolute there; but as compared with almost any circumstances in which it is possible to place him outside, we may say it is absolute. Sixteen suicides occurred in England in 1870, in asylums, whither most persons known to be suicidal are sent; while 1,517 occurred out of asylums. No morbid impulse is so strong and subtle as the suicidal; and few are so latent and unsuspected in many cases. The quiet cases that say least about wanting to take away their lives, are by far the most dangerous. The very much more rare cases of true homicidal impulse should all, surely, be placed in asylums. And where the two impulses are combined, as is often the case, it is clearly our duty to remove the patient to a place of safety. However opposed relations may be on general grounds to the proceeding, they will certainly, if the patient kill himself or somebody else, blame the medical man. If a patient refuse to take food, and the medical man is too far away to feed him twice a day, there is nothing for it but the asylum. An exhausting disease of the nervous system cannot be starved, and yet recover. If our patient have morbid dislikes to relatives or neighbours, or insane notions about his house or locality, then the sooner he is away from them the better, either in an asylum or elsewhere. I believe so-called fixed delusions could often be removed, if they had not been allowed to feed themselves into strength and fixity by having their objects near them when they first arose. *Obsta principiis* must be our motto in this case. Indeed, there are few diseases where this principle should be more vigorously applied than in those of the brain. In any sort of mental disturbance, if the circumstances of the patient be such that they manifestly aggravate it, or if no proper attendance can be got, or if the patient have evidently not sufficient food, there can be but little question about sending him to an asylum, however mild the present symptoms may be. If home-treatment, after having been tried, have distinctly failed from any cause, then I think the alternative of asylum-treatment should at once be resorted to.

General Considerations against sending a Patient to an Asylum.—If he will probably recover as well at home, I think it our clear duty to keep him there. No mere annoyance to neighbours, except it be of a serious kind; no saving of a little trouble to relatives, can justify us in consigning a man to an asylum in the present state of opinion as to what sending to an asylum means. If we have a doubt on this matter, the patient should get the benefit of it. Extreme mildness of the symptoms should induce us to try to keep the patient at home. Delirious raving suddenly coming on, and acute delirious symptoms, generally can often be treated as well in bed at home, with ordinary good nursing, as anywhere else. If a little gentle mechanical restraint have to be used for a short time in such cases, it is quite unobjectionable, and may save the patient's strength. Extreme youth, or extreme old age, should in themselves plead for home-treatment, unless the symptoms present strongly contraindicate it.

I shall now go into the different forms of insanity, with a view to seeing what light such an examination throws on this question.

Forms of Insanity.—We do not derive any light whatever in the solution of this question by taking the common classification of insanity into mania, melancholia, dementia, and idiocy. There are many cases of each of those forms that should be kept at home, and many that should be sent to asylums. But we do acquire much information that helps us, if we take the classification of Dr. Skae, which is partly founded on the natural history of the disease, and partly on its etiology.

It is one of the numerous merits of this classification, and therein it shows its truly scientific character, that it helps in the solution of a practical question such as the one under discussion. By bringing the bodily causes of the mental symptoms prominently before our minds, it enables us to see whether we can treat and remove them with the means at our disposal in private houses. It helps our prognosis greatly; so that we can take into account the probable duration of the severe and acute symptoms that often make home-treatment impossible if they continue long. When a case is distinctly incurable from the first, the question of sending him to a lunatic asylum is immensely simplified.

Dr. Skae's Classification.—I shall briefly go over the different groups into which Dr. Skae divides insanity with reference to this question. His first group is congenital insanity, comprising idiocy and the various degrees of imbecility. This class of cases require training rather than medical treatment, and, as a general rule, are not suitable inmates of asylums. At home under the kindly care of relations, in institutions for the training of imbeciles, or in workhouses, such cases are most suitably placed. The next group, that of epileptic insanity, does most undoubtedly often require asylum-treatment, where there is a tendency to great violence and excitement after the fits. In many cases, however, this violence is very transient; and where circumstances allow suitable attendance during these times, the patients may be kept outside, and lead far happier lives than in asylums. If an epileptic, however, have become permanently irritable, with suspicions and sudden impulses to violence, then our duty is clear in the matter. The insanity of masturbation comes next; and I think every effort ought to be made to keep this class out of asylums, at first trying every means of cure before sending them there. The great hope in such cases is to get the bodily health into a thoroughly vigorous condition, and rouse the mind to interest itself in something that is healthfully stimulating. The same observations apply to hysterical insanity in the female, and to the short attacks of mania that sometimes occur at puberty (insanity of pubescence) in both sexes. In the case of puerperal insanity, everything depends on the intensity of the symptoms and the circumstances of the patient. In itself, this form, more than any other, tends to recovery with anything like proper treatment. Among the very rich, almost no cases of puerperal insanity need be sent to asylums; but they must often be sent from home, under the care of proper attendants. Among the very poor, on the contrary, I believe nearly every case would get better much sooner, and more satisfactorily, if sent to asylums. Somewhat the same remarks apply to insanity from prolonged lactation. The cure of this is a mere matter of abundance of good nourishment and stimulants, with some mild sedative to procure sleep. The insanity of pregnancy should only be sent to an asylum when the symptoms are so extremely acute that the patient cannot be managed elsewhere, or where strong suicidal tendency exists. Uterine insanity is so apt to be associated with fixed delusions of a sexual character, that most cases have, sooner or later, to be sent to asylums; and that being so, it is better they should be sent early, when treatment is of some avail. In few kinds of insanity is there such a tendency to think that nothing is wrong, and so an obstinate aversion to treatment of any sort. In an asylum, this treatment can be carried out *volens volens*. Climacteric insanity, or that occurring at the change of life, is usually a very curable affection, and its symptoms are mild in their character, so that resort to an asylum is seldom necessary. In the case of senile insanity, all must depend on the violence of the symptoms and the circumstances of the patient. Among the rich, such cases need never be sent to asylums. Among the poor, no cases are often so much benefited by asylum regimen and treatment. Phthisical insanity unfortunately needs asylum-treatment in most cases. The waywardness, dislike to relatives, irritability and fickleness that characterise it, can be better managed in an institution than in a private house. Traumatic mania, or that caused by violence, is generally best treated in an asylum. Its symptoms are apt to be violent and unmanageable out of one. Delirium tremens and alcoholism should not be sent to asylums, nor the attacks of ephemeral mania that sometimes follow a drunken bout. Dipsomaniacs should not be sent to an asylum. They should, assuredly, for their own sakes, be prevented from having stimulants; but, unquestionably, the law does not at present recognise this as a form of mental alienation that justifies deprivation of liberty. If we send such cases to asylums, we do so at our own risk; and I cannot see that it is the duty of our profession to expose itself to legal penalties in such cases. Mr. Dalrymple's bill will, no doubt, in time, put matters right in this respect. General paralytic insanity, I may say, should always be sent to an asylum. It is utterly hopeless from the first, and can be far better managed in an institution with means and appliances at hand. And there is no object in delaying time when we have made our diagnosis. The patient will merely be squandering his means, and causing infinite pain and annoy-

ance to his relatives during the time he is allowed to remain at home. In the case of acute idiopathic insanity, with a strong hereditary predisposition, if the patient be young, I believe it is of much importance to send the case to an asylum. Early treatment of the right kind may save the patient from falling into dementia, which he is likely enough to do under any circumstances. How should the existence of strong hereditary predisposition to insanity affect our view of sending a case to an asylum or keeping him at home? I think it ought to incline us to send him to the asylum, on account of the greater importance of having right treatment early and thoroughly applied in such a case. Hereditary predisposition does not denote incurability, by any means. In fact, such cases are quite as curable as others; but it does indicate a great liability to recurrence of the attack after being cured.

I am not going to enter here into the question of boarding out, in suitable families, the harmlessly demented, weak-minded, and mildly incurable insane. That is a question of expediency. They are working it out in Scotland. The English lunacy law as yet makes no provision for its being carried out under the supervision necessary to its being successful; so we need not discuss it.

THE CONSTANT OCCURRENCE OF SARCINA VENTRICULI (GOODSIR) IN THE BLOOD OF MAN AND THE LOWER ANIMALS: WITH REMARKS ON THE NATURE OF SARCINOUS VOMITING.

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GREAT mystery has prevailed regarding the conditions under which the peculiar organisms *sarcina ventriculi* (Goodsir) appear or are generated, as the phrase is. They have been most commonly observed in cases of chronic disease of the stomach associated with obstinate vomiting of acid, frothy, yeasty matters, of so characteristic a nature that the condition has received the name of sarcinous vomiting. Since the time when these organisms were discovered by Goodsir, and called by him *sarcina ventriculi*, it has generally been believed that the stomach is their natural habitat; and their occurrence elsewhere has been looked upon as a curious pathological fact, and has led to ingenious speculations endeavouring to account for their appearance as secondary to the affection of the stomach. *Sarcinae*, however, have been found by numerous observers in so many different situations, and under such varied conditions, that this explanation is entirely out of the question. Consequently, different species of *sarcinae* have been established, deriving their name from the locality in which they were found, or from some apparently slight difference in size and appearance. They have been found in the urine by Heller, Beale, Mackay, Johnson, Munk, Begbie, etc.; in the faeces and intestine by Bennett, Hasse, Demme, etc.; in cholera-stools and diarrhoea-evacuations by Wedl, Mensonides, Cunningham, etc.; in diseased conditions of the lungs by Virchow, Frerichs, Zenker, etc.; in the peritoneal fluid, in a case of perforation of the stomach, by Zenker; in the cerebral fluid, in a case of tubercular meningitis, by Jenner; and once on the surface of the capsule of the lens, in a case of cataract, by MM. Robin and Sichel. Virchow has seen them in the stomach of a rabbit, and Frerichs in the stomach of a dog the subject of a gastric fistula. Eberth has found them in the caecum and faeces of fowls, and in the stomach of an ape.

Many other instances may have been recorded, but these are sufficient to show in how few respects, apparently, they agree. The results of numerous experiments which I have been making for a different purpose appear to me to warrant the conclusion that organisms which develop into such as have all the characters of *sarcina ventriculi* are a constant, if we cannot call them a normal, occurrence, in the blood of man and the lower animals; and that the name *sarcina sanguinis* would indicate more truly the natural seat of these organisms. In reference to human blood, I find I have been anticipated by Losterfer (*Wien. Med. Fahr.*, 1871), who by a different method has succeeded in developing organisms like the *sarcina ventriculi* from the blood of several healthy individuals. That his observations are correct, my own experiments, both in reference to human blood and the blood of various lower animals, will fully show. In the case of rabbits, cats, dogs, and frogs, the special subjects of physiological experiment, I took sufficient precautions to ensure against introduction of organisms from without, by allowing the blood to run directly from the carotid or other large vessel into tubes (previously raised to a white heat), which were then immediately sealed; or into flasks similarly prepared and stopped with cotton-wool. Human blood was introduced into similar tubes