of the trichophyton tonsurans. It is a micro-photograph, and there was much difficulty in obtaining good definition. A scientific friend (who very kindly rendered me most valuable assistance) and myself had to take several plates before we got one satisfactory. Even this one is defective, inasmuch as there are three or four blotches shown which had nothing to do with the picture, but I show it because the fungus spores or conidia on the hair and amongst the *débris* are very well brought out.

The second view is a hair after a month's treatment. The hair is twisted and partly ruptured, just as one so frequently finds them in the chronic stage, and is of itself characteristic; but you will notice that there are very few conidia to be seen. There were a few, and, if you use a magnifying lens, a few will appear; and, by-the-bye, a lens brings them out very clearly in the first one.

The third view is the end of a hair frayed out, just as they are so often found, and equally significant of ringworm, the fungus separating the hairs into the most minute fibrillæ; and here there are no conidia visible, but there were a few found in another part of the hair.

This last was taken from another case, a boy who was at a city school in Bristol. The case was recognised early, and when I saw him first, on the 25th of May last, the hairs were crowded with conidia. Some were twisted and burst, very similar to No. II, only crammed with conidia. My note says "one hair showed them right down into the bulb." The photograph was taken from a hair removed on July 2nd, and an examination made a few days ago, and made very carefully with several distinct specimens—by distinct specimens I mean taken from varying parts of the affected area—gave no evidence of any conidia; so I think one may safely conclude the case is cured.

I am afraid it has been the fashion to regard ringworm as a very unimportant complaint—an "uncanny" one, may I say?—and medical men have fought shy of it. Where such has been the case in the past it must not be so now. In these days of extensive gregarious education in the huge Board, National, and public schools there is too much interest at stake for the complaint to be regarded lightly, but I do not think much good will be done—in the National and Board schools at least—unless there is a better recognition of the disease and, it may be, some legislative action respecting it. The educational grants to these schools depend in great measure upon results, and as ringworm need not necessarily be accompanied by the slightest ill-health—for constitutional weaknesses and robustness have nothing to do with it—the school marshals look up the children if haply they are being kept at home, and, finding nothing the matter with them except a little scurf on their heads, as they view it, insist upon the parents or relatives sending them to school. The length of time occupied by treatment is long at the best, and it is difficult to induce mothers or friends to continue bringing their children long enough; and thus, between the urgency of the school visitor and too frequently the inclination of the parent, it is not to be wondered at that the complaint is running fairly rampant amongst the schools. If a return could be made of all the cases in Board and National schools only, and especially the chronic cases, the results would be most astounding.

This view of the subject brings me to another point, namely, the prophylactic treatment. As far as I know this has not received the consideration which I think it deserves. When we come to consider that a little innocent child, of a few or more years' age, affected with head ringworm—and it is a literal affliction—is for a period varying from months to years, in many cases (I am speaking now of the ordinary modes of treatment) practically a pariah as regards the society of other child companions, does it not seem remarkable that so little has been attempted to minimise, at least, the chance of the propagation of infection? If—and there is no doubt about it—one child suffering from tinea may, directly and indirectly, infect a large number of its companions, by being allowed to associate and play with them; surely if anything could be done to diminish this risk without ostracising the child, it is well worth consideration, and I venture to point out that by simple and elegant means, very great immunity may be obtained. I don't like to boast of perfect immunity, because my experience, although extensive, is not such as would justify the more comprehensive form of speech. May the results in the future fully corroborate the idea, however!

It is accepted that a dry state of the scalp is more favourable than a moist one for the spread or development of the parasitic fungus, and that grease also is prejudicial to its growth. Keeping these points in view, I employed various agents, but came eventu-

ally to the conclusion that the following application was very effective. B. Ointment of boracic acid and ointment of eucalyptus, of each $\frac{3}{4}$ ij; oil of cloves, $\frac{3}{4}$ ss; and oil of cocoa nut, to make $\frac{3}{4}$ vi. This constitutes really a very elegant pomade—call it prophylactic pomade if you will—one of the very best for general purposes, as well as this special that I know of. If, however, ringworm makes its appearance in a family, I recommend its use to other parts of the head of the patient, and to all the other children in the family, and so far with very satisfactory results. To test further its efficacy I purposely placed infected hairs on the heads of three children, and then did not use the pomade until the next day. No infection occurred in any of the cases. You may say that this result is only negative evidence, and so it is; but still it is worth something, and is of the kind desired.

Before closing my paper I should like to state that I have treated a few cases of favus on the same plan as tinea tonsurans, and very successfully; but in Bristol and England generally cases of favus are so very rare, that one has no opportunity of testing results on a large scale. Of tinea tonsurans I have had more than one hundred cases during the last two years, and from these I consider I am warranted in drawing conclusions, upon the whole, highly favourable.

ON THE RAPID CURATIVE TREATMENT OF CYSTITIS IN WOMEN.¹

By THOMAS MORE MADDEN, M.D., F.R.C.S.E.D.,

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THE disease to the treatment of which I desire to invite your attention for a few minutes, namely, cystitis in women, is not only one of the frequent complaints that come before us in gynaecological practice, but is also admittedly most intractable to the methods generally relied on for its relief. Moreover, too often this condition, as Dr. Emmet has well observed, occasions an intensity of suffering, both of mind and body, unequalled by any other infirmity to which the human body is subject. I therefore need offer no apology for here bringing under your consideration a method which I believe to be new, and which I know by experience to be generally successful in its rapid curative treatment.

Within the past year I have found my former contention with regard to the prevalence of cystitis in women, as well as the advantages of the method of dealing with such cases referred to, borne out by the fact that twenty-eight instances of this kind have come under observation in the gynaecological wards of my hospital; and that in nearly every one of these cases the patient was discharged free from the disease, which in some of them had resisted years of other treatment.

Causes of Female Cystitis.—As met with in our special branch of practice, cystitis frequently occurs as a complication or consequence of vulvar or vaginal inflammatory conditions—vulvitis and vaginitis more especially when of gonorrhoeal origin; or it may be due to mechanical causes, uterine flexions or displacements, and fibromata. Occasionally it results from the extension of renal disease, or from the irritation of gravel or calculi; as well as from cold, local injuries, reflex irritation, or simply from long delay in complying with the call of micturition.

Symptoms.—In women cystitis is, not only from the special causes incidental to the sex, more frequent than in men, but is also more urgent in its symptoms and more liable to lead to grave pathological consequences than is the case with the same disease in the latter. These symptoms and sufferings may, perhaps, be best illustrated by the history of a typical case of this kind.

F.G., aged 18, was admitted into St. Agatha's Ward, suffering from persistent, teasing, suprapubic pain, extending throughout the pelvis, and giving rise to tenesmus, as well as to almost continual desire (night and day) to pass water, with little or rather no relief on each occasion of so doing, micturition being attended with increased pain, straining, and inability to void the last drops of urine. These symptoms had endured for nearly two years before admission, and had not been mitigated by the treatment

¹ Read in the Section of Obstetrics at the Annual Meeting of the British Medical Association held at Glasgow, August, 1888.

employed during the time. This result was apparent in the physical appearance of the patient, who, from a plump, well-conditioned, good-looking girl, as we were assured she had been before the disease commenced, was now reduced to a wretched, careworn, cachectic-looking creature, to whom life was a misery. On examination, the urethral orifice and canal were found patulous, and the mucous membrane extruding in a state of hypertrophic ectropium through the gaping meatus. The lining membrane of the bladder was in a similarly diseased condition, and its cavity and walls were so contracted and irritable that it was not without occasioning considerable pain that we could inject an ounce or two of bland fluid, which was immediately ejected with spasmodic force. This is no over-wrought picture of a well-marked case of cystitis, such as may every day be met with in the gynaecological wards of any hospital. Moreover, the condition described is one that may, I believe, in most instances be effectually and permanently relieved, as the case just described was, by a facile and rapid method of treatment, and without the necessity of resorting to the formation of an artificial vesico-vaginal fistula.

General Treatment of Cystitis.—Before describing the method now referred to, I may say a few words with regard to the general principles which should guide our management of these cases, as well as on the ordinary plans of treatment and palliative measures generally recommended in cases of cystitis in women. In the first place, then, it is obvious that in this, as in every other disease, our primary business is to ascertain and to remove, if it be removable, whatever may be the exciting cause of the morbid condition of the bladder. Thus, if the disease be dependent on extension of vulvar or vaginal inflammation, either gonorrhoeal or non-specific, this must be at once allayed by appropriate treatment. If the cystitis be due to the mechanical pressure of a displaced uterus, this should be rectified by a suitable pessary. In the same way the weight of a uterine fibroid pressing on the bladder, if it cannot be otherwise got rid of, must be at least lifted well above the pelvic brim, and there maintained by the means which were pointed out in my *Lectures on Uterine Fibromata*. If vesical calculus be present, or if, as should be ascertained by careful examination of the urine, renal disease exists, and has extended from the kidneys along the ureters, it will be useless to attempt the topical treatment of the consequent cystitis until in either instance its cause has been removed.

Presuming, however, the case to be one of uncomplicated cystitis, we have then an abundant choice of suggested remedial measures which (save that advocated by Dr. Emmet, to the grave objections to which I shall subsequently refer) are all, I believe, equally useless, as far as probability is concerned, of thus curing any extreme case of cystitis. Nevertheless, some of these measures are unquestionably of value as palliative expedients, and may possibly even prove curative in exceptionally mild cases of the disease. Of these the most generally useful in this way are long-continued warm baths, washing out the bladder through a double catheter with plain warm water, thin flax-seed tea, or a solution of boro-glyceride; conjointly in all instances with absolute rest in bed, the free use of diluents, together with the administration of the old-fashioned Dover's powder in small, frequently-repeated doses, as the best opiate in these cases; and lastly, above all, by the use of boracic acid in 10 or 15-grain doses three or four times a day, by which the generally foetid ammoniacal urine is deprived of its foetor and rendered less irritating to the endo-vesical mucous membrane.

Curative Treatment of Cystitis.—The measures just referred to, as already observed, may relieve, but *per se* will not cure well-established cystitis, nor am I aware of any method by which this result can be obtained except by primarily giving the diseased lining membrane of the bladder and its submucous muscular walls absolute physiological rest. This may be secured in either of two ways, namely, first, by that advocated by Dr. Emmet on the suggestion of the late Dr. Marion Sims, which consists in the formation of an artificial vesico-vaginal fistula through which the urine may drain away as fast as secreted, and by the consequent removal of the immediate source of irritation to the unhealthy and hyperæsthetic endovesical mucous membrane thus affords the patient a fair chance of escape from ultimate extension of the disease to the kidneys. The objections to this plan of treatment are, however, so grave as to render any rational alternative that may be suggested for attaining the same object by less heroic means deserving of fair consideration and full trial. These objections are, first, the general difficulty of keeping the fistulous opening patulous for a sufficient time to allow the diseased bladder to

regain its normal condition; secondly, the irritation often occasioned by the button commonly employed for this purpose; and thirdly, the more serious trouble, which we meet with in some exceptional instances, of closing the fistulous opening when the desired object has been attained, and the consequent misery resulting from this mischance, by which the patient's last condition may thus possibly be rendered worse than her former state.

For these reasons I have abandoned this operation, and believe that we may obtain all its advantages more easily and more safely, simply by so thoroughly dilating the urethral canal with the instrument exhibited as to enable us to pass the index into the bladder, and thereby paralyse the contractility of the sphincter or of the canal for a time, which may be indefinitely extended by repeating expansion in the same way as often as may be necessary. It may, moreover, be advisable in some instances to remove the proliferating vesical mucous membrane by the cautious employment of a dull wire curette, such as that now shown, which I have used with advantage in cases of this kind. And, lastly, whether the curette be required or not, the method of dilatation just described should, in all cases, be conjoined with the topical application of carbolio acid to the mucous surface. The latter is best employed in the form of glycerine of carbolio acid of the *Pharmacopœia*, which is quite strong enough for this purpose, and introduced by an ordinary stilette, armed with a piece of absorbent cotton saturated in the application, and passed through my dilator so as to avoid any of the acid being brushed off in the canal until it reaches the fundus vesicæ, where it should be retained for a couple of minutes until every part of the vesical wall contracts firmly upon it. The urethral canal is then to be similarly brushed out by another application of the carbolised glycerine. The pain caused by this procedure may be prevented by previously introducing in the same way a ten per cent. solution of cocaine. I have only to add that, according to my experience, the plan of treatment now recommended seldom requires to be repeated more than two or three times, at intervals of a week, to effect a cure of even the most aggravated cases of cystitis in women.

Mr. JESSOP (Leeds) reminded the meeting that several years ago Mr. Teale (Leeds) advocated the treatment of vesical irritation by dilatation of the urethra alone, without, that is, the application of any remedial measures to the interior of the organ. The cases were not few which, having resisted all topical and medicinal means, would at once yield to the operation of dilating the urethral canal. He himself was in the habit of using the well-known Weiss's three-bladed instrument, and of dilating to such an extent as to admit the introduction of his forefinger through the open blades of the instrument. It seemed probable that the curative result was due to the paralysing effect upon the sphincter of the dilatation, which led to a temporary rest both of the sphincter and bladder.—Dr. M. A. BOYD said: Any new recommendations as to our means of treating this troublesome affection, we should certainly hail with pleasure. We should feel grateful to Dr. Madden for this new addition to our means of treatment for it. I cannot agree in the statement of the last speaker that dilatation of the urethra alone is sufficient. It is certainly useful, but will not prove sufficient in all cases; and the application to the cavity of glycerine of carbolio acid when the mucous membrane is diseased, as it is in some cases, ought to give relief by its anæsthetic properties.—Dr. BYERS drew attention to the value of ascertaining whether any peri-uterine inflammation was to be found in these cases, as, when this was present, treatment with hot douches, glycerine pledgets, etc., would relieve the bladder distress. In other cases the constant use of a small catheter, just passed within the internal orifice of the urethra, was of great value by giving constant rest to the bladder. This plan might act through causing dilatation, but its great feature was that it gave rest to the bladder.—Dr. HEYWOOD SMITH hoped that Dr. More Madden would, in his reply, indicate the time recommended for the dilatation of the urethra, for he had seen cases often dilated too rapidly producing laceration of the urethral orifice and permanent incontinence.—Dr. SAMUEL SLOAN remarked that whilst all the speakers agreed on the advantage of dilatation in bladder irritability, Mr. Jessop declared that dilatation alone was sufficient, whilst Dr. Madden insisted on further measures. Now these gentlemen referred to different conditions of bladder. There would be no doubt that in cases of simple irritability with healthy urine and healthy mucous membrane, no amount of other local or of constitutional treat-

ment could avail. Here if you dilate, you at once, and in a great majority of cases, cure the affection. In cystitis, on the other hand, you required additional measures. As to time, Dr. Sloan said he usually occupied about fifteen minutes in the operation, and in no case had he any bad symptoms resulting.—Dr. DUKE had the pleasure of seeing several cases of Dr. Madden's treated by his method with excellent results. He wished to say that it was exceedingly difficult to diagnose the cause of cystitis in young girls, but he had been able to trace the complaint in a few cases to masturbation, where the patient carried the morbid secretion from the vagina into the meatus, and thus set up an acute attack, which was much easier to produce than to cure.—Dr. MORE MADDEN, in reply, expressed a hope that the communication just read might induce other practitioners to give a fair trial to the plan of treatment he had recommended; and he ventured to believe that any who thus adopted it would probably come to the same conclusions as those arrived at by his friends Dr. Boyd and Dr. Duke, who, having witnessed his method of treating cases of cystitis, had in the foregoing discussion so kindly borne testimony to its successful results.

CLINICAL MEMORANDA.

SUSPENSION IN THE TREATMENT OF LOCOMOTOR ATAXY.

WITH reference to the subleader on this subject which appeared in the JOURNAL of February 23rd, may I be allowed to state the results obtained, so far, in three cases which have been treated by this plan for the last month, commencing soon after the appearance of M. Charcot's lecture in *Le Progrès Médical* for January 19th?

CASE I.—E. G., aged 52, was admitted January 24th with lightning and girdle pains, ataxy, loss of pupil reflexes and knee-jerks and ability to stand with his eyes shut; entire loss of vesical reflex and of power of voluntary micturition. He was suspended first on January 28th, and since then has been suspended twenty-one times, generally for two minutes, sometimes for fifteen or thirty seconds longer. He complains of no disagreeable effects, except singing in his ears during the time he is suspended. He is a small, light man. In addition to this treatment, he has been blistered down the spine, and has taken 30 grains of iodide of potassium three times a day. His present condition (February 24th) is: no girdle pain, very little lightning pain, walks better, passes an increasing quantity of water voluntarily; knee-jerks, pupil reflexes, and inability to stand with eyes shut are as they were.

CASE II.—H. H., aged 40, admitted January 28th with lightning pain, gastric crises, ataxy, inability to stand with eyes shut, no knee-jerks or pupil reflexes. He has been suspended seventeen times; as he is very nervous, the duration has averaged under two minutes, though lately this period has been regularly attained. He formerly complained of "fulness of the head," lasting for some hours after the operation, but he does not do so now. His pains are better; he has no gastric crises since admission, but he is otherwise not improved. He has been taking 30-grain doses of iodide of potassium three times a day.

CASE III.—E. L., aged 34, admitted January 24th, with girdle and lightning pains, ataxy, and inability to stand with his eyes shut; knee-jerks exaggerated, pupil reflexes present. There is a distinct history of syphilis. He has been suspended fifteen times since February 3rd. In addition, he has taken 30 grains of iodide of potassium three times a day, and has been blistered down the spine. At the present time his pains are better, but there is no other improvement.

These results are not very striking, but the average duration of treatment in Charcot's cases was twenty-seven suspensions, and I have not reached his maximum of four minutes. I intend to persevere with the plan, as it is not attended with any serious inconvenience. Case I has undoubtedly improved, though to what extent this should be attributed to the suspension may be doubtful.

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HYDRONEPHROSIS RELIEVED BY POSITION.

MRS. C., aged 30, consulted me on January 25th, 1889, complaining of a painful swelling on her right side, which had been increasing in size during the last three weeks. Upon examination I found a fluctuating tumour extending from one inch below the lower border of the liver as far as the brim of the true pelvis, forwards to the middle line, backwards to the spine. Passing almost perpendicularly downwards was a deep sulcus dividing the swelling into a large outer and a smaller inner portion. *Per vaginam* I was able to feel the lower border of the cyst. As I was unable to detect the colon, I presumed it rested in the sulcus. Her urine was normal, and other organs healthy. Having diagnosed it a case of hydronephrosis, and thinking that position might afford relief—she having already partaken freely of aperients—I directed her to rest in bed with her pelvis elevated upon pillows. After remaining in this position for a few hours she suddenly felt a desire to pass water, passing about a pint. Shortly afterwards she was again compelled to leave her pillows, and, after passing about a pint and a half of urine, discovered the swelling had disappeared.

R. H. A. HUNTER, M.R.C.S. and L.R.C.P., etc.

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ADDISON'S DISEASE.

ON June 2nd, 1888, I was asked to see W. D., aged 59, a man whom I had known non-professionally for the last five years, and whom I had, as he walked along the street, noticed for some few months to be gradually losing flesh, colour, and strength. His family history was good, and he was the father of a large and healthy family. His health, up to the commencement of his present illness (with the exception of what he called an attack of brain-fever ten years ago), had been good; but in September, 1887, he began slowly but surely to realise that he was losing health and strength, and to feel his employment, that of a rate-collector, almost too much for him. He continued in this feeble condition (despite treatment carried on by his medical adviser) through the winter, and, expecting help from further advice, called me in, as above stated, on June 2nd. My first idea was that he might be suffering from pernicious anæmia, as the man's blanched condition of skin immediately suggested some blood-condition, and, with this notion, I examined his blood, in which red corpuscles were markedly deficient; no rouleaux to be seen; colour very pale.

Physical Examination.—Left lung dull at base, elsewhere the percussion note being normal; coarse crepitations scattered all over this side. Right lung normal, as also was the condition of the other organs. Cough frequent, expectorated frothy mucus. Respiration was weak and irregular, but not hurried. Pulse small and feeble, 100. Urine normal in quantity, 1,020, trace of albumen, no sugar. Alimentary canal: tongue clean, but marked by teeth, appetite very capricious, but generally good; has had two attacks of hæmatemesis, and constantly feels sick, but being so does not give any relief; vomited matter not offensive. Bowels constipated. Temperature 99°. The whole of the skin of his body is of an almond white colour, but is nowhere patchy or bronzed. Although he has lost flesh, he is by no means thin.

June 4th, 1888. While talking, he tells me he has felt no sexual feelings for ten years, and for the last few days has noticed an increasing brown mark on the scrotum, which, on examination, proves to be a large patch of pigment, covering the right side of the scrotum, and running for an inch or so down the inside of the right thigh. Closer inspection shows bronzing of the borders of the axillæ, and spots of pigment on the neck and arms. His general condition is the same as before. Hydrocyanic acid and bismuth have eased the feeling of sickness. From the room in which he usually sat being papered with a bright arsenical green, I imagined that this might possibly be the cause of some at least of his symptoms, so the paper was changed, and the moist peroxide of iron given, which only gave temporary benefit, although it certainly did help him for a time. Liq. arsen. hydrochlor., ferri et ammon. cit., quinine, and liq. strychninæ were all tried, but to no purpose. Pure terebene on sugar, and syrupus picis liq., have a marked effect on the cough and expectoration.

July 6th. The bronzing has entirely disappeared, but the general condition is rather worse than before.

This state of things, in spite of all that was done for him, went on getting worse, although he did not give up his occupation; and, on September 23rd, 1888, at 7 A.M., while sitting on the edge of his bed drinking a glass of milk, he died suddenly, probably from cardiac syncope.