OBSERVATIONS ON
SPERMATORRHŒA,
OR THE
INVOLUNTARY DISCHARGE OF
THE SEMINAL FLUID.

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THAT important and most afflicting class of affections of the sexual organs, which is characterised by the frequent involuntary discharge of the seminal fluid, although sufficiently familiar to the majority of practitioners engaged in the large towns of this and other countries, has not met with such public notice on their part as it would seem to demand. For this reason, and to the great detriment of society, the treatment of the effects of sexual abuse or excess, exclusive of syphilitic and blennorrhagic affections, is too generally consigned to a section of that horde of unprincipled pretenders, which the government of this country, to its shame, by tolerating, continues to patronise, and from whose obscene advertisements it condescends to derive a portion of its revenues. It thus happens that a subject fraught with the deepest interest, both as regards the individual and society at large, is rarely, in all its extensive details, submitted to honest and scientific investigation. It is to be hoped, however, that as the eye, the ear, the teeth, have one by one been rescued from the unclean grasp of quackery, so, in its turn, this most wretched of all the curses which man's imprudence entails upon him, may be thought worthy the attention of the educated practitioner.

If a person after the age of puberty, and more especially if he have indulged in regular sexual intercourse, be from any cause induced to lead a life of perfect continence, he will experience involuntary emissions during sleep in greater or less frequency. The secretion of semen being continuous, and not, as is by some believed, accidental upon erotic excitement, nature adopts this mode of disembarassing the system of a product which ought, in correspondence with her laws, to be expended in the wholesome sexual employment of the organs. Emissions, therefore, occurring under such circumstances in robust individuals, so far from being injurious, must be regarded as a salutary provision. But, although beneficial, or, at least, harmless, at first, these nocturnal discharges may, if the continence be prolonged, be, by an acquired habitude of the parts concerned, repeated to an extent which becomes positively injurious, and, as in the case of other habitual discharges, then produce inconveniences proportionate to their frequency, and the original constitution of the individual.

But the cases in which spermatorrhœa is consequent upon unnatural continence *per se* are comparatively rare. The involuntary

emissions which occur in such abundance as to constitute a really morbid phenomenon, are usually to be traced to one or other of the causes hereafter to be mentioned.

Symptoms.—From the almost insurmountable objection to speak of their ailments which is generally observed in the unhappy subjects of this complaint, it is difficult to procure a complete account of its origin. The history of a case of seminal emissions, however, will usually be found to be somewhat as follows. After a greater or less amount of abuse of the genital organs, either natural or unnatural, the individual makes the discovery that he has become infested with seminal emissions during sleep. The emissions are at first accompanied by erection, but soon occur with diminished rigidity of the penis. If he at this time indulge in sexual intercourse he experiences more than usual difficulty in consummating the act; he is frequently disappointed altogether, or, if not, the erection is incomplete, and ejaculation more than ordinarily precipitate, and in some cases painful. As the disease advances the nocturnal emissions increase in frequency and abundance, at length occurring without either erection or pleasurable sensation; in fact, the patient is often only made conscious of them by the sense of feebleness on waking and by the marks upon his linen. In sexual intercourse ejaculation becomes more and more hurried, till at length mere contact with or even sight of, the female will induce it, and complete impotence is thus established. The pernicious effects of these discharges upon the general economy is soon evidenced. The mind becomes enfeebled and incapable of protracted attention, the memory fallacious and uncertain, and the patient feels that he is no longer fitted for his usual avocations. His disposition undergoes an equal change, he becomes morose and suspicious, fond of solitude, lachrymose upon trivial occasions, and exhibits those apparently causeless contrarieties of temper, which are commonly received as evidences of hypochondriasis or eccentricity. Cerebral and thoracic symptoms, as giddiness, noises in the ears, palpitation, and cough, present themselves in greater or less intensity. The body gradually emaciates, especially about the lower extremities. The aspect becomes dejected, the patient seldom raises his eyes to the person he addresses, as if conscious that the expression of his countenance would reveal his wretched condition. Digestion is impaired and accompanied by pain and flatulence. The bowels are invariably costive; indeed, I know scarcely any disease short of mechanical obstruction, in which they so obstinately resist the most powerful cathartics. That this state of bowels is intimately connected with the emissions is shown by the fact, that upon the suspension of these, the bowels at once resume their normal action. A case has lately come under my

care in which the bowels resisted two-minim doses of croton oil, but acted spontaneously and regularly after the cure of the emissions by cauterisation of the urethra. The urine is passed frequently, three or four times perhaps during the night. The aspect of the genitals is generally though not always enfeebled. I have seen the most complete impotence co-exist with sexual organs of large size and vigorous appearance, but usually the penis is flaccid and without elasticity, the scrotum pendulous, and the testicles soft and tender to the touch. After the lapse of a certain time, if the disease makes progress, the nocturnal emissions cease, and the patient is buoyed up with the hope that his ailments are removed; but his increasing feebleness soon proves that his hopes are without foundation. If at this time the patient's attention be directed to it, it will be found that an alteration has taken place in the character of the urine, it has become turbid and nauseous to the smell. The turbidity is not, as in chronic affections of the bladder, persistent throughout the entire act of micturition, but appears chiefly towards the end, the urine being clear at the commencement. In other cases the seminal fluid is not emitted till the bladder is emptied, when a glutinous fluid is observed to accompany the last few drops of urine. The evacuation of the bowels is accompanied by the same discharge, so that, in fact, there is a daily draining away of the seminal secretion.

The case is now complete, and in that condition which, until Lallemand directed our attention to it, was utterly misunderstood. The medical attendant being misled by the fact of the absence of nocturnal pollution, was invariably in such instances occupied by the more prominent features of the case, which was considered as cerebral, cardiac, or gastric disease, accordingly as one or other organ happened to take the lead in the symptomatology. This is doubtless the description of an extreme case; the majority present themselves while the emissions are nocturnal,—before, in fact, the disease has assumed its worst aspect; but it is of importance to be aware that the seminal fluid may pass away with the urine, and that it is not to be concluded, in a suspicious case, that spermatorrhœa does not exist, because a nocturnal emission has not occurred for a long time. The tendency of every case of morbid nocturnal emission, if unchecked, is to become diurnal. The nocturnal discharges cease for the plain reason that the semen is removed continuously in the evacuations of the bladder and rectum.

The Morbid Anatomy and Pathology.—We shall now proceed to the pathological appearances which have been observed in fatal cases of spermatorrhœa. When it is considered how great is the difficulty of recognising seminal pollutions after they have become diurnal, as is generally the case

before they induce the death of the patient; and also how numerous are the instances, among fatal cases, in which the pathological causes only of the more prominent symptoms referrible to the head or abdominal viscera are looked for, the real nature of the case having been overlooked,—we shall not be surprised that few records are to be found of the essential anatomy of spermatorrhœa. The doctrine most in vogue concerning the pathology of the affection is, that it depends upon an atonic condition of the seminal apparatus, and the treatment has therefore consisted of attempts to strengthen the system by local and general tonics and stimulants. The frequent failure of the means calculated to effect this end, and the not unfrequent aggravation of the mischief under the use of iron and similar remedies, must convince us that in many cases the pathology is misunderstood.

On this point, as well as in the treatment of the complaint, we are mainly indebted to Lallemand.* The morbid anatomy as given by him displays the following lesions:—

1. *In the Seminal Ducts*—Dilatation of the orifices with erosion or ulceration; the ducts themselves dilated, or, as it were, dissected out by suppuration of the prostate. In some cases they have been found cartilaginous or even ossified.

2. *Vesiculæ Seminales*—In some cases filled with pus, in others with tubercular matter, mixed with ill-elaborated semen. The lining membrane has been found dark-coloured, ulcerated, or sloughy.

3. *Vasa Deferentia*—These vessels have exhibited tortuosity, and irregular dilatation, with pouches and intervening strictures.

4. *Testicles*—These organs are usually soft and white, and more or less diminished in size.

From a consideration of these changes, taken in connection with the symptoms, it is clear that the proximate cause of the disease is chronic inflammation, or, at least, irritation, of the whole track of the seminal apparatus, but more especially of that portion of it situated near the prostate part of the urethra. Had we not direct proofs of this in the ulceration, &c., of the parts, the analogy of the same state of other organs would be sufficient to direct us to a correct opinion. The effect of chronic inflammation of mucous tissues is to excite in them a mixed state of functional debility, and irritability or increased sensibility to ordinary stimuli. We have instances of this in the stomach and bowels, but more frequently in the bladder, all of which organs in a state of chronic inflammation become impatient, and reject a small quantity of their contents, of the presence of which, in their healthy condition, they would not be sensible. Precisely the

* Des Pertes Seminales Involontaires. Paris, 1839.

same train of circumstances is observed in that condition of the prostatic portion of the urethra and its vicinity upon which the disease in question depends. The parts concerned in ejaculation are morbidly irritable; the vesiculæ seminales contract upon the smallest quantity of semen, and are induced to the discharge of it upon the slightest irritation, and thus follows, in the first instance, precipitate ejaculation *in coitu*, and eventually pollutions, with their invariable concomitant, a greater or less degree of impotence. I think, from these circumstances, it is fair to conclude with Lallemand that in the majority of cases spermatorrhœa has for its essential lesion chronic inflammation of the parts concerned in the formation, conveyance, and expulsion of the seminal fluid.

There is, however, a form of the complaint which is produced solely by debility of the parts. This form is generally to be traced to congenital causes, and ensues in many cases without the least suspicion of excess or abuse on the part of the patient. I shall hereafter speak of the characters by which this form is to be recognised; the treatment is simple, but the prospect of cure very small.

Causes.—It has been the custom with most writers, from the time of Hippocrates downwards, to attribute seminal pollutions in all cases to previous abuse of the sexual powers. More recent investigations have determined that, although such indulgence is the more common cause, there are other circumstances capable of inducing the disease, independently of any blame on the part of the patient.

It is well known that some individuals support with impunity a degree of sexual irregularity which inevitably plunges another into the miserable condition in question. We must, therefore, admit in the case of spermatorrhœa, as in other diseases, the existence of predisposition. This predisposition is to be found in a congenitally feeble state of the sexual organs, by which they are rendered early susceptible of injury from over-excitement. Lallemand, who has paid considerable attention to this branch of the subject, remarks that sexual feebleness is indicated by congenital phymosis, varicocele, and incontinence of urine. Of the first of these he has given several cases in which the disease was established without either excess or abuse of the sexual power. Incontinence of urine during childhood, according to the same author, is of the worst augury for the subsequent vigour of the genital organs, especially when it persists during the day, and continues until puberty. In the greater number of patients of this class whose cases are detailed by him, nocturnal emissions occurred from the very commencement of puberty, and without any appreciable exciting cause; moreover, the slightest circumstances sufficed to invest

them with the character of great severity, and they were speedily replaced by the most obstinate diurnal losses.

The exciting causes of spermatorrhœa are now known to be far more numerous than was formerly supposed. The most common cause is doubtless the exaggerated excitement of the organs, either in a natural or unnatural manner, but more especially the latter. The next in importance is gonorrhœal inflammation of the urethra. The disease may likewise be induced by affections of the rectum, the presence of sebaceous matter under the prepuce, and perhaps by continence. I shall notice each of these causes separately.

The cases in which spermatorrhœa is induced by venereal excesses solely, I believe to be rare. The organs will sustain a great amount of natural excitement, in ordinary cases, without permanent injury. Where such instances do occur it is usually in the case of newly-married men. In those individuals who have suffered in consequence of immoderate promiscuous intercourse, there are generally to be met with the concomitant circumstances of intemperance, late hours, gonorrhœal affections, and other incidents in the life of a debauchée, so that it is rendered difficult to determine to what degree the mischief is to be ascribed to the sexual excess. But in the unnatural abuse of the genital organs we have the most common cause of the disease, and one which there can be no difficulty in allowing. This cause existed in the majority of cases reported by Lallemand, either alone or combined with others, and in twenty-four cases out of thirty-three treated by Mr. Phillips* it was plainly avowed. So common do I believe the vice of masturbation to be in the present day, that I do not hesitate to ascribe every case of seminal pollution to addiction to the practice.

Blennorrhagic affections are the next most frequent exciting causes of pollutions. We should be led to anticipate the effect of urethral inflammations in the production of the malady from the close anatomical connection between the urinary and spermatogenic apparatus. We find accordingly that gonorrhœa and its consequences are frequent precursors of the disease. Lallemand has particularly noticed the great effect of stricture of the urethra in inducing seminal discharges. He thus expresses himself upon the subject:—*“Depuis lors j'ai eu de nombreuses occasions de me convaincre que les pollutions diurnes etaient encore plus frequentes à la suite des retrecissemens de l'urètre, que je ne l'avais pensé moi-même. Dans bien des necropsies j'ai rencontré à la suite des retrecissemens anciens, les vesicules seminales, les canaux deferens, les testicules, et*

* Observations on Seminal and other Discharges, &c.—*Med. Gazette*, May, 1843.

même leurs enveloppes aussi malades que la vessie, les uretères, et les reins.”

Pollutions are likewise attributed to causes having their origin in the rectum, as constipation and the presence of ascarides. In the former it is probable that the effect has been often mistaken for the cause, since, as has already been remarked, an obstinate state of the bowels is a very constant symptom of the disease. It may, however, be readily supposed that if the vesiculæ seminales be already in an irritable condition, the passage of hardened faeces may induce their contraction or expel their contents by simple compression. Lallemand believes that hæmorrhoids, fissure of the anus, and stricture of the rectum, produce seminal emissions mainly by inducing constipation. It appears to me, however, much more rational to suppose that the chronic inflammation which always exists in those instances has extended by continuity of tissue to the seminal apparatus, as is the case in inflammatory affections of the urethra. Be this as it may, the presence of ascarides in the rectum appears to have a direct influence in producing and maintaining seminal emissions, as in many cases the expulsion of the worms is the only means necessary for the cure of the disease. Every one who has seen a moderate share of the diseases of children must be aware of the influence exercised over the genital organs, even in them, by the presence of worms in the lower bowel. Frequent erection of the penis, even in very young children, so often co-exists with these animals as to be considered in the relation of cause and effect by mothers and nurses. It is not surprising, therefore, that an agent so powerful before puberty should after that period be productive of the worst effects. There is one peculiarity about the seminal emissions arising from this cause which deserves to be noticed, and which may even be considered diagnostic of its operation. It is the obstinate character of the erections which accompany the pollutions, and which persist for some time after the occurrence of the ejaculation. This is not observed in pollutions from other causes; on the contrary, the vigour of erection diminishes *pari passu* with the severity of the complaint, and eventually disappears altogether.

Among the occasional causes of spermatorrhœa may be mentioned the presence of sebaceous matter between the glans and prepuce, and absolute continence. The operation of sebaceous secretion is probably indirect. By keeping up a constant irritation in the parts it leads in those who have not been forewarned of the danger to the practice of onanism, and to this the malady is in reality to be attributed.

Absolute and prolonged continence is supposed by Lallemand to be sooner or later followed by spermatorrhœa and impotence in all cases, and he gives numerous consulta-

tions by Romanist clergymen in confirmation of his opinion. It appears to me that Lallemand, in the ardour of his investigations into a malady for the elucidation of which he has done so much, has been guilty of unconscious exaggeration in attributing the actual, or, as it more frequently is, the imagined, impotence of persons who have long led a chaste life to the presence of diurnal seminal discharges. My experience leads me to the conclusion that the “impuissance” of such individuals is due to a want of muscular power, to a kind of semi-paralysis, in fact, of the erector muscles, rather than to the absence of seminal fluid. The genital, like other muscular organs, deteriorate in power from disuse, and as the deltoid, if it were to remain perfectly inactive for a given time, would shrink in volume and diminish in power, so will also the *erectores penis*, and the other muscles which assist in keeping the organ in a state of rigidity. Actual experience, moreover, will convince us that such is the fact. Every one must be aware of the imperfection of the first acts of intercourse, when access to the sex has long been suspended, and that the perfection of the act is advanced by its repetition.

The *modus operandi* of these different causes is next to be considered. It is scarcely necessary to point out in what way excessive coitus and masturbation induce chronic inflammation of the spermatic apparatus. Suffice it to say, that all organs in which mucous membranes are largely distributed, if frequently stimulated, are liable to assume a permanently hyperæmic condition. The effect of blennorrhagic affections is still more obvious, as in them the whole urethra is more or less in a state of inflammation, which, frequently repeated or long continued, leaves the orifices and canals of the excretory ducts in that condition which we have seen to belong to the disease in question. Phymosis acts by producing external inflammation of the glans, which is propagated along the canal of the urethra. The presence of sebaceous matter operates in the same manner, or by inducing the habit of masturbation. The diseases of the rectum, which are occasional causes of emissions, I believe to operate through the extension of the inflammation by contiguity of structure, and not as Lallemand imagines, by inducing constipation.

Diagnosis.—There is no difficulty, in general, in recognising the existence of spermatorrhœa; the presence of continual nocturnal emissions leaving no room for misapprehension, but in the more aggravated forms of the disease there arises a complication of symptoms, which, taken in connection with the disappearance of the nocturnal losses, gives rise to frequent mistakes. These cases, in which the seminal fluid drains away in the evacuations of the bladder and

rectum, are usually confounded with chronic affections of the brain and alimentary canal, to which they bear so close a resemblance as to require considerable tact for their discrimination, especially when, as is often the case, the patient obstinately refuses to make his medical attendant the confidant of his habits of life. Had we any positive signs by which we could recognise the presence of seminal fluid in the urine, the diagnosis would be perfectly simple, but unfortunately such is not the case. There is so commonly an admixture of the morbid secretions from the bladder and prostate, together with amorphous urinary sediments, that neither the microscope, nor any other agent, is sufficient to determine the presence of semen. According to Lallemand it is to be suspected whenever the urine is voided thick and fetid, and exhibits a cloud resembling thin gruel suspended in it. Where the fluid is discharged during defecation there is no difficulty in its detection, as by the assistance of the patient it may be submitted to ocular demonstration. But, setting aside the desirable but at present unattainable proof of the existence of semen in the urine, let us inquire whether there are any general grounds for distinction between the cerebral symptoms produced by spermatorrhœa, and those which depend upon idiopathic disease of the brain. The following considerations will enable us to arrive at something like a satisfactory conclusion upon the subject. In the case of spermatorrhœa the cerebral phenomena are not the first in the chain of symptoms, but are preceded for a considerable time by notable derangement of other functions of the body. The digestion will be found to have been previously impaired, and the sexual vigour usually fails in a degree disproportionate to the general debility. In idiopathic cerebral disease, on the contrary, the symptoms of disordered circulation in the brain, as giddiness, tinnitus aurium, dimness or distortion of vision, &c., take precedence of the disturbance in other organs; the appetite and digestion are not necessarily impaired, neither is the sexual vigour observed to decline until an advanced stage of the disease. There is not, moreover, the extreme emaciation and feebleness of spermatorrhœa, but the general powers of the body fail only in proportion to the increase of the cerebral disorder. In doubtful cases I consider that the condition of the urinary and genital functions is our best guide in diagnosis. Wherever we have frequent micturition of turbid urine, calculous cases excepted, combined with the gradual extinction of the procreative powers, we shall do well to direct our inquiries to the condition of the seminal apparatus.

Having decided upon the existence of seminal loss, the next question is to determine whether it depend upon chronic inflammation or upon simple atony of the

parts. This question can only be decided mainly by the history and general appearance of the patient, as the more prominent symptoms are identical in the two cases. It is, nevertheless, of considerable importance as regards treatment; for a misapprehension of the pathology will lead to a considerable waste both of time and credit. The following are the reasons which should lead to the supposition of simple debility of the seminal vessels:—Signs of general congenital feebleness, as small osseous and muscular development, with late puberty, thin whitish hair, slight appearance or total deficiency of beard, and high treble tone of voice. In addition to these signs of sexual feebleness may be mentioned a general roundness of contour, with wide hips and waist. In the genital organs themselves may be observed smallness and flaccidity of the penis, which appears to be drawn close up to the pubes, an elongated prepuce, and small pendulous testicles. I have, while engaged upon this paper, seen a severe case of seminal emissions depending upon debility, in which one testicle rests in the inguinal canal. Congenital hernia and varicocele are also to be considered as evidences of a feeble sexual apparatus, as is, also, incontinence of urine in childhood. If, on the contrary, the patient is of a well-developed frame, with genital organs of normal dimensions, and if he has at one time enjoyed average sexual power, we shall be authorised in regarding the complaint as one of chronic inflammation, whatever be the degree of accompanying emaciation and feebleness.

While upon the subject of diagnosis I must not omit to mention a class of cases which are far from uncommon. I allude to cases of imagined impotence in which the incapacity arises solely from mental disquietude. The subjects of this complaint are usually newly-married men, or those who have for the first time been placed under circumstances in which intercourse is accompanied by strong affection. A few days in the society of the beloved object are usually sufficient to remove the difficulty. I have, however, known a month, or more, elapse before the marriage has been consummated, each unsuccessful attempt serving only to increase the embarrassment. The best advice in such cases is that said to have been given by Sir A. Cooper, to determine to pass a few nights without making an attempt at intercourse. The mental origin of the incapacity is soon, by this means, made evident.

The Treatment.—In noticing the treatment of seminal emissions we dismiss entirely those which occur but seldom, and in robust continent individuals, since, as has before been stated, such discharges are not to be considered morbid. The following remarks are to viewed as referrible to diurnal emis-

sions and nocturnal pollutions of frequent recurrence.

Our first object must be to inform ourselves of the exciting cause, and at once to remove it. If the emissions co-exist with ascarides in the rectum, our treatment must be directed to their expulsion, upon which, in some cases, the patient will be restored to health without the intervention of other means. The ordinary remedies for these worms are sufficient, such as calomel purges, salt and water injections, and mercurial inunction of the anus. When the complaint depends upon stricture of the rectum, fissure of the anus, or hæmorrhoids, the appropriate surgical treatment is to be employed. Sebaceous matter behind the prepuce is to be removed by cleanliness and the use of astringent lotions. If, as is sometimes the case, this morbid secretion is retained by an elongated and narrow prepuce, circumcision is the obvious remedy. In many cases the mere removal of these exciting causes will be sufficient to effect a cure, but in the majority a morbid condition of the spermatic ducts has been established, which must be combatted by means hereafter to be described.

The treatment of that form of the disease which depends upon simple atony of the genital organs is to be attempted by such means as are likely to improve the tone of the system. In these cases the treatment, which is too often followed indiscriminately, viz., cold bathing and cold douches upon the parts, will, in general, be of great utility. The douche should be used at least three times a-day, and continued each time until an unpleasant sensation of cold is produced. In conjunction with these means, tonics, and especially the mineral forms, should be exhibited. The tincture of sesquichloride of iron is perhaps the best. It will occasionally be found that the nocturnal emissions are at first increased in frequency under this treatment, but we are not to be dispirited at such an effect; it is only temporary in its duration, and the emissions produced under the influence of the medicine are not nearly so enfeebling as those which occur previously to its employment. It is a question whether sexual intercourse should be recommended in these cases. If we consider the subject without reference to religion, the opinion of Lallemand appears to be rational that the occasional employment of the organs would conduce to their vigour, upon the principle that a muscular organ is invigorated by moderate exercise.

Such is the simple mode of treating that form of spermatorrhœa which is connected with general debility, and depends upon an atonic condition of the spermatic vessels; we have now to consider the treatment of the most important form of the disease, that which has for its exciting cause undue exertion of the sexual organs, and which

depends essentially upon chronic inflammation of the parts concerned.

In the first place the excess which produced the disease must be abolished, and here is the principal difficulty; so firm a hold has the pernicious vice which is generally in such cases indulged in, that inducements and threats are alike inefficacious in preventing it. Sexual intercourse must be forbidden; in this form of the disease it is positively hurtful. The great error in the treatment of these cases lies in the endeavour to support the debilitated frame by nourishing food and stimulating drinks. Wine and beer must not be allowed, neither must the food be highly seasoned. The diet should, on the contrary, be of the simplest kind, as milk and bread, with well-cooked and digestible vegetables; the drink must be water. The application of cold is of doubtful efficacy; some cases are even aggravated in a notable degree after cold bathing and the douche. The method upon which the greatest reliance is to be placed for the absolute cure of the disease is the application of nitrate of silver to the affected portion of the urethra. It is not my intention to discuss the manner in which the remedy acts; suffice it to say that its power in modifying the sensibility and restoring the functions of diseased mucous membranes is now a matter of every-day notoriety.

The application of lunar caustic to the urethra in cases of spermatorrhœa was first the suggestion of Lallemand; for although Sir E. Home had previously cauterised the canal, it was with the object of overcoming a stricture. Lallemand prefers, in all cases, the application of the solid nitrate, but it may likewise be used with benefit in the form of solution. In the hands of the French surgeon the success of this mode of treating involuntary emissions has been most remarkable. Nearly one hundred cases are reported in which it was adopted by him, and in all, with very few exceptions, its effects have been rapid, and, where the patient has been commonly prudent subsequent to the treatment, permanent. The experience of British surgeons, though not so extensive, is, as far as it goes, equally satisfactory. In an excellent critique upon Lallemand's works in the "British and Foreign Medical Review," are collected the written testimony of several English practitioners. One gentleman writes as follows:—"I can recollect eleven cases in which I have found Lallemand's treatment successful, and one in which it did not completely succeed. In seven of the eleven cases a single application of the caustic was sufficient; in four it was necessary to apply it a second time. . . . The effects are immediate; a person in whom the discharge has continued for months will have none for some days after the use of the caustic." Another writes thus:—"I have carefully noted twenty-seven cases treated

by the nitrate of silver. . . . Of these thirteen were completely cured, eight so much benefitted that the emissions only recurred occasionally, and produced but little effect upon the system; the remaining five were benefitted, but not to the same extent." A third surgeon states that with regard to Lallemand's method of cauterising the urethra, he has tried it in a dozen cases, and in the majority of them with decidedly good effects. Mr. Phillips, in the paper before alluded to, thus speaks of the caustic bougie:—"In nineteen cases I used the caustic. Of these cases ten were completely relieved by a single application; in three the amelioration was decided, though the complaint was not cured; in six there was no relief. In the nine cases in which the first application was insufficient, the remedy was again used,—in three cases with complete relief." So that "in thirteen cases out of nineteen it succeeded, in six it failed; but in no case was there any aggravation." It appears, then, from these remarks, that of fifty-eight cases, exclusive of those of Lallemand, in which caustic was applied, it failed only in six, was beneficial in fourteen, and completely successful in thirty-seven, or two-thirds of the whole, a result sufficient to establish its character as a remedy of the utmost value.

In the majority of the cases one application of the caustic is sufficient, and more than a second is seldom necessary. No evil effects are produced by it beyond those of transient irritation, such as scalding, and occasionally a few drops of blood with the urine. My own experience of the remedy is not extensive, but such as to inspire me with the utmost confidence in its powers. I have caused it to be tried only in three cases, in all with the most perfect success. One case was of the utmost severity, and as it affords an excellent example of the affection, and portrays the obstinacy with which the ordinary means of cure are resisted, I will briefly relate it. Mr. —, ætat. 19, of moderately robust original constitution, consulted me about a year ago in the following condition:—He had emaciated to a considerable extent, and had become utterly incapable of exertion; the slightest exercise induced fatigue and profuse perspiration. His face was pallid, expressive of timidity, and covered with acne indurata and punctata. His mind had become enfeebled, he was unable to read with attention, and wept upon the most trivial occasions. He complained of anomalous pains in various parts of the body, and suffered severely from gastrodynia. He had frequent attacks of hysteric delirium, accompanied with excessive palpitation of the heart. The bowels resisted obstinately large and repeated doses of croton oil. Nocturnal emissions had existed for many months, and at this time occurred several times in a night, leaving him in a state of the

utmost moral and physical prostration. The mere act of conversing with a female induced an emission, but he had lost all power of erection. The genital organs were well developed, but the testes were tender upon pressure and pendulous. He confessed to the long and frequently indulged habit of masturbation, but, as is commonly the case in such persons, had never committed excesses with women. He had been treated by more than one practitioner in the usual way, that is, by tonics, without avail. As he complained of considerable pain along the perineum, I commenced the treatment by leeches, and with good effect as to the pain, but without diminishing the frequency of the emissions; I next ordered an injection of four grains to the ounce of nitrate of silver, three times a-day, under which the emissions were suspended for several days together, and he gained a corresponding amount of strength. I lost sight of him from this time till January last, when I was suddenly summoned to him, and found him as bad as ever, and in a state of complete hysteria. I determined therefore to cauterise the urethra. A surgical friend having first passed a common bougie, we found the membranous portion highly sensitive, and cauterised it by means of Lallemand's instrument. Very little pain was complained of. In a few days an alteration had taken place in the patient which surprised me; he had suffered but one emission since the operation, could retain his water, and had experienced erection of the penis which had not occurred for months. A daily improvement took place, his mind became clear and capable of attention, his procreative powers returned with vigour, and he is now in perfect health.

The method of performing the operation is as follows:—A common bougie or catheter is to be passed in the first instance, and the length is to be noted at which the urine begins to flow; an inch short of this will give the situation of the membranous portion of the urethra. The armed instrument is then to be passed to the same length, and the caustic is to be made to revolve by twirling the instrument for the space of an inch and a half, when it is to be drawn within the bougie and extracted. If the ardor urinæ be excessive, and much pain follow the operation, a hip-bath may be used, but in general no ill consequences are observed to arise.

As auxiliaries to cauterisation in the treatment of involuntary emissions, the occasional application of leeches will be found useful. The patient should also be recommended to lie upon a hard mattress, and never, if possible, to sleep upon his back, as pollutions are beyond a doubt more likely to occur in that position than in any other. The use of a cold enema with twenty drops of lauda-

num, upon going to bed, will greatly assist in preventing them.

Much care is requisite in managing the convalescence of these patients. Their newly acquired sexual vigour is apt to lead them to a repetition of excess, by which a relapse is most readily induced. Tonics may be given when all traces of local irritation has subsided, but not till that time.

Bury St. Edmunds, Sept. 21, 1843.

PRACTICAL OBSERVATIONS ON THE CURATIVE EFFECTS OF BELLADONNA

IN CERTAIN AFFECTIONS OF

THE NERVOUS SYSTEM.

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(Continued from vol. ii., 1842-3, p. 837.)

SCIATICA.

It has been already remarked that belladonna appears to influence some painful affections of the nervous system more beneficially when administered internally; but others when applied on the surface of the skin, deprived of its cuticle. This latter effect is most observable in sciatica. The mode of its application has consisted in applying a large or small blister, according to circumstances, upon the part affected, removing the cuticle when that is elevated by the serous exudation beneath, and dressing the exposed surface with an ointment consisting of from a scruple to a drachm of the extract of belladonna, diluted with an ounce of lard. If the surface upon which the diluted extract is applied be extensive, the former and weaker ointment may be best employed, as the general effects by absorption, of an overdose of belladonna may, be rapidly observed in the system, and watchfulness, mental elevation, restlessness, and slight delirium, with dilated pupil, occasioned. The removal of the application and dressing the part with spermaceti ointment (after washing carefully with dilute acetic acid), and administering two drachms of acetic acid in an ounce of water, every three hours, speedily cause the cessation of these untoward symptoms. The local effects produced are, relief of the previously excruciating pain, attended by a pricking, and followed by a sensation of benumbing, of deadness, and a want of natural sensibility in the part, which, after a certain but unfixed period, gradually subside, and leave the natural conditions perfect. The period of the disorder at which the belladonna is applied appears unimportant, but during the most acute stage of sciatica its sedative effects upon the pain have been most observable.

CASE I.

Mr. P., ætat. 53, a hop merchant residing near Nottingham, is a gentleman of a full plethoric habit, accustomed to much exercise and generous living, and never affected with gout, after local exposure to cold was on the 3rd of September, 1841, attacked by a general rigor, followed by sense of stiffness and pains at the back of his hip and across the loins, the latter much aggravated by slight exertion; felt generally unwell and feverish; took some domestic aperient; and on the next day I found him, after passing a restless night, attended with perspiration, complaining of great pain in the situation of the sciatic nerve, with a full and rather frequent pulse, 98; skin hot; great restlessness and general distress; tongue furred; bowels well acted upon by medicine; urine depositing a copious sediment of the purpures; the general distress, nevertheless, seems disproportionately great to the existing pain. He was ordered to lose blood from the hip, by cupping, to sixteen ounces, to take an ounce and a half of compound colchicum mixture every three hours, and at night five grains of calomel and sixteen of compound ipecacuanha powder; the diet to be very spare, confined to tea, gruel, and thin diluents generally.

On the fifth of September,—the last night very restless; profuse perspirations; the pain much aggravated, extending down back of the thigh; pulse 100; urine spare, very high-coloured; countenance expressive of great pain. To continue the colchicum mixture; to apply a blister to seat of pain; to take at night two grains of solid opium and five of calomel.

Next day (the 6th) no improvement in general symptoms; the fever and perspirations rather aggravated; the pains excruciating, extending from back of hip on the right side to the ham, and from thence down the back of the leg, as far as the ankle; the gastrocnemii muscles are tender to the touch, and affected by frequent tremors; the blister has risen well. Ordered to continue the same medicines.

7. Extremely bad night; pain not abated; the stomach and bowels now under the active influence of the colchicum; much purging and nausea. Omit the colchicum. Take an ounce and a half of compound guaiacum mixture every four hours. Continue the pills.

This plan of treatment was persevered in until the 12th of September, with the exception that the calomel was omitted on the 9th, the gums having become very swollen and tender. Dover's powder, pure opium, and the acetate of morphia had been alternated and administered every night, in large doses, without which the pain precluded the possibility of any, even the most trifling portion, of sleep. During this period the pa-