ON THE
MEDICINAL PROPERTIES
OF
STRAMONIUM;

WITH
ILLUSTRATIVE CASES.

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HAVING seen within the last few months, several instances in which Stramonium, or the Thorn-apple†, taken internally in the form of extract, has appeared to relieve acute pains of various kinds, more effectually than any other narcotic medicine; and the properties of this plant, as an

* It is scarcely necessary to observe that since the outline of this paper was read to the Society, several cases that have subsequently occurred, up to the middle of September, have been added to it.

† *Datura Stramonium* of Linnæus. An herbaceous plant, with a thick branched stalk, two or three feet high, large sinuated indented leaves, and long tubular white or purplish flowers succeeded by large, prickly, green, fleshy seed-vessels, which open at the end in four divisions, and disclose numerous black seeds. It flowers in July.

internal medicine, not having, to my knowledge, been yet particularly investigated or described by any English medical writer, I have thought it my duty to submit to the Society the result of my observations on this subject.

The inhalation of the smoke of the *Datura Stramonium* for the relief of asthma, a practice introduced within these few years, is, I believe, in some instances attended with unquestionable benefit, and is frequently resorted to in that disease. Indeed this plant, which grows wild in this and many other countries, and is more especially met with in dunghills and among rubbish, is now cultivated in some English gardens for the purpose just mentioned. It is chopped into small pieces and smoked like tobacco; and though often ineffectual, it has acquired no inconsiderable repute among asthmatic persons*.

The effects of this plant as a poison, when taken internally, have long been noticed in medical works, both in this and other countries: amongst those of American writers in particular, several tracts are to be found on this subject†. In Europe, the

* An ointment prepared from the leaves of *Stramonium*, has also been found to give ease in external inflammation, and in hæmorrhoids.

† Vide *Samuel Cooper's inaugural dissertation on Stramonium*, 1797, published in *Caldwell's Selected medical Theses, Philadelphia*, 1805; and *Bartram*, in *Transactions of the college of physicians of Philadelphia*, I. 198, &c.

poisonous effects of Stramonium are also mentioned by many authors. Boerhaave, amongst others, seems to have been well acquainted with its deleterious effects; for it is stated upon his authority, that "some boys, who had eaten the seeds of Thorn-apples, were seized with giddiness, horrible imaginations, terrors and delirium, and those who did not soon vomit, died." And Dr. Woodville relates, on the authority of Dr. Haygarth, an instance in the town of Chester, in which several children who had swallowed some of the seeds of Stramonium, were seized with blindness and a kind of madness, biting, scratching, shrieking, laughing, and crying, in a frightful manner*. It had been observed also, that these effects, when the quantity taken was but small, though still very peculiar, were not so formidable; and it is even mentioned by Kempfer and Prosper Alpinus, that the Turks and Indians, who are not allowed to drink wine, sometimes take Stramonium in minute doses, on account of its exhilarating property.

As a medicine, however, it is in the writings of modern German practitioners, that I find the earliest records of its effects; and although it obtained, many years ago, a place in the Edinburgh

* *Woodville's Medical Botany*, II. 339. Other instances of a similar kind are related in the *Edinb. Med. Comment.*, Vol. V. 161.

Dispensatory, it was evidently rather upon the authority of German writers, than from the experience of British practitioners. Dr. Störck of Vienna was, I believe, the first who expressly wrote upon the medicinal effects of Stramonium. So far back as the year 1762*, he published a tract on the virtues of this plant, from the expressed juice of which he prepared an extract, which he administered in the dose of from half a grain to one grain, three, four, or even six times a day. He tried it in cases of mania, epilepsy, and convulsions. Dr. Wedenberg of Upsal†, and Dr. Odhelius of Stockholm, repeated these trials in the same class of diseases; and the aggregate result of their experiments, though in some instances successful, and shewing the remedy to be possessed of great powers, was certainly not upon the whole very favourable‡.

* *Tract. de Stramon. Vienna, 1762.*

† *Wedenberg de Stramonii usu in morbis convulsivis.*

‡ Dr. Samuel Cooper, in the work above quoted, which did not come to my knowledge till after this paper had been prepared for the press, contains the fullest account of the deleterious effects of Stramonium that I have yet met with. His experiments were tried partly upon men in health, and partly upon animals; and afforded some curious results, several of which coincide with my own observation. He relates also a few trials, made by himself and others, of its medicinal effects. These, however, are but summarily noticed, and add but little to our information on this subject. The preparation of the plant which was commonly used in his experiments, was the leaves in powder; and the dose was from half a grain to four grains.

In these, and a few other trials by German practitioners, the mode of preparing the medicine was various. Störck, as I have just mentioned, made an extract from the plant; others used the powdered leaves, in the dose of from one to five grains. Sometimes also a decoction of the whole plant was employed. As to the largest dose administered, I find as much as 30 grains of the extract stated to have been given for a dose*. But from what I shall presently relate of the effects of this medicine, that statement will appear scarcely admissible.

In these early trials, the effects which were most commonly observed when the medicine was taken in sufficient doses, were vertigo, a sense of dryness and suffocation in the throat, and a peculiar affection of the eyes, sometimes attended with sleepiness, and even in some instances with a degree of delirium. Some writers† assert that it is apt to paralyse the iris and dilate the pupil, like the belladonna. Others mention the aperient tendency of this medicine; but none of those whose papers I have had an opportunity of consulting, ascribe to it any constant or distinct effects on the pulse; nor do they seem to have noticed what appears to me to be the principal, and by far the most pro-

* *Murray's Apparatus Medicaminum*, I. 458.

† *Dictionnaire d'Histoire Naturelle*, art. Stramonium.

mising property of Stramonium, namely, that of allaying some of the most obstinate and severe kinds of pain.

The only form in which I have tried the Stramonium, is that of extract ; and all the specimens I have used, with but one exception, have been prepared by Mr. Hudson, an eminent chemist and druggist in the Hay-Market, who has been so obliging as to favour me with the following account of his process, with permission to lay it before the Society.

“ One pound of the *Seeds* of Stramonium, after being well bruised, are boiled with three gallons of water down to one gallon. The decoction is strained, and the seeds are again boiled, with one gallon more of water, to two quarts. This second decoction is strained, and being mixed with the former, the whole is allowed to stand for twelve hours. The liquor is then drawn off, free from fecula and oil, and evaporated to a proper consistence, the latter part of the evaporation being performed in a water bath. A considerable portion of oil is separated from the seeds by boiling, which is troublesome in the extract, if allowed to remain, and does not appear to add in any degree to its effect.

“ The quantity of extract, yielded by one pound of seeds, is from one ounce and a half to two

ounces, being liable to some variation from the state and quality of the seeds.

“ An analogous extract is obtained by a process exactly similar, by substituting the *whole plant* cut into small pieces, instead of the seeds ; but in this case none of the oily matter above mentioned appears. The proportion of extract, when prepared from the whole plant, has not been ascertained.”

I have only to add to the above account, that, from the few comparative trials I have made of the two kinds of preparations, the extract obtained from the seeds has appeared to me considerably more active than that prepared from the whole plant; and the impression made upon my mind from these trials is, that the extract from the seeds is more certain in its effects than the other, and that one part of the former is at least equal in power to two parts of the latter. But though the one appears to be so much stronger than the other, I am not able to point out any other difference between the two preparations. The form of pills is that which I have always used ; but it would not be difficult to dissolve, or at least diffuse, the extract in some appropriate menstruum, so as to enable the prescriber, if necessary, to divide this powerful medicine into very small doses, with a greater degree of convenience and accuracy than the form of pills generally permits.

As to the probability of the Stramonium proving sufficiently useful to be adopted in general practice, no body is more sensible than I am of the great caution with which the statements of one individual, however candid, or the evidence of a few cases, however carefully related, must be received in medicine. The subject, nevertheless, will perhaps be deemed worthy of further investigation, and the annexed cases will appear entitled to the more attention, when it is remarked that I have made a point of mentioning the unfavourable as well as the successful results, a practice which appears to me indispensable in medical writings, and to which I have uniformly adhered on former occasions*.

I do not by any means pretend to have yet acquired a competent knowledge of the properties of this medicine; but if I were called upon to express in a few words the general opinion which I feel inclined to form from the opportunities I have had of studying them, I should say that the most common effect of Stramonium, when administered in appropriate doses†, in cases of chronic disease, attended with acute pain, is to lessen powerfully, and almost immediately, sensibility and pain; to occasion a sort of nervous shock which is

* See an Essay on the medicinal properties of the oxyd of Bismuth, in the 5th volume of the Memoirs of the Medical Society of London.

† I mean from $\frac{1}{4}$ th to 1 grain, a dose which should not be exceeded till its effects have been ascertained.

frequently attended with a momentary affection of the head and eyes, with a degree of nausea, and with phænomena resembling those that are produced by intoxication ; to excite in many instances nervous sensations, which are referred to the œsophagus, or bronchiæ, or fauces, and which sometimes amount to a sense of suffocation ; to have rather a relaxing than an astringent effect upon the bowels ; to have no marked influence upon the frequency of the pulse, though in a few instances it has appeared to render it somewhat slower ; to produce but a transitory and inconsiderable dilatation of the iris and pupil ; and to have but little immediate tendency to induce sleep, except from the state of comparative serenity and ease, which generally follows the symptoms I have just described.

In some instances, however, as will be seen on perusing the annexed cases, the beneficial effects are obtained without the patient experiencing any of the uneasy sensations above-mentioned ; while in a few others, the unpleasant consequences of the medicine have been experienced without any subsequent benefit.

I think it right to state, before I detail the cases, the accidental manner in which my attention was first directed to this medicine. About 15 months ago, as I was one day visiting my patients in Guy's Hospital, one of the medical pupils, then

attending the hospital, (whose name I cannot recollect, else I should have great pleasure in mentioning it) informed me by the bed-side of a patient labouring under excruciating pain from sciatica, that his father, a practitioner in the country, was in the habit of preparing an extract of Stramonium, which he found singularly useful in relieving those painful disorders. This gentleman at the same time offered me a few grains of this extract which he had with him, and which I immediately tried in the case in question*, with the following result.

CASE I.

Jane Elsworth, æt. 30, was admitted into the hospital, on the 5th of April 1815, labouring under symptoms of sciatica of long standing, with strong suspicion of disease in the hip-joint. The pains in the hip and knee were excruciating; and *Cicutæ*, *Hyoscyamus*, *Opium* and blistering, were tried in succession without any relief, till the 13th of May, when $\frac{1}{2}$ grain of extract of Stramonium was given three times a day. The relief was immediate and very striking; but she uniformly complained, each time she swallowed the pill, of a pe-

* In all the other cases related in this paper, Mr. Hudson's extract was exclusively used.

cular sensation of heat in her throat, with a kind of spasmodic affection in her breathing, which however always went off after a few minutes. This remedy was continued till the 27th of May, when finding herself free from pain, it was omitted ; but the pain soon returned, though not so severe as before ; and at the end of three days, the pills being again resorted to, the same striking beneficial effects were produced. On the 5th of June the pains were so much subdued, that she was discharged as cured, feeling quite able to return to the care of her family.

CASE II.

Peter Gahagan, æt. 30, became a patient in the hospital on the 27th of March 1816, complaining of acute pains in the loins and in the right hip, often shooting to the groin ; and he stated that his complaints had begun four months before. He was cupped and blistered without any benefit. The warm bath, Guaiacum, and Opium were used without better success. On the 11th of May, $\frac{1}{4}$ of a grain of the extract of Stramonium prepared from the seeds, was ordered to be taken three times a day. The relief obtained by this was so immediate and so complete, that he was able to walk out, and actually quitted the hospital of his own accord on the 19th, that is, after having only taken

five or six doses of the medicine. Some time after this, however, the sister of the ward was informed that he had relapsed.

CASE III.

The case I am going to relate, though it ultimately proved fatal, and did not indeed at any time admit of any reasonable hopes of cure, appears to me to afford a remarkable illustration of the powers of Stramonium in diminishing sensibility and pain. It occurred last spring, in private practice, in a lady of great respectability, and of a clear and cultivated mind, who gave a much more distinct and satisfactory account of her sensations than most persons are able to do under similar circumstances. The general outline of this case was as follows: Mrs. T. about 48 years of age, had for some years past been subject to a tumor in the right breast, which though evidently schirrous and of a very large size, had never given her any considerable pain. The bulk of the breast however, and the tension of the skin had latterly become sufficiently troublesome to induce her to try, by the advice and under the management of Mr. John Pearson, the plan of treatment by bandages and pressure, as lately proposed by Mr. Young. This was persevered in for some months, and it was thought with advantage, the tumor

having been sensibly reduced in size, and having become less uneven at its surface.

In the course of the last winter, however, whilst under this treatment, the patient was suddenly seized with acute pains in her loins, which were first considered as rheumatic* ; and three or four weeks after this, when apparently in a state of amendment, she was suddenly seized with what she called a crawling sensation in her left hip and thigh, extending down to the knee and leg, and occasionally shooting towards the groin and pubes. This sensation was almost immediately converted into pain of the most acute and excruciating kind, especially on attempting to move the affected parts; but without any distinct fever. Bleeding, blistering, opiates, *Cicuta*, *Hyoscyamus*, &c. were tried with great diligence, but with scarcely any sensible effect. Opium sometimes produced temporary relief, but it was used with great reserve on account of the obstinate state of costiveness it was found to induce. When the pain abated for a short interval, she often felt a numbness or tingling in the affected limb, and a great disinclination, if not a total disability to move it. It was found necessary at this time to discontinue the application of bandages to the breast, on account of the exquisite pain it produced in the loins and thigh, by the unavoidable change of posture it occasioned.

* During the preceding winter this lady had experienced a slight attack of the same kind.

These symptoms had lasted about two months, during which she had constantly kept her bed, when I saw her for the first time, about the beginning of April last, in consultation with Mr. Pearson. It occurred to me that the Stramonium might afford some relief; and finding that Mr. Pearson had two or three times given that remedy with good effects, to patients labouring under severe pain, I proposed that we should give it a trial in this case. We accordingly ordered $\frac{1}{4}$ of a grain of the extract from the seeds, prepared by Mr. Hudson, to be taken three times a day, which dose was the next day increased to $\frac{3}{4}$ of a grain three times a day. The result even from the first dose, was very remarkable. The patient felt, within a few minutes after taking the pill, a peculiar sensation in her throat, which, notwithstanding her usual accuracy in expressing her feelings, she was at a loss how to describe. She compared it to a current of wind rushing up and down the inside of her throat, and producing a slight sense of suffocation. In the course of about a quarter of an hour however, the pain subsided sensibly, and soon afterwards entirely, and an uncommon feeling of serenity and repose, though not sleepiness, was experienced. These effects were reproduced whenever she took the pill; but after a few doses, the recurrence of pain altogether ceased, so that at the end of four or five days the Stramonium was laid aside. About this time she suddenly won-

dered one morning that she had not passed any urine for 24 hours, and yet that she felt no call or uneasiness whatever. The catheter was immediately applied, and her urine drawn off without pain or inconvenience. On the following day her bowels being quite inert, she naturally connected this circumstance with the state of her bladder, and became exceedingly alarmed, under an idea that a mortification had taken place. By means of castor oil however, several motions were easily procured ; but with very little if any controul over the sphincters ; and from this time no urine was ever discharged without the catheter, nor any motions obtained without the assistance of cathartics. About this period however, being refreshed by the absence of pain, her strength seemed for a time to recruit itself, and she recovered a considerable degree of appetite and cheerfulness ; but she never again ventured to sit up in bed, partly from a sense of weakness in the loins, and partly from the dread of the pain which a change of posture might have brought on. She got so much better however, that the operation of strapping the breast was resumed ; but it was soon found necessary to leave it off again on account of the fatigue it occasioned.

The further details of this interesting and melancholy case, and the various conjectures and speculations to which it gave rise, would be irrelevant to my present purpose. It will suffice to

add that the paralytic symptoms above described did not in any degree abate, and that the strength of the patient continued gradually to decline, though the pain did not in any degree return. About the middle of June she was carried in a litter into the country a few miles from town; and this removal, after her long confinement, far from giving her pain, afforded her exquisite enjoyment. Soon after this however, some gangrenous spots in the sacrum, which had been observed for some time, became highly inflamed and painful; her powers of digestion were more and more reduced, the prostration of strength became excessive, though the mind continued unimpaired, and on the 15th of July, death terminated her complicated sufferings.

CASE IV.

Sarah Mears, aged 23. This is a case which has for some years, at different periods, excited great interest in Guy's Hospital, and given rise amongst the physicians and pupils to much controversy and discussion. The particulars of this young woman's long and problematic sufferings, will probably some day be made public, but would not be relevant to my present purpose. The following short outline of the case however, will be

necessary to convey an idea of the effect of the remedy, the properties of which I have been endeavouring to ascertain.

The original symptoms were, so far back as five or six years ago, a tumor in the abdomen first inclining towards the left side, but afterwards occupying the whole abdominal region, occasioning in its progress exquisite pain with fever and extreme irritation, and yet not producing emaciation, and not permanently impairing the powers of the constitution, or disturbing the visceral functions. This tumor gradually increased to an enormous size, so as greatly to exceed that of a woman in the ninth month of pregnancy, and the pain became more and more intense, till at last, enormous quantities of a sanious or puriform fluid, mixed with blood and serum, were simultaneously discharged, partly by vomiting, and partly by the vagina and the rectum, and the patient soon recovered. In the course of a few months however, the complaint gradually returned with similar symptoms, which were again relieved in the same manner, and the tumor has now, for the 11th time, gone through the process of filling and bursting, with extreme pain and subsequent sudden relief, in the way I have just described.

It was on this last occasion, on the 10th of April, during the formation of the tumor, the pain being at its highest pitch, and opium affording but

little relief, though given in the dose of from six to ten grains, that the Stramonium was tried in the dose of only half a grain, three times a day. This remedy uniformly produced, about a quarter of an hour after being taken, some giddiness and dimness of sight which lasted a few minutes; but the pain was immediately allayed for a few hours; and the same relief was experienced whenever the pill was repeated. But after continuing the Stramonium for five days, the contents of the tumor having been spontaneously discharged in the usual mode, and a truce to the pain having taken place, as on former occasions, the extract was discontinued. This time however, the cyst was not allowed to fill again; but on the contrary, the moment that the symptoms of throbbing and fulness recurred, the accumulating fluid was forced out by external pressure, and discharged both by the rectum and vagina. During the last three or four months, this operation, which is always more or less painful, has been repeated once or twice a week, and the reproduction of the tumor, at least to any considerable extent, has thus been prevented. Yet such is the tendency to inflammation in the diseased part, that cupping and bleeding, which have been practised during the course of this illness upwards of two hundred times, are still frequently required. Latterly also the functions of the urinary passages have become so much impaired, that the use of the catheter is daily required; and an habitual state of pain and irritation have been induced, which

though not equal in intensity to the fits of pain formerly experienced, yet frequently require the assistance of narcotic medicines*. This unfortunate young woman has now had such a long experience of disease, and has become so familiarised with the mode of using palliative medicines, that she has for a long time been allowed to take opium almost at her own discretion. But ever since she has become acquainted with the Stramonium, she has had recourse to it in preference. She takes it during the exacerbations of pain, in doses of from $\frac{1}{2}$ grain to one grain of the extract from the seeds, or about double that dose of the extract made from the whole plant, either of which affords her more relief than even half an ounce of Laudanum, which she now occasionally takes at one dose without much effect. The Stramonium however uniformly affects her head and eyes, but this effect is only transitory. I one day requested her to take the Stramonium pill whilst I was in the hospital, in order that I might witness its immediate effect. In about 20 minutes after taking it, her eyes became dim like those of a person either extremely sleepy or in a state of intoxication, the pupils appeared somewhat dilated, and she seemed extremely languid and unwilling to speak. The pulse, which was rather quick, previous to taking

* It may be proper to observe that the affection of the urinary organs began long before the Stramonium was used ; and that it evidently originated from the pressure of the tumor on the distended bladder.

the pill, had now become a little slower, though still rather above the natural frequency. In about half an hour however, all these effects had disappeared, and yet the relief obtained was still distinctly felt. Her bowels are generally open, sometimes relaxed, and scarcely ever require the use of aperient medicines.

CASE V.

Elizabeth Aines, æt. 27, was admitted into the hospital in June last, for pains of long standing, though of a very acute character, in the left loin, hip, and thigh, which symptoms appeared on examination to depend upon a disease of the hip-joint, the general constitution, however, having yet but little suffered. The Stramonium in this case, though used to a greater extent than in any former instance under my observation, did not afford any distinct relief. She began with $\frac{1}{2}$ a grain of the extract from the whole plant, twice a day, the dose being gradually increased to one grain and a half, without any other perceptible effect than a slight momentary giddiness.

CASE VI.

William Brown, a sailor, æt. 32, had laboured for about four months under strongly marked Sciatica, combined with syphilitic pains, particularly in

the shin bones. All the usual remedies, cupping, blistering, antimonials, guaiacum, and opium, in pretty large doses, had been tried without effect. In the month of May last, some weeks after his admission, the pain having become almost intolerable, half a grain of the extract from the seeds of Stramonium, was ordered to be taken three times a day. The first few doses had no decided effect; but being increased to one grain, this dose, on the first trial, made him very uneasy for about half an hour, when he suddenly felt much relieved; and this improvement continued for many days, though the use of the medicine was suspended. He now only complained of weakness and numbness along the course of the sciatic nerve, which numbness however he had occasionally felt before he began to use this medicine.

About the end of June, when in this state of apparent convalescence, the pains in the hip and loins having returned with great severity, the Stramonium was resumed in doses of $\frac{3}{4}$ of a grain, three times a day. The rheumatic pains almost immediately abated, and on the 5th of July, he only complained of pains in his elbow joint, and shin bones, for which the blue pill was ordered, and the Stramonium was at the same time continued till the 22nd of July. At this period he complained only of weakness in his limbs, and the Stramonium was discontinued. He was discharged cured on the 11th of September.

CASE VII.

Justin Macarthy, æt. 56, was admitted on the 10th of July, having been ill about three weeks. He complained of excruciating pain in his right hip, thigh and knee, which I had first mistaken for Sciatica, but afterwards appeared upon examination to depend upon a disease of the hip-joint and thigh-bone. In this case Stramonium, though gradually increased to one grain, three times a day, afforded no relief to the patient, though it produced distinct giddiness and some rambling during his sleep. This man however, I cannot omit to observe, was most remarkably relieved by blistering the hip and the knee in succession, and he now complains, almost solely, of pain in the inguinal region*.

CASE VIII.

Christopher Russel, a poor man, aged 60, admitted on the 10th of July, had laboured about a fortnight under an acute Sciatica, and had been blistered on the head of the femur without any benefit. After using a variety of medicines without effect, he was ordered, on the 14th of May, to take half a grain of extract of Stramonium three times

* A tumor has since appeared in the groin, from which matter has been discharged.

a day, and to suspend all other medicines. The relief was immediate. He continued the Stramonium till the 25th of the same month, when it was omitted, the man being nearly well, and he was soon afterwards discharged free from complaint. The Stramonium, in this instance, removed the pain without producing any affection of the head.

CASE IX.

William Rawson, æt. 48, was admitted into the Hospital on the 10th of July, for a severe Sciatica, of three months' standing. Various remedies having been previously tried without effect, $\frac{1}{2}$ grain of the extract of Stramonium prepared from the seeds, was ordered three times a day. The relief produced was very remarkable. In a few days he was able to walk out, and was soon afterwards well enough to be discharged. The Stramonium in this case occasioned only slight dizziness.

CASE X.

Lawrence Murray, æt. 34, was admitted a few weeks ago, labouring under excruciating pains, partly rheumatic, partly syphilitic, with extremely severe nocturnal exacerbations. He had kept his

bed constantly ever since his admission. He had taken a great variety of the usual anti-rheumatic and anti-syphilitic medicines, and had been slightly salivated twice, without permanent relief. Opium in pretty large doses was but of very little avail. At last he was ordered, one night at bed-time, to take one grain of the extract of Stramonium prepared from the seeds; but this dose produced so much dizziness and nausea, that although it sensibly mitigated the pain, it was thought necessary to omit it. A few days after this, however, the pains raging with increased violence, the Stramonium was again resumed, in the dose of $\frac{1}{2}$ a grain, three times a day, with the very best effect. The giddiness induced by this dose was hardly perceptible, and he felt a greater relief at the end of two days, than he had ever experienced since his complaint began; he has since continued the extract for about a fortnight, together with mercury, and is now in a convalescent state.

CASE XI.

A young woman was admitted a few months ago into the hospital by Mr. Astley Cooper, for a cancer in the left breast. Being repeatedly struck, on passing her bed-side, with her tears and her expressions of agony and despair, I inquired into the particulars of her situation, and found that she

was advised to quit the house immediately, her general health suffering materially from confinement, and the circumstances of her case not admitting of ultimate recovery. The surface of the breast had ulcerated, and had become exceedingly painful. The right breast had also become diseased, and opium, belladonna, and various other palliatives had been administered at different periods with very little advantage. I advised her to stay a few days longer in the hospital in order to try the Stramonium, small doses of which were immediately ordered. The result was that she soon found her pains very materially relieved by that remedy; and when I saw her again, a few days afterwards, she was comparatively serene and comfortable. Under these circumstances she left the hospital to go to the country. But I have just heard that she has lately fallen a victim to her disorder.

CASE XII.

The following case, in which Stramonium was used in *Tic douloureux* with evident benefit, being that of a lady, whose husband is a medical man of considerable experience and observation; and the outline of the case having been drawn up at my request by that gentleman himself, I shall lay it before the Society in his own words.

“ The complaint in Mrs. S.’s face * began in the first week in Lent, and continued about eight weeks, when it appeared to have yielded to occasional doses of opium, and a mixture of valerian, camphor and ether. During this period a plaster of cicuta and opium was applied to the face, and before it was removed produced active vesication. The relief however from this, if any, was but temporary. Mrs. S. now went into Hertfordshire, and the complaint returned in about a fortnight, which was probably induced by riding frequently in an open chaise in the high grounds of this country. The same remedies now having been again employed, afforded no relief, when recourse was had to the Stramonium, in doses of $\frac{1}{4}$ grain of the extract from the seeds, which afforded almost immediate cessation of pain, and was afterwards frequently resorted to for this purpose, and on no occasion was it necessary to repeat it more than a second time after an interval of two hours. The Stramonium never produced any inconvenience, and never failed of relief; so much was this depended on, that Mrs. S. never went without some of the pills in her pocket. It was now thought that the complaint in the face might be connected with spasms in the stomach, to which Mrs. S. had been for some years subject, and which were con-

* This lady was seen by several medical men, and amongst others by Mr. Astley Cooper, who did not hesitate in considering her as labouring under *Tic douloureux*.

nected with a costive state of the bowels. With this view she was advised to adopt a mild mercurial regimen (the blue pill), and appeared to derive considerable benefit from its continuance. At present she has discontinued the mercurial plan for about two months, and had been free from the complaint some time before. It may be necessary to mention that, during the first attack, the Bark was taken in large quantity. The arsenical solution was also used, till it disagreed so much as to oblige us to leave it off. Thus although the mercurial plan appears to have produced the most permanent advantage, yet it must be confessed that the effect of the Stramonium was extremely beneficial in affording immediate relief when the pains were excruciating."

CASE XIII.

Encouraged by the effect of Stramonium in the case I have just related, Mr. Astley Cooper was induced to recommend to my care Miss D. (who had laboured for some years under a severe and aggravated form of the same disease), with a view to enable me to give that medicine another trial in this obstinate disorder. In this instance however, it failed entirely of producing relief; or rather the patient, a person of the most highly irritable nervous habit, could not bear its effects even in

the minute dose of $\frac{1}{8}$ th of a grain. It produced great affection of the head and of the stomach, and such a general nervous agitation as could not be endured; and the medicine was abandoned without having produced the least benefit.

CASE XIV.

Another, and more promising opportunity of trying the effects of Stramonium in *Tic douloureux*, was afforded me a few weeks ago, by the recommendation of Mr. Cooper. The subject of this case is a gentleman whose general health appears perfectly good, though he has been frequently tormented, for about three years past, by severe paroxysms of *Tic douloureux*. Between the two or three first attacks, intervals of several months intervened; but for the last 15 or 16 months the complaint had continued without any complete intermission, though varying considerably at different times, as to its violence and character. Having been himself a medical man, and acquired great eminence and celebrity in a particular branch of the healing art, this gentleman had been extremely active in trying all the remedies that have been recommended in this disorder; but had failed in obtaining permanent relief. Early in August last, he began to take the extract of Stramonium prepared from the seeds,

in the dose, first of $\frac{1}{4}$ of a grain, and soon afterwards of $\frac{1}{2}$ a grain three times a day; and his first report was that in the smaller dose it had produced no relief, but that the benefit obtained from the larger had been very considerable. The remedy had been attended with no sensible inconvenience, and had produced rather an aperient effect. At this period however the patient went to the continent, and I was no longer favoured with direct accounts of his proceedings. But as he has lately written to a friend that his face is very much better, and that he continues the Stramonium regularly, it is reasonable to hope that his case will afford another instance of the beneficial effects of this remedy*.

Thus from the facts I have just laid before the Society, (the only ones that have yet come under my own observation respecting the effects of Stramonium,) it would appear that in four cases of Sciatica decided benefit was obtained. The efficacy of this remedy was still more strongly marked in two cases of Sciatica combined with syphilitic pains. It

* Since this was written, another letter of a more recent date (September, 1816) was received from that gentleman, which considerably diminishes my hopes of the ultimate success of Stramonium in this case. He says, "My face is still indifferent, though upon the whole rather better than when I left England. I have continued the Stramonium, and now take between *five* and *six* grains every day, but without any perceptible effect." It appears from the same letter that the preparation of opium called 'the black-drop' generally produces relief.

failed entirely in two instances of diseased hip-joint. It produced considerable relief, as to pain, in a case of supposed disease of the spine followed by Paraplegia; and likewise in one of Cancer of the breast. It allayed materially the pain occasioned by an acute uterine disease. It was of great and repeated utility in a case of *Tic douloureux*; its utility in a second case of the same description was very doubtful; and in a third, it entirely failed.

It may perhaps appear to this learned Society, on a first view of the subject, that the addition of a narcotic plant can hardly be considered as a new or important acquisition in practice, since we are already possessed of a variety of powerful and efficacious medicines of the same class. But if this remedy should decidedly prove, upon further trial, to produce the effects I have described, and in particular to allay pain, without inducing constipation or lethargy, I cannot help flattering myself that it will be found to afford, at least, a valuable palliative.

Postscript. After the two first sheets of this paper were printed off, I heard that the name of the Medical Gentleman alluded to in page 554, was Mr. Norwood, of Ashford, in Kent.