the enlargement and pain in the side, the short dry cough, inability of lying upon the healthy side, the dulness on percussion, together with the absence of breath-sound in the lower part of the lung. On the other hand, the existence of the respiratory murmur in the lower lobe at the back, in consequence of this portion being situated behind the liver, while in front, the dulness and absence of breath-sound were complete; the negative effect on the physical signs by change of posture; the clearness of respiration above, and the non-existence of intercostal displacement furnished the chief indices upon which to frame a differential diagnosis.

It was interesting to remark, on the diminution in the size of the liver, the return of the heart to its normal position.

CASE III.

PURULENT DISCHARGE FROM THE BOWELS; PULSATING TUMOUR IN THE ABDOMEN: TREATMENT BY THE OXIDE OF SILVER.

A female, aged 40, came under my care at the Ipswich Hospital, with the following symptoms:—She stated that shortly after her confinement, she was the subject of considerable hæmorrhage from the bowels, sometimes during the natural evacuation, and occasionally per se. This discharge, occurring repeatedly at variable intervals, and continuing unrelieved for the space of two years, materially reduced her strength, at which period it became changed from sanguineous to purulent.

On admission, she said that the "corruption," as she termed the discharge, had existed for the previous six months; that she suffered frequent pain about the region of the sigmoid flexure of the colon; felt occasionally sick, and often faint. Her countenance was sallow, and anæmic; tongue clear; appetite moderate; bowels very sluggish; urine natural; skin very dry and harsh, with patches of chronic eczema about the wrists. On examining the body pain was produced by pressure, both in the hypochondriac and epigastric regions. In the situation of the pancreas, a tumour about the size of a small orange, was discovered pulsating synchronously with the aorta, and over which was audible a moderately loud but soft bellows-murmur. The intestinal discharge was distinctly purulent.

Various remedies were prescribed for six weeks, including salines, warm baths, a mild course of mercury, sulphate of zinc, counter-irritation, &c., all of which benefitted, but did not cure the disease. The oxide of silver was then given in half-grain doses three times a day, with one grain of the compound ipecacuanha powder, and steadily persevered in for ten weeks, when she reported herself well, and free from discharge.

Observations.—This preparation of silver, more especially brought before the notice of the profession by Mr. Lane, I have found extremely useful in many gastric and duodenal affections. It appears to be especially indicated in cases presenting a clean but flabby tongue. In cases also of amenorrhœa, chlorosis, and anæmia, complicated as they so frequently are with morbid sensibility of the gastric nerves, the oxide of silver appears to fulfil the best intention prior to the

exhibition of the preparations of iron. The tumour of the abdomen in the above case, although in many points strongly simulating aneurism, depended, I believe, upon disease of the pancreas or mesentery lying upon, and transmitting the pulsations of, the abdominal aorta.

This opinion I was led to infer, after repeated examination, from the following circumstances:—

1st. From the history and symptoms of the case, and general appearance of the patient.

2nd. From the soft short character of the blowing murmur, on the application of the stethoscope.

3rd. From the possibility of nearly suspending both impulse and murmur by laterally pushing the tumour off the artery.

The patches of chronic eczema were completely cured by the application of the iodide of sulphur. I may here mention the great amount of benefit I have seen derived from the use of this preparation in the form of ointment, in the treatment of this often very chronic and obstinate disease. The strength of the ointment has varied from fifteen grains to two scruples of the iodide of sulphur to an ounce of lard.

ON THE VALUE OF URINARY DIAGNOSIS IN THE DETECTION AND TREATMENT OF DISEASE.

By EDWARD JAMES SHEARMAN, M.D., Rotherham.

(Communicated to the Anniversary Meeting of the Provincial Medical and Surgical Association, at Sheffield, Thursday, July 31st, 1845.)

Presuming that the members of this Association are fully acquainted with the chemical and microscopical properties of healthy urine, I take the liberty of mentioning a few points in practice, which I have found exceedingly useful in enabling me to detect, more easily than usual, the causes of some obscure cases of disease.

To avoid taking up the time of the Association by any introduction, it is just necessary to premise, that my own view of the action of the kidneys is, that of *safety valves* to the rest of the secreting organs; when they are disorganised, most diseases become much more unmanageable.

The urine ought to have an acid reaction on litmus paper—from the phosphoric acid liberated by the combination of uric acid with the phosphate of soda and ammonia, derived from the food. If, therefore, the urine is alkaline, it is unnatural; unless the person has lived long exclusively on vegetable food. The specific gravity of the healthy urine of twenty-four hours ought to be about 1,029.

By detailing the history of a few cases which have appeared to me rather rare and obscure specimens of disease, I do not in the least presume to dictate the best mode of treatment, as I have not yet had sufficient experience to enable me to decide. But it must be gratifying to any practitioner of medicine to be able to detect even the nature of an obscure disease, although, as will often happen in such cases as the following, the broad outline of treatment does not prove entirely satisfactory.

In children, from six months to six years of age, it

very frequently happens that we meet with cases where there are all the apparent symptoms of mesenteric disease, *without the acute pain*. There is great debility, hectic fever, emaciation, and a full, tense, and tender abdomen.

Until lately, I never particularly enquired into the state of the secretion of urine in these cases; but it will be found, frequently, that *diuresis* has been going on in such children, unnoticed, for a long time; and that a child of three years of age will pass from four to six pints of urine in twenty-four hours, of the specific gravity of about 1.030; and both *sugar* and *albumen* may easily be detected in this urine, often with a large quantity of *urea*. These cases are most commonly met with in scrofulous families, and in children exposed to bad air and unwholesome food; but I have met with it in those whose diet and exercise have been as much attended to as necessary. I have found this disease in a child who was continually flogged for wetting his bed at night; when I examined the urine, I found it loaded with albumen and sugar. Such complaints not unfrequently terminate in convulsions or coma; particularly where there is very little urea secreted from the kidneys.

This disease requires the same kind of treatment as diabetes mellitus,—animal diet, warm bathing, flannel next the skin, tonics, particularly the citrate of iron, with small doses of opium, used very cautiously.

Since I have paid attention to the subject of urinary diseases, it is extraordinary how many cases of *debility* accompanied with *emaciation*, for which I could not in the least account before, have come within my knowledge, and which have been attended with a secretion of *oxalate of lime* from the kidneys. In some cases there has been too little, in others too much urine secreted. It is always acid, rather pale-coloured, of specific gravity about 1.015; occasionally, not often, accompanied with small quantities of albumen.

By evaporating a portion of the urine, warming it in a watch-glass over a spirit lamp, and, after allowing it to subside, drawing off as much as possible from the top, most beautiful crystals of oxalate of lime are easily seen under the microscope.

The persons who have consulted me have been in very low spirits, apprehending some dangerous disease approaching, often believing they cannot live long, and yet complaining of nothing but weariness, languor, want of energy of both mind and body; and, perhaps, a little back-ache. One complete case of hypochondriasis I have on my list, which was accompanied by a very large quantity of oxalates, and yielded to treatment. Another case, pronounced as confirmed consumption by some practitioners, turned out to be nothing else but oxalate of lime diathesis. The appetite is often good, and it is almost impossible to get them to acknowledge they have any derangement in their organs of digestion. Unusually close attention to business, losses, or great mental anxiety, seem to have generally been the exciting causes of this state in my patients.

I was first induced to look into this subject from reading some cases related by Dr. Golding Bird, in *Guy's Hospital Reports*, during the time I was attending a very troublesome patient of this description, who was growing as tired of my advice, as he had been

of that of others before me. I examined his urine and found oxalate of lime, and cured him.

Subsequently I have read, with great delight, Dr. Bird's admirable work on urinary deposits, where he accounts very satisfactorily for the conversion of *urea*, (the natural nitrogenous secretion from the kidneys,) into *oxalic acid* and *ammonia*, in consequence of a depressed state of the nervous system; and this, uniting with the *lime*, which we are constantly taking in vegetable food, forms the *oxalate of lime*.

By strictly attending to the general health; watching the secretions and excretions; a generous plain diet of the most digestible mixed animal and vegetable food; the omission of wine and beer, and substitution of brandy and water in moderation; small alterative doses of the mildest preparations of mercury with rhubarb or castor oil; and tonics, particularly iron combined with the nitric or muriatic acids; an occasional warm bath, and flannel next the skin, followed by cold shower baths, I have hitherto, since I became acquainted with this deposit, managed to recruit nearly all those who have consulted me.

Another set of cases attended by very great debility and emaciation, not usually recognized, are those accompanied by *deficiency* or *increase* in the relative quantity of urea.

For the last twenty years, I have been in the habit of meeting with patients from 30 to 50 years of age, who, with a haggard countenance and emaciated figure, complain of lassitude, great debility and low spirits, thirst, restless nights without any evident cause, moderate appetite, but with a quick pulse, dry skin, and a whitish furred tongue in the morning. I have continually examined the alvine excretions, and found them healthy; the urine has not contained any deposit, nor indeed been darker in colour than natural; there has been no pain nor tenderness to be detected any where, and I used to set down such cases as belonging to the class of common continued pyrexia, as the symptoms of diuresis were not sufficiently prominent to attract the patient's attention. But no cases that I ever met with in practice have been more difficult to manage than some of these.

Since my attention has been directed to the contents of healthy and diseased urine, I have found such cases present the following circumstances:—

1. *Diuresis* with *acid urine*, containing a very unusually large quantity of *urea*. If the amount of urine does not much exceed that in health, the specific gravity is high, as 1.030 to 1.035; and on adding nitric acid to it in a watch-glass just after it is passed, nitrate of urea is formed almost immediately; or if the quantity of urine is very large, the specific gravity is not more than 1.025, and nitrate of urea does not form until the urine has evaporated in some degree. But by examining daily the quantity and specific gravity of the whole urine passed in twenty-four hours, it will be very evident that a much larger quantity of urea than natural is eliminated.

2. *Diuresis* with *urine in great quantity*, of a low specific gravity, from 1.001 to 1.005; this is of a very light straw-colour, either neutral or very faintly acid, and, by keeping, becomes putrid or sour, and not ammoniacal; in fact there is so little urea in it, that the change into carbonate of ammonia cannot take

place. You will have to evaporate several pints down to an ounce or two, before you can detect any urea. In these cases, the odour of almost any liquid drunk, may be very soon detected in the urine.

It must be very evident that the treatment of these two descriptions of cases requires to be very differently conducted.

When there is a large quantity of urea excreted, instead of confining a patient to his room upon low diet, giving him calomel and black draughts, and treating him as if he were under the influence of feverish action, the best plan, I believe, is to adopt nearly the same mode of treatment as that which has been found most successful in diabetes mellitus. Fresh air, good sound porter, animal diet, warm salt water baths, flannel next the skin, mild tonics with liquor potassæ, and small doses of opium, with Dover's powder at night, at the same time attending strictly to the state of the digestive organs; but I am convinced mercury, in almost all its forms, is injurious. I have succeeded lately, in some instances, by these means, where I feel quite sure I should have failed before I became acquainted with the circumstances I have mentioned.

But *what is to be done when scarcely any urea is secreted?* Animal life could no longer continue if the kidneys did not secrete urea, than if the lungs did not exhale carbonic acid gas. The elements of urea would be absorbed into the venous blood, circulated through the capillaries of the lungs, from which the urea could not be exhaled; it would therefore be circulated in the arterial blood, and act as a direct animal poison to the brain. The effect of this would be, to deprive the muscular system of its due nervous energy; and in this manner the symptoms described above may be accounted for.

Unfortunately, this form of disease very frequently ends in coma, and is most difficult to treat successfully. As little fluid as possible should be drunk; the functions of the skin should be kept active by sudorifics, as Dover's powder, the hot-air bath, and friction, or a warm climate; flannel should be worn next the skin. The citrate of iron, or a tonic, I have found useful. Sound porter as a beverage, and animal and farinaceous diet, seem to me to be the most effective mode of combating this serious disease.

These cases usually occur in persons from 40 to 50 years of age, who, in their youth, have contracted venereal affections—have been loaded with mercury, and kept their systems in an excited state by the abuse of fermented liquor. And, as we know that the kidneys, at this time of life, naturally become degenerated, this, in connexion with their previous habits, seems quite sufficient to account for the cessation of the natural elimination of urea by the kidneys from the blood. When the kidneys have lost their power, it is a difficult matter to find a substitute for them;—consequently, such cases generally end fatally.

Another malady of not unfrequent occurrence, may be allowed to be mentioned here:—A peculiar form of *headache*, accompanied with alkaline urine, of the specific gravity of from 1,015 to 1,030, depositing *triple phosphates* and *phosphate of lime*; and a *deficiency of urea*. The headache is described as a dull weary pain, affecting the memory and imagination; there is uneasy

sleep, often conjuring up very unusual sensations and ideas. The appetite continues good; bowels regular; tongue clean; pulse quick and often feeble; but a great feeling of debility attends this form of headache.

I imagine, in this disease, there is *just sufficient urea circulating* in the blood to *derange the brain*, which is the *sole cause* of the *headache*; and as soon as the kidneys return to health, and separate the whole of the urea from the blood, *the pain ceases*.

Instead of giving purgatives, using local bleeding, and blistering the back of the neck, &c., I think the best mode of treating this, is to give animal food, good sound porter, light tonics, with nitric and muriatic acid; merely attending to the secretions and excretions, without using any decided alterative course of medicine. I have met with several such cases, which have soon yielded to this simple mode of treatment, and I think this is the class of headaches, cases of which are sometimes quickly cured by tonics and stimulants, prescribed at random, after the failure of an antiphlogistic mode of treatment.

I could have related the progress of several cases of the different forms of disease, which I have endeavoured to describe in this short paper, but I thought the briefest mode of stating my opinions would be the best; and I now submit this subject to the consideration of the members, with a hope that some will test the correctness of the principles I have attempted to bring forward.

Rotherham, July 30, 1845.

PRACTICAL OBSERVATIONS IN MIDWIFERY.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

As every addition to a fact increases its weight and value, I beg to hand you the following:—A while ago I was called to a patient who was stated to be "flooding." I found her in the last month of pregnancy; the hæmorrhage had subsided when I reached her; no pains; and the patient quite well. I therefore left, with directions to be called again when needful. In about six hours I received a very urgent message, and attended immediately. I found the placenta in the bed, and the child half born.

More recently I was called to a case at the full term of gestation, where the placenta was protruding at the os externum. The hæmorrhage had been very considerable, and the arm presenting. I therefore turned and delivered. Both these children were born alive, but the latter survived only a few hours; the first, from the rapidity of the expulsion, and the comparatively trifling loss, did not suffer.

Any fresh proof of Nature's power, (too often disregarded,) should be of importance and guidance to us, who *ought* ever to be her imitators and followers, and Drs. Radford and Simpson have so stirred the attention of the profession to this truly *vital* subject, that it becomes a matter of duty for those who *acquire*, to *disseminate* their experience. I think too, Sir, it is a duty incumbent upon the members of this Association to support their *Journal*. At the very interesting meeting recently held at this place, it was well observed by Dr. Robertson,