than the average would be among so many. In the beginning of March, 1854, diarrhoea appeared, slight at first, but in a few days rapidly increasing. The patients all complained alike, of severe pain in the bowels, heat of head, pain over the eyes, slightly furred tongue, with morbidly clean tip, and very prominent papillae, with frequent serous discharges from the bowels. In the course of three days, upwards of fifty cases came under our notice; whilst many others complained of lassitude, loss of appetite, and general uneasiness. It was at once evident that some causes were at work peculiar to the locality of the school itself, as at that time the town of Croydon was unusually healthy: we had, in fact, except in the school, scarcely a case of diarrhoea under treatment. My partner, Mr. Westall, and myself, instituted inquiries to elicit the cause; the diet appeared unexceptionable, the drainage and ventilation of the rooms were in perfect order, and the gas was not more impure than usual. The water was examined, and appeared very good; but it was with some surprise we found the supply was derived from a well, and not from the mains of the waterworks. It was stated that on one or two occasions the tea had tasted unpleasant; and, curiously enough, the cause was supposed to be from the Board of Health water having been used instead of the well-water. Such, however, was evidently not the case; for the waterworks being on the constant pressure system, it is impossible for the water to get contaminated in the mains. We at once requested that the supply might be changed, and the water from the mains only used for dietetic purposes; for we were morally convinced that the cause was some general one, affecting all parties—the cases having occurred equally among boys and girls, teachers and servants—no class, no room, being exempt or affected more than the others. On the day that the water supply was changed, we had sixteen fresh cases; on the following day two only; and eighteen hours after the change had been effected, not a single fresh case of diarrhoea came under our notice. In the course of a few days most of those under treatment had recovered, with the exception of three, which ran on into mild continued fever.

It would be impossible to have a more striking instance of the effect of impure water than this. No person can for a moment doubt that here we have cause and effect; the water neither to the eye nor taste gave any signs of impurity; but nitrate of silver detected a large amount of animal matter in solution. It might be urged that it was merely a coincidence in the water supply being changed at the moment when the epidemic exhausted itself; but we have further proof to the contrary. The rise of the epidemic led to a minute examination of the sewers; they were flushed, and it was believed that they were in good working order; but on a second and more accurate inspection, one of the drains passing from a wing of the building and some of the outhouses was found to be blocked up with sand. This stoppage must have existed for some time, and extensive leakage had taken place into the ground around the impervious sewer, which unfortunately ran in close proximity to the well, only a pervious gravelly soil intervening. This was not discovered until after the subsidence of the disease; but what evidence could be more conclusive or more convincing against the use of water contaminated by sewerage of any description, whether derived from the Thames at Vauxhall, or a well in close proximity to a cesspool? Had there been at that time a choleraic tendency in the country, we should have had to deplore an event similar to the Tooting tragedy; the outbreak at Albion Place, Wandsworth; or, still more recently, that in the neighbourhood of Golden Square. It makes one tremble to think of the precipice upon which we stood, and earnestly urges upon all the necessity that exists for a pure water supply, free from all risk of contamination from any cause whatever, so as to prevent the possibility of the occurrence of such catastrophes for the future.

Having considered what has occurred in this large establishment, one turns to the evidence afforded by smaller

households. If attention had not been drawn to the subject by such incidents, and had two or three members of a small house only been affected, the cause would not have been so evident. It has frequently happened that diarrhoea has continued until the patient has fallen a victim to continued fever, or, as it were, become acclimatised, or used to, the water consumed. I know at this moment several houses so situated, where the inmates will persist in drinking well-water, and where every visitor and fresh servant is attacked with diarrhoea soon after taking up his quarters in any of them.

Since the outbreak of cholera in London, I have looked with some anxiety for its effects upon these very houses. It has been most striking, that as far as the observations of my partner and myself have gone, no approach to choleraic diarrhoea has occurred in any houses connected with the public sewers, where the inmates use the water from the mains of the waterworks. Whilst those who will continue to use well-water, and have not made their connexions with the town sewers, have suffered from choleraic diarrhoea to a considerable extent. I have only met with two cases of cholera in the town itself, and in both were the houses unconnected, and well-water was used.

It must be a great source of gratification to the inhabitants of Croydon, after all that has been said, to find that the money expended upon their works has not been thrown away, and that they are now reaping the benefits of those improvements for which they paid so dearly in 1852.

I have presumed to publish the foregoing observations, in hopes that they may stir up others to trace out the origin of disease—be it fever or cholera: for I cannot lose sight of the fact, that it is far more honourable to prevent disease than to cure it. I have many similar cases upon a smaller scale, but I will not on this occasion offer any further remarks on the subject.

Croydon, September 25th, 1854.

CLINICAL MEMORANDA.

By C. M. DURRANT, M.D., Physician to the East Suffolk and Ipswich Hospital.

PROFUSE SWEATING, AS A SYMPTOM OF CONGESTED LIVER.

It has several times occurred to me to be consulted in cases in which this symptom has been predominant, but the nature of which has been overlooked, inasmuch as tonics and mineral acids have been administered, and have signally failed in affording relief.

The history, if carefully investigated, is simply that of congestion of the liver. The detail of two cases, which have comparatively lately fallen under my notice, will serve to illustrate the leading features.

CASE I. A gentleman, accustomed to field sports, had previously enjoyed good health. On my visiting him, I found him in bed, depressed in spirits, bathed in perspiration, emaciated, and with the certain foreboding that he was labouring under some organic affection of the heart or lungs, and which an injudicious communication from a medical friend had not served to alleviate. The perspirations had been and were most profuse both by day and night, and was the symptom that most annoyed him. His tongue was coated, and he complained of weight and uneasiness in the right hypochondrium. The pulse was 110; the heart's action was irritable, but otherwise normal; the lungs were healthy. On examining the evacuations—a proceeding which, in these cases, ought never to be omitted, as the report of both patient and nurse is, with scarcely an exception, fallacious—they were found to be in the highest degree unhealthy, being dark, bilious, and very fetid. The urine was scanty and very high coloured, but without deposit. Under the impression that the perspirations resulted from debility, the patient had been ordered quinine with full doses of sulphuric acid, and a somewhat stimulating diet. Under a broth and farinaceous diet, and the

simple exhibition of salines, with a steady perseverance in blue pill and colocynth, the evacuations became natural, and the perspirations ceased.

This gentleman has continued well, and is now stout and in the best of health.

CASE II. A gardener, without feeling decidedly unwell, or being compelled to discontinue his employment, was the subject of profuse perspiration, principally of the head, face, and chest, which occurred chiefly at night or early in the morning, quite irrespective of physical exertion.

This case proved an obstinate one, and required the repeated exhibition of alterative aperients for two months. He has quite recovered.

REMARKS. My object in detailing these simple cases is to show that we are not at once, under the idea of combating debility, to administer tonics and mineral acids, but rather to seek to remove the true pathological cause, which will often be found to exist in a congested condition of the hepatic circulation.

THE OCCURRENCE OF DELIRIUM IN ACUTE RHEUMATISM.

The profession is deeply indebted to Dr. Watson for having insisted upon the importance of attending to this symptom, as an indication of the probable existence of inflammation of the pericardium.

Delirium occurring during the progress of acute rheumatism is always of grave import, and calls for an immediate and frequently repeated examination of the condition of the heart. It is a symptom which is very likely to mislead the practitioner; and if the treatment be directed solely to the mitigation of the cerebral disturbance, the pericarditis, upon which the delirium depends, may silently advance, and ultimately destroy the patient.

In the fatal cases which have been reported of this complication, and in which an opportunity of examining the condition of the brain and heart after death has been afforded, the former, in many instances, has been found free from disease, while the latter has shown unequivocal results of recent but unsuspected inflammation. These cases of apparent inflammation of the brain, or its meninges, were formerly attributed to metastasis; the more probable cause is now considered to be uræmia, or it may be direct reflex action, excited by the pericardial inflammation. The latter is more especially the cause of the convulsive movements of the limbs, which sometimes take place under the circumstances which we are now considering.

The delirium may be active and violent, but it is more generally characterised by muttering or taciturnity. The pulse is usually *very* much accelerated. In the following case, the delirium occurred during the progress of the pericarditis; but the symptoms from the first were so severe, and the extension of the inflammation to both pleuræ so fully marked, that its brief detail may not be out of place.

CASE. A. M., aged 50, after having been out of health, was seized with acute rheumatism, to which, in a few days, was superadded pericarditis.

On examination, his countenance was anxious; the breathing was quick and catching; and he complained of considerable pain and oppression at the region of the heart. The tongue was coated with the white rheumatic fur; he had profuse sour perspiration; his bowels were regular; the urine was scanty, with dense deposit of purpurates and lithates.

On applying the stethoscope, a friction sound was heard over the entire cardiac region, so loud as to mask considerably the sounds of the heart itself. The patient, prior to my visit, had been twice largely bled. Local depletion by leeches to the cardiac region, with calomel and opium, in addition to salines with colchicum, were prescribed.

On the following day, the friction sound was less intense, but the patient now complained of pain beneath the right breast, where a friction sound was also audible. A blister was now applied to the region of the heart, and the mercury, etc., continued. On subsequent examination, the friction sound had disappeared, but the heart's sounds had

become distant; while the cardiac dulness had considerably increased, extending upwards towards the left clavicle. Signs of effusion also distinctly obtained in both pleural cavities. The mouth at this period was very sore from the mercury.

The subsequent treatment for some days consisted of repeated large blisters both in front and behind, with saline diuretics, supporting the strength with strong broths, and the occasional exhibition of a stimulant in the shape of wine.

The condition of this patient for more than a week was a most critical one; at this period delirium supervened, with constant talking and muttering, and occasional attempts to get out of bed. The evacuations and urine were now passed involuntarily. The pupils contracted naturally, and but slight heat of the scalp existed; the pulse was much accelerated. The mouth was still sore, and the absorbents acted slowly. The pericardial distension was still very considerable. The blistered surfaces were kept discharging freely, and a blister was also applied to the nape of the neck; while the quantity of wine allowed was increased. The delirium continued more or less for a fortnight, when the symptoms gradually abated; and, although I have not had an opportunity of ascertaining the precise condition of the heart and lungs after so formidable an attack, still the reports both from his medical attendant and friends have been satisfactory, inasmuch as he has been able to leave home and attend to business.

REMARKS. Dr. Stokes has rendered good service by recommending a more liberal allowance of wine in the latter stages of the treatment of, and during the convalescence from pericarditis. Attention to this advice will be more particularly called for, if venesection have been freely had recourse to at the onset of the attack. The nature of the disease, after the violence of the primary fever has been subdued, is essentially a depressant of the nervous power, more particularly if the brain be oppressed by uræmic poisoning.

Very many cases would, I believe, under the present asthenic character assumed by disease, have a better prospect of recovery, were the injunctions of Dr. Stokes in reference to the earlier exhibition of wine more generally attended to; and many a convalescence, I can but think, would be materially shortened were the lancet used still more sparingly, and, when it is absolutely necessary that the quantity of blood be withdrawn, with a prospective regard to the ultimately depressing nature of the disease.

NEURALGIA RESULTING FROM HERPES ZOSTER IN ELDERLY PERSONS.

The pain which occurs during, or more frequently as a sequel to shingles, in very elderly persons, is sometimes so severe as to give rise to considerable apprehension both on the part of the patient, as well as in the minds of the friends. The affection is not a common one, and less so perhaps on the continent than in this country; since it has been stated by M. Biëtt that, in more than five hundred cases of ordinary shingles, he had not once met with this complication.

Three very severe cases have presented themselves to my notice within the last two years. In one of them, the pain accompanied the eruption; in the other two, it did not occur until this had disappeared. The pain is described by the patient as deep seated, darting, and tearing, or, as one of my elderly patients graphically expressed it, "as if the flesh were being torn from the side with red hot hooks".

The pain appears to be of a neuralgic character, and is often intermittent. In the treatment, quinine is the remedy which is likely to be most useful. In two of the cases above alluded to, it acted as a specific; and what is singular, on the suspension of the medicine for a day or two, the pain returned with equal intensity, again to be removed and cured by the persistence in the quinine. In the third case, which had resisted all other remedies, the quinine acted less speedily, but equally beneficially. The quinine may be given at the onset of the pain; but, if the tongue be coated, it will be better to commence the treat-

ment with a few grains of blue pill, followed by a warm rhubarb and magnesia draught. I have seen the pain yield to quinine after the failure of veratrine, aconitine, chloroform, and a host of liniments with opium. Should, however, the quinine fail, the next best remedies would, I believe, be found in arsenic, iron, and cod-liver oil. External applications are not of much service.

COD-LIVER OIL IN THE TREATMENT OF NEURALGIA.

I was induced to make trial of this remedy as a last resource in a case of the most severe facial neuralgia which I have ever witnessed. The pain was so severe that it amounted to agony, the tears involuntarily flowing over the cheek. Iron, quinine, and arsenic, in full doses, had severally failed in affording more than mere temporary relief. The oil had not, however, been taken longer than a week when the pain became sensibly diminished; and, by a perseverance in its use for a few weeks, the disease, which had existed for many months, was perfectly cured.

This patient continued well for two years, when he again became the victim of a similarly severe attack. Recollecting the failure of other remedies in his former seizure, he begged that he might at once commence the oil, which desire was acceded to, and was attended with a like happy result. From the satisfactory termination of this case, I have been induced to prescribe cod-liver oil very largely in many forms of neuralgia, and, upon the whole, with decidedly good effect.

Among the more severe cases in which I have seen cod-liver oil act with especial benefit, I may enumerate one of ocular neuralgia, a very severe case of neuralgia of the tongue, many cases of facial neuralgia, several obstinate cases of sciatica, and two or three cases of neuralgia of the rectum, the exquisite suffering from which I have found it both speedily and permanently relieve. Indeed, in this latter form, whether in combination with, or independent of, hæmorrhoids, the oil appears to act most beneficially, and I can with great confidence recommend its use.

Since noting these memoranda, I find the value of cod-liver oil in neuralgia fully corroborated by Dr. Theophilus Thompson, in his valuable *Clinical Lectures on Pulmonary Consumption*.

Ipswich, September, 1854.

SOME REMARKS ON THE TREATMENT OF PROCIDENTIA UTERI.

By W. J. ANDERSON, F.R.C.S., Accoucheur to the St. George's and St. James's Dispensaries.

DESCENT of the uterus has been most appropriately divided by Blundell into three degrees: relaxation, prolapsus, and procidentia. When the womb protrudes, the disease is called procidentia; when it remains at the outlet, prolapsus; where it scarcely subsides below the level of the brim, it then constitutes what is denominated a relaxation. Relaxation may degenerate into prolapsus, and prolapsus again into procidentia; but neither of them should do so under proper treatment; rest combined with local astringents and constitutional remedies, will to a certainty, if assiduously persevered in, effect a cure. It is true that procidentia is a very different affair. We have here the uterus protruding externally, dragging down the vagina, in fact turning it inside out, and carrying the bladder with it; micturition is of course interfered with, and the severe local irritation, as well as ulceration, accompanied with sharp attacks of hæmorrhage, which is often present, must necessarily affect the general health. If this distressing complaint be left to itself, the tumour may become permanently fixed in its unnatural position, precluding the possibility of cure, and affording very small hope of relief. Extirpation of the womb has been advised as a radical cure; and we find the following expression in Blundell's *Obstetric Medicine* (p. 797): "It has been proposed to cut into the vagina, and take the womb away altogether. I do

not believe that extirpation of the womb would always be either impossible or fatal; yet it is too dangerous an operation to be thought of for the purpose of ridding the patient of the disease; besides which, if the prolapsed womb were troublesome, and were extirpated in consequence, the probability is that other parts would descend,—that the bladder or intestines would come down. I can, therefore, by no means recommend that operation; which was proposed by the French." Burns again says, that "if the uterus cannot be reduced, and be much diseased, it has been proposed to extirpate the tumour"; and then with the greatest propriety makes the following remarks: "This has been done, it is true, with success, but it is extremely dangerous; for the bladder is apt to be tied by the ligature, which is put round the part; and as the intestines fall down above the uterus into the sac, formed by the inverted vagina, they also are apt to be cut or constricted. As a palliative, Richter advises the use of a suspensory bandage." (*Principles of Midwifery*, p. 184.)

Artificial constriction of the vagina has been recommended as permanently curative, especially by Dieffenbach, who was in the habit of excising portions from the sides of the vagina, and bringing the parts together by sutures; protrusion alone is prevented by these means, and even this is not always accomplished; for Blundell, with straightforward honesty, mentions a case in which he used an awful instrument of torture, termed "the lantern pessary, but not to be recommended to your use"; this thing had numerous large holes, through which the vagina protruded, became strangulated, and sloughed. "But mark! Notwithstanding there had been so much inflammation of the vagina, and though the patient had been confined to the horizontal posture afterwards, to give her a chance of a radical cure, no such cure was in that way produced." Before the period of child-bearing is past, nothing can warrant such a proceeding; a hard unyielding cicatrix or cicatrices are formed, which must almost to a certainty give way during a subsequent labour, giving rise to mischief which will probably be irremediable,—vesico vaginal or recto-vaginal fistula, one or other, if not both, being far from unlikely to occur. This operation has lately been revived; but it certainly appears a rude mode of getting over a difficulty, and strongly reminds me of a piece of farriery related to me by a medical man. My friend had a pet pig, who had borne many litters, and brought them up in a respectable manner; she was, however, afflicted with prolapsus ani, a complaint both uncomfortable to herself and unsightly to her master's friends. Under these circumstances a farrier was called in, who excised portions of the congested mucous membrane, returned the gut, and with a needle and thread stitched up the anus, in spite of which the animal recovered, and the cure was permanent.

The present plan of the perineal pad, though much used, certainly has many disadvantages. In the first place, a considerable degree of pressure must be employed on the perineum, a part liable to be chafed from the great amount of perspiration which always goes on there, and which must necessarily be vastly increased by a waterproof pad; again, the vulva being covered partially or completely in a similar manner, the vaginal discharges are also directed down to this part, and the vulva is heated and irritated, which alone is often sufficient, independent of any other cause, to keep up leucorrhœa, and must therefore perpetuate and augment the discharge which always attends these cases. There is also an objection to the abdominal support in some of these appliances, inasmuch as any pressure upon the intestines must, more or less, interfere with digestion; and though removing the superincumbent weight must certainly tend to assist any mechanical means of support, the advantage gained appears quite overbalanced by the probable injury which may be incurred. I do not say but that this instrument may be, and assuredly is in many cases, of inestimable value; frequently a pessary cannot be borne or retained; or the uterus may be permanently fixed in any situation, giving rise to incurable prolapsus or procidentia, when of course a pessary could only produce