templated its removal, not from any apprehension that the ligature had produced the disease, but lest in her struggles the uterus might suffer; and I admit that, had I not made a post-mortem inspection, I should have been in doubt whether such a mechanical injury had not produced the fatal result.

The polypus is reduced in size soon after the application of the ligature; this was noticed in Mrs. C.'s case, as the catheter was not required after the fifth day. After an operation the diet should not be lessened; on the contrary, we cannot too soon commence a tonic treatment. The recovery is generally rapid. From the history of these and other cases we may conclude—

First, That polypus is not a disease of the virgin state.

Secondly, That it usually appears before menstruation ceases.

Thirdly, that it is more frequently met with in the parturient than in the barren woman.

Dr. Gooch mentions a case of polypus in an unmarried woman, and also one in a woman fifty-five years of age. The experience of the medical men here, with whom I have conversed on this subject, is similar to my own.

When an artery is tied, the portion above the ligature as far as the next branch becomes obliterated, and the vitality of the neighbouring parts would be lost, only for the collateral circulation; as a ligature thrown round a polypus obliterates its vessels as far as the uterus; and as there is no collateral circulation, it is evident that the portion between the ligature and uterus must die and be separated.

3, Upper Parliament-street, Liverpool.

August 29, 1843.

FURTHER

OBSERVATIONS UPON MALARIA.

By EDWIN MORRIS, Esq., Surgeon, Spalding.

Malaria is more prevalent during a continuation of fine weather than at any other time. This I have repeatedly observed, and it is to be attributed to vegetable decomposition going on more rapidly. When the drains are nearly empty of water, and the dead reeds and weeds are fully exposed to the sun, the water is gradually evaporated, and a thick slime is left at the bottom of the ditch, which is continually bubbling up, and emits forth a most disagreeable odor, which may be perceived at a great distance in the direction of the wind. If we are long without rain, the slime becomes dry, and large fissures are observable in various directions, out of which an abundance of deleterious gas ascends, for the mud is a concentrated mass of vegetable corruption, and is in the most favorable state for the production of it. In the beginning of the autumn of 1842, we had a succession of fine weather; the drains became quickly empty, at a time, too, when vegetable life was fast losing its vitality. I never knew malaria so prevalent as at this time, particularly in certain localities. Where a large drain had been neglected cleaning out in one place, this was most remarkable; a large sewer extends about a mile along its bank; a number of cottages are erected for the whole distance, and it

is the receptacle for all the refuse from them. The stench from this drain was beyond description; families after families were suffering from malaria. Application was made to the proper authorities for leave to draw up a sluice, so as to admit the water from the river Welland, when the tide flowed. Permission was granted, and at the next flow of the tide the water ran rapidly through the drain, and well scoured it out; but, during the time of its doing so, the neighbourhood could scarcely be borne, so intolerable was the stench. Several of the parties suffering from the malaria this produced recovered, after having been violently purged from the effects of it. At last one poor woman, the mother of a large family, and who had been suffering from malaria upwards of ten days, was attacked with symptoms of continued fever; this proved the worst case of typhus fever I ever saw. The husband caught it, and the whole of the children; the youngest child died. The nurse who waited upon them fell ill, and the whole of her family had it also; they all recovered. The woman who attended to them went home ill; she resided a mile from them, in quite a different direction, in a small yard where there were four houses, occupied by poor families. Not one in the yard escaped, and four people fell victims to this terrible disease; two out of the number died from ulceration of the bowels during the latter stages of the fever, and the others from exhaustion. In all the above cases violent delirium was present, which lasted several days, and few escaped without sloughs forming over the sacrum. One poor boy had an immense abscess formed in the right axilla; he had afterwards one over the region of the liver: they both got well. Others afterwards formed upon the right leg; the tibia became diseased, and he is suffering from necrosis of that bone at the present time.

The above cases are some of the frightful results of persons originally affected with malaria. It behoves us, therefore, to be indefatigable in our researches as to the cause of it, and to endeavour, if not totally to eradicate, in some measure, at least, to abate its baneful influence. This summer, owing to the quantity of rain we have had, the drains have remained full, consequently we have had less malaria; indeed, I never knew so healthy a season as we have had in this neighbourhood. There is a small town a few miles from us which is notorious for fever, and of the worst kind. A large drain runs through the very centre of it, and is arched over in the town; but before it reaches there it runs at the back of some poor cottages, and receives the whole of the filth and dirt from them, which is allowed to accumulate and rot. After a heavy fall of rain a portion of it is washed down into the tunnel which goes underneath the main street of the town; at certain places there are grates to admit the water from the street into it, and after a few days fine weather the stench from these different openings is unbearable. No wonder that fever should be so very prevalent in this little town, whilst such a dangerous nuisance is allowed to exist, and the inhabitants dwelling in the midst of it. It is deplorable to see certain physical causes of fever in this country, which might be removed by proper sanitary measures. "The annual slaughter in England and Wales, from preventible causes of typhus, which

attack persons in the vigor of life, appears to be double in amount of what was suffered by the allied armies in the battle of Waterloo."* I have observed that persons suffering from typhus fever, primarily caused by malaria, give out malaria of a more virulent and contagious character than that which originally induced it. The cases I have previously alluded to fully corroborate this; if it were needful I could bring forward ample evidence that neglected sewers and ineffectual drainage were the great cause of malaria, for sewers have been filled up, stagnant water removed, and good drainage effected, in the very localities where fever never was absent before the above means were adopted, but have since become a healthy district. This is fully exemplified in the town of Spalding. Several years ago an open drain, called the Westlode Drain, ran through a portion of the town, and which was the receptacle of all kinds of filth; I am given to understand that fever was always present in the streets contiguous to it, but that since it had been completely filled up it had become a very healthy part of the town. The effluvia arising from the putrescency of animal matter is not of that deadly character, and has not the same injurious effect, as the effluvia arising from decayed vegetable matter. I am backed in this opinion by that profound thinker and philosopher Parent-Duchâtelet, whose researches into the causes of fever are most elaborate. He states that at Montfaucon, a short distance from Paris, there is an establishment for the slaughter of horses; it is supposed that more than 12,000 are brought there annually, and the several parts of the animal prepared for different uses. He says, "The nature of the operations which are practised in those yards, the fetid emanations which proceed from them, and the disgusting and destructive animals of which they favor the increase, have always made them to be considered as dangerous places, which ought to be far removed from habitations. In reality, nothing can be compared to the fetid effluvia produced by these establishments; everything there announces negligence and barbarism; their aspect alone induces one to draw back with horror, and one asks himself, on beholding them, if he be actually in the nineteenth century, and at the entrance of a city which makes pretensions to be the capital of the civilised world."† One would suppose that the horrid effluvia emanating from this immense collection of putrid animal matter would be productive of the worst kind of typhus, but such is not the case; Duchâtelet affirms that the persons employed in these yards are robust and very healthy, and attain a good old age, and fever is very rare amongst them, or in the neighbourhood. Every surgeon is aware what disgusting places our dissecting rooms are, and yet how rarely is the health of those exposed to it affected! There can be no doubt of the great difference in the quality of the effluvia produced from marshes and those from putrid animal matter; the marsh miasma exerts a most deadly influence upon the system, it lowers the pulse, it prostrates the strength, and affects the mind, and renders life mis-

erable indeed. I am fully persuaded that one-half of the diseases we are called upon to treat in the fens of Lincolnshire are caused by malaria; its effects upon the nervous system are most striking, and we have a train of singular phenomena produced by it; there is not a question but it is the primary cause of all our fevers, and, with few exceptions, I have always been able to trace it. I do not wish to be understood that all persons suffering from typhus fever were primarily affected with malaria, and that it was, *per se*, the cause of it, because, when once a case of typhus occurs, it is rapidly afterwards propagated by contagion. There are certain circumstances which render people more liable to be attacked with malaria—viz., a scanty supply of good and wholesome food, filthiness, and improper ventilation; also a moist state of the atmosphere is favorable to its diffusion. Males are more frequently the subject of malaria than females; strangers are much more liable to suffer from it than natives of the fens, and few escape having slight attacks of it before they become thoroughly acclimated; others, again, who are always obliged to return to their own country, and many there are who fall victims to its pernicious effects. I have frequently been called to patients that have fallen down in a fit, and have remained insensible for a time, who have been for some time previously suffering from malaria; their fits have always been preceded by coldness of the hands and feet, with pain in the back; chilliness comes on, with dizziness in the head; they then suddenly lose all recollection; these attacks generally take place soon after they get up in the morning. I was last week called to a woman, aged thirty years, of a plethoric habit of body; she has had all the symptoms of malaria upon her for some time, and has had great difficulty in attending to her work. She had been washing all day; about four, p.m., a chill fit came on, the hands and feet were cold; whilst walking across the room she fell senseless on the floor; when I saw her she was upon the bed, and three people holding her down; she was struggling violently to get from them; she had torn her cap off, and attempted to pull the hair from off her head; she raved and talked to persons she fancied were running about the room; after repeating a question several times, she would give me a sensible answer; she would, a few minutes after, scream and struggle violently; her pulse was feeble, and 64; the feet and hands were very cold; the face was flushed; and the head very hot; the pupils were dilated. I had a thick towel dipped in cold water, and then applied it upon the head; the heat of the head was so great that a complete vapor arose from the towel; when it became warm I immediately changed it; she expressed that she felt great relief from it, and wished it be continued. In about two hours she became perfectly sensible. I gave her a brisk purgative, which cleaned out the bowels, and afterwards quinine was given. She recovered very rapidly. People frequently apply to us to be bled for the pain in the head when suffering from malaria. I have seen patients bled under such circumstances, and after the abstraction of a few ounces of blood, they faint; the collapse after is very great; the blood is exactly like treacle, and flows out of the vein very slowly; in such cases it is a long time before they recover the shock produced upon the

* Mr. Chadwick's "Report on the Sanitary Condition of the Laboring Population of Great Britain," p. 3.

† Hygiène Publique, ou Mémoires sur les Questions les plus Importantes de l'Hygiène appliquée aux Professions et aux Travaux d'Utilité Publique, tom. ii, p. 123-4.

system by it. Persons suffering from malaria, or predisposed to it, will not bear the loss of blood. I always avoid depletion as much as possible; indeed, I never have recourse to it except in extreme cases, and then only locally. I have had a young female under my care who suffered severely from malaria; for upwards of a fortnight she was quite insane; as soon as ever the malarious symptoms left her she became quite rational; she had not the slightest recollection of what passed during the time of her temporary insanity. Upon inquiry, I ascertained that none of her family had ever been insane. I have seen patients lie insensible for several days, and appear as though they were under the influence of opium, but as soon as ever the malaria is removed from their system they recover. There is one symptom which is always present, and it is of great importance that this should be remembered, especially if it is supposed that the party has taken opium—the *pupils* are always dilated, and contract upon the approach of a candle. In concluding this paper, it may be as well to remark that I have been at great pains to collect the above information respecting malaria, and that whatever novel conclusions I may have come to as regards its peculiar effects upon the system, it is after a long-continued actual observation of the disease in a number of cases. As it is undoubtedly the primary cause of typhus fever of a character peculiar to this fenny district, I purpose, in a future communication, to give the history of it, and the treatment which has been found most beneficial.

Spalding, Lincolnshire.

VILLITIS INTESTINALIS PUERPERA.

TO THE EDITORS OF THE PROVINCIAL MEDICAL JOURNAL.

GENTLEMEN,—As I have lately met with two cases of severe inflammation of the mucous coat of the intestinal canal, which occurred in child-bed, and which I cannot find accurately laid down by writers on midwifery, I take the liberty of sending them to the Provincial Medical Journal, with some subsequent remarks on the subject.

I remain, Gentlemen,

Your very faithful servant,

W. S. OKE, M.D.

Southampton, September 1, 1843.

Mrs. —, aged forty, of stout make and relaxed habit, the mother of seven children, was delivered of her eighth child in January of the present year. The labor was more tedious than her former ones, from the presentation being that of the breech. The child was born asphyxiated, and its vitality was restored with great difficulty. The placenta was of large dimensions, and its expulsion was attended with a *profuse and alarming hæmorrhage*. The uterus was immediately grasped and kept contracted, which prevented any farther material loss of blood. She, however, continued to be so faint from the hæmorrhage, that it was necessary to administer constant supplies of the strongest stimuli in fluid nutriment for hours together, to sustain even a feeble action of the heart. At length she rallied, the pulse remaining feeble and

frequent, and the faintness recurring at intervals for a considerable time after her delivery.

On the morning of the third day she was seized with a rigor, which was followed by pain at the lower part of the abdomen, and soreness under deep pressure, and by diarrhœa. The heat of the surface was not much above the normal temperature, and the skin was moist, but the tongue was furred, and the pulse 130 in a minute. The urine was high-colored; the uterine discharges were interrupted; there was no lacteal development, and no fond solicitude about her child, although she had ever been one of the best of mothers.

After a gentle laxative, the treatment consisted of moderate doses of mercury with chalk, and opium, with a farinaceous and mucilaginous diet. By these means the pain was relieved, but they did not in any degree restrain the diarrhœa; the latter, indeed, was very harassing, and the fecal evacuations were charged with a slimy mucus, occasionally streaked with blood.

As she became extremely weak, and her mind began to wander, every effort was made to lessen the diarrhœa. The chalk mixture, combined with kino and laudanum, was given after every liquid stool; fomentations were laid over the belly; starch glysters, with full doses of the tincture of opium, were from time to time thrown up the rectum, and her strength was supported by stimulants and nutritious food. No improvement resulted; the diarrhœa continued with unabated frequency, and the stools were foul, sanious, and slimy. The pulse was at a fearful height; her snatches of sleep were disturbed and delirious, and her strength was prostrate; at the same time there was no abnormal heat of the skin, no vomiting, no meteorism, and no abdominal pain, nor even soreness, except under deep pressure.

On about the sixth day of the disease she complained of painful deglutition, and, on examining the throat, the internal fauces and soft palate were covered with aphthæ. These were soon removed by a gargle of the *mel rosæ*, and a dilute solution of the chloride of lime; but on the following day, after another severe rigor, a more numerous crop succeeded. This effectually put a stop to all nourishment, and precluded all hope of her recovery. She gradually sunk, and died on the eleventh day of the disease.

Mrs. —, aged twenty-seven, tall and well formed, was delivered of her first child at the full period of gestation, in July last. Her labor, both with regard to the child and placenta, was normal. On the second day after her delivery she complained of acute pain on the left side of the lower part of the abdomen, which was soon associated with a rapid pulse, foul tongue, hot skin, high-colored urine, and diarrhœa. The lochial discharge ceased, and the breasts were flaccid, and without milk. There was *soreness* of the affected part of the abdomen under pressure, but not that exquisite pain felt by the slightest pressure in puerperal peritonitis. There was no meteorism nor infiltration into the peritoneal cavity.

She was treated, in the first instance, with local bleeding, fomentations to the belly, and with calomel and opium; but, as the smallest dose of mercury seemed to aggravate the condition of the mucous coat of the bowels, and increase the diarrhœa, this medi-