would involve the employment of every remedy calculated to favour our object, and assist nature in the accomplishment of her views, and assuredly this would be to interfere with the natural history of disease.

It is not easy to bring this question to the test of experience, for in the first place men judge very differently as to the form and degree of malady; they arrive at very different opinions of the self-same disorders; and their inveterate prejudices lead them to find their preconceived notions confirmed. Then, a great majority of diseases would get well of themselves, and the touchstone of utility of treatment is the experience of an honest and true heart, with regard to those frightful forms of malady which threaten the extinction of life; and in man's present imperfect state, one despairs of obtaining such results.

It should ever be borne in mind, that the administration of medicine is *one* important means of controlling disease, and of favoring returning health; let it, in fact, be called a portion of our hygienic agency; allow it a place in the scale of influence at least equal to other means of this description; and then, *if the one be necessary, so will be the other*. Then, let us not indolently sit by, and contemplate the ravages of disorder, but while we prudently and cautiously avoid all means, hygienic and regimenal, as well as medical, which may be calculated to contravene nature's efforts, let us also wisely and zealously employ all the means in our power, *medicinal as well as hygienic and regimenal*, to favour this result; let us anticipate if we can what have been supposed to be the critical terminations of malady, by acting upon the secretions; and if we cannot effect this anticipation, let us supply such lack of service by subsidiary influence; let us carefully avoid that blind and misplaced security in the curative powers of nature, which would lead us to overlook or undervalue important remedies, on the hollow pretext of not interfering with the natural history of malady; let us not cruelly delay the application of remedies until the golden period for action has escaped us, and the time in which we could be useful to our patients has fled for ever,—fled with the *first* lengthening, and then fast receding, shadows of life. Even in the happier forms of malady, let us carefully endeavour to screen our patient from those complications which may prevent an agreeable result; let us try to *second* the salutary efforts of nature, and control her too great vehemence of action; while in the severer, as well as in the lighter disorders, let all our remedies be employed *cito tute, jucunde*.

(To be continued.)

SHORT NOTES OF THE OPINIONS AND PRACTICE OF THE LATE JOHN PEARSON, ESQ., F.R.S., ON SYPHILITIC DISEASE.*

By W. S. OKE, M.D., Physician to the Royal South Hants Infirmary.

The Effect of the Venereal Virus upon Bones.—It is taken for granted in general that the bone is affected in the same manner as the periosteum, but no fair

case can be shewn in which the bone was primarily affected by the venereal disease. If this effect were produced, it is necessary that the bone should become soft, so as to admit of dilatation, or that its bulk be increased by a deposit of new matter. The venereal virus attacks the cortical plates of the bones from the periosteum, and of those bones which are nearest the surface; the effects therefore just mentioned must have been seen if they did take place.

The bones certainly become soft in other diseases, as in scrofula, where the medullary part is attacked; but the only primary effect from the venereal disease which can be discovered, is death of the bone. There is not ulceration, as in scrofula, or a loose fragment, as in necrosis, but the solid part of the bone dies.

When the matter is under the periosteum, the bone always suffers, and as those bones are generally attacked which are nearest to the external air, a secondary effect is produced by exposure.

In the bones of the cranium the outer table is sometimes destroyed, but the disease does not often go beyond the diploë. [I remember to have seen a case of this kind in a young man, in which almost the whole of the outer table of the frontal bone was dead and loose, whilst the inner table did not appear to be involved. The dead bone was removed by Sir Benjamin Brodie.]

The membranes covering the base of the nostrils, formed by the maxillary apophyses, the vomer and the inferior spongy bones, being exposed to a stream of air, are very liable to become affected by the venereal virus. A carious state of one or more of these has always been connected with an ulcer in the nose. It may be doubted whether an ulcer can long exist on the upper part of the mouth, without being associated with some disease of the palate bone. Even in such a case, the disease generally begins in the membrane of the nose. Whenever, therefore, there is a viscid secretion obstructing the nostrils, or an offensive discharge, tinged with blood, with a sense of soreness about the part, a carious bone is to be suspected.

Again, when there is a small rising at the upper part of the mouth, a plate of bone will often be found bare; but when the greater part of the horizontal plate is carious, it is probable that the palate bone, vomer, and nasal lamella of the ethmoid bone, are in the same state. Sometimes along with this, the alveolar processes of the four front teeth are involved; but if the soft palate remain, the inconvenience is not considerable. The ossa nasi are never diseased, except when there has been great destruction of the soft parts.

Wherever examination can be made for local symptoms, it ought to be done, however much the patient may refer them to internal maladies, as many complaints may be discovered to arise from mere local causes, unconnected altogether with the venereal disease.

The venereal virus will occasionally attack the internal part of the skull, in a remarkable manner; the inner surface becomes scabrous, with a number of projecting edges or points. The patient has violent headache, pains in the muscles moving the head and neck, and symptoms of compression of the brain; the eyes and ears are greatly affected, and idiocy is often the result. The brain being kept in constant irritation, becomes susceptible of the slightest excitement, which eventually brings on fits, resembling epilepsy, and the patient dies. From this deplorable condition recovery is never to be expected.

Treatment of Tertiary Symptoms.—The tertiary symptoms of syphilis cannot be cured with the same facility as the primary or secondary symptoms; from nine to twelve weeks will usually be necessary; or if the mercury has not acted fairly, the course will sometimes be required to extend even to fourteen weeks.

Treatment of Pustules.—Pustules in this stage of the disease should be made to dry as soon as possible, that the parts below may heal without exposure to the air; with this view it will not be expedient to use the warm bath, or any unctuous application.

If the crust remain moist and elevated, and there be an oozing of matter from under it, the most useful application will be a strong decoction of guaiacum shavings, with a little spirit; and when they separate from the skin, they are apt to leave deep foul ulcers, which are much disposed to throw out fungus.

Great attention is necessary to destroy the fungus, for, if neglected, the sore will either not heal, or leave an unseemly cicatrix, which will be very liable to give way. The best applications in this case will be a solution of the sulphate of copper, or of nitrate of silver, of such strength as not to give pain. The sores may be afterwards dressed with the Unguentum Hydrargyri Nitrico-Oxidi.

When mercury has been ineffectually employed, the cicatrix remains smooth, of a silky feel, and of a redder colour than is natural. On the contrary, when the disease has been completely cured, there will be a depression in the middle of the cicatrix, which will have as much roughness as the natural skin. As cicatrices are apt to give way, when even there is no return of the disease, they should be defended from the external air by some mild cerate.

Treatment of Enlargement of the Ligaments.—This symptom will require as full a course of mercury as the former, and will be benefitted by the vapour or hot bath. If the enlargement should not subside at nearly the end of the course, volatile liniments with camphor, or repeated blisters, may be applied to the part; and whether these last remedies are required or not, it will be necessary for the patient to wear a soap plaster, with mercury or without it, for some time.

Treatment of Nodes.—No particular mode of treatment

is necessary, as recent nodes generally disappear during the course: should they be painful, immediate relief may be given by dividing the integuments down to the bone, and separating the periosteum for about a quarter of an inch. Exfoliation does not always follow. The wound should be dressed down with lint, to promote suppuration.

[This practice has an excellent effect in chronic or local thickenings of the pericranium from traumatic causes. I recollect one instance of this kind, of long-standing, and of very painful character, which was at once cured by my dividing the pericranium, and dressing it with dry lint till a small scale of bone was exfoliated.]

When the periosteum has been extensively affected with the disease, it has been found necessary to give the bi-chloride of mercury, in the dose of one-eighth of a grain, three times a day, for four or five weeks, before a course of inunction.

[The modern iodine treatment of these cases has an immense advantage over the mercurial, as will be seen in the following case. A few years ago a tradesman consulted me for a large node on the shaft of the left tibia, which had existed many months, and deprived him at length of all sleep. He had tried the usual treatment in vain, and even opiates had failed to exempt his nights from severe pain; indeed so great were his sufferings that he requested, as a last resource, that his leg might be removed. Five grains of the iodide of potassium were ordered for him three times a day, with five grains of the Pilula Hydrargyri every night. On the third night the pain subsided, and never returned. The nodes gradually diminished, and in six weeks he was quite well.]

If the tumefaction should not subside when the pain is removed, repeated blisters have been of use; but, notwithstanding this treatment, the bulk will sometimes last a good while; if, however, it is free from pain, and will bear pressure, no anxiety need be felt about it.

Treatment of Caries.—As there is generally a collection of matter about carious bone, it will be best to divide the integuments, in order to evacuate it, and bring away the loose pieces of bone, but in general the integuments ought not to be removed, unless they are much diseased. A small incision will suffice, and after the first inflammation has subsided, and good pus has been formed, the sore may be dressed down with lint, dipped into Bates' camphorated water, dry lint over that, and over all some mild cerate.

No particular effort need be made to keep the sore open, for if any small bits of bone should approach the surface, they can easily be removed by a small incision. Keeping the sore open for such an object, will only be painful and inconvenient.

Carious bones of the cranium are generally long in separating—sometimes three years. If both tables should be affected, it will be necessary to remove the

dead bone with a trephine; but both the cranial tables are so seldom involved, that such an operation is very rarely required.

No particular treatment is applicable, where the bones of the face are diseased. Bates' camphorated water or the Linimentum *Æruginis* may be employed; or if the internal bones of the nose be involved, lime water with a little of the above liniment may be used. The parts are to be kept clean, and as dry and easy as possible; and no strong efforts should be used to get away diseased bones, especially of the nose, till they are loose and vacillating.

After the bones of the nose are separated, there will probably be a considerable discharge of a yellowish matter for some weeks; and the same kind of matter will sometimes find its way through the puncta lachrymalis. This may arise from a diseased state of that part of the palate bone which ascends to form part of the orbit.

During the night the discharge will be very small in quantity, but will be much increased by the erect position and exposure to the air. As soon as the diseased bone is removed, the discharge will gradually decrease, and in four or five weeks entirely cease; there may be, however, other pieces to come away, and a year may elapse before they are wholly removed. When one piece has come away, the discharge is very great, and then ceases gradually; another piece brings on the discharge again, till it has exfoliated, when the discharge increases for a time, and then subsides as before.

If the bones of the palate should have been destroyed, a silver plate may be substituted; but if the soft parts are also gone, there will be no support behind, and the defect will be irremediable.

After the separation of the palate bones, it is best to introduce lint for some time, to obdurate the soft parts; for without this precaution the false palate will give great uneasiness. As the opening will in some measure become contracted, there will be greater probability of the false palate fitting at the end of six months than if introduced sooner.

Though the vomer should come away, the form of the nose will be decently supported so as to enable a person to mix in society; but if the softer septum should come away, the deformity will be considerable.

When the tibia is diseased, the bone being laid bare, the parts should be dressed with drying applications till exfoliation is completed; but should a considerable part be carious, perhaps half the bone, it ought to be taken away by means of a mallet and chisel, by which treatment the process of exfoliation will be shortened several months.

As the patient may suffer a relapse after the process of exfoliation, it is desirable the bone should be separated before the mercurial course is completed. This may be done when the bones of the face are

diseased; but when the frontal or parietal bones are involved, it will be found more difficult—indeed, in such a case it is not easy to decide when mercury may be laid aside with safety.

A relapse may be suffered in two ways,—viz., by the contamination of the parts contiguous to those which are diseased; or by the recurrence of a spot of the secondary kind. In such cases as these, four courses of mercury may be required during a period of three or four years before the disease is fairly eradicated.

In support of this severe mercurial treatment, Mr. Pearson relates the following remarkable case:—

A woman underwent a course of mercury in the Lock Hospital for a syphilitic secondary eruption, and appeared to be cured. She went into the Asylum, and at the end of three or four months returned to the hospital with nodes, which were apparently cured by a second course of mercury. Sometime afterwards she had caries of the tibia and of one of the parietal bones, and was confined to her bed three months, whilst she underwent a third course of inunction. The portion of the tibia separated during the course, but that of the parietal bone did not come away till after three years. At the end of two months from the separation of the latter, her throat was found to be ulcerated and venereal blotches appeared on the skin. She then went through a fourth course of mercury for nine weeks, and has since remained well.

It is the practice of some,—of Hildanus, Louis, and Turner, to defer the adhibition of mercury till the diseased bone has fairly separated; when, however, the exfoliation is very tedious, it is not advisable to wait till it has taken place, before the mercury is commenced, but bearing in mind the possibility of a relapse, it will be judicious not to give the patient a positive assurance of his safety till five or six months after the separation of the dead bone.

Syphilis in Pregnant Women.—There is nothing very remarkable or requiring particular treatment when pregnant women are affected with lues. The course of its different stages takes place as under common circumstances.

When venereal blotches exist, they become liable to sore nipples, particularly during the latter months of pregnancy. In the first four months the free use of mercury is apt to produce abortion; it is therefore of importance to introduce it slowly. The warm bath also can be seldom borne without great inconvenience. Sometimes primary sores will remain stationary during the whole period of utero-gestation, but after delivery will yield and heal under the proper effect of mercury. On the other hand, pregnant women, under the proper use of mercury, have been apparently cured, but after delivery have suffered a relapse.

After the sixth month of utero-gestation the cure of syphilitic disease is very uncertain; primary symptoms may indeed sometimes be cured during this period,

but there is always an uncertainty attending such cases.

If a woman be imperfectly cured, and she conceive again, either the symptoms will remain stationary, or if apparently removed, the poison, not being eradicated, will lie dormant till after parturition, when the mercury will be again required. For example:—a woman went through a course of mercury during the latter part of pregnancy, and was not completely cured. She proved with child again, and there were no clear symptoms of the disease till after the birth of the second child, when secondary symptoms appeared on both mother and child.

(To be continued.)

EMPLOYMENT OF CHLOROFORM IN ACUTE TRAUMATIC TETANUS.

TO THE EDITOR OF THE PROVINCIAL MEDICAL AND SURGICAL JOURNAL.

SIR,

Cases of tetanus and some other convulsive diseases are reported to have been successfully treated with chloroform. The following afforded an opportunity of testing this agent, the result of which I beg to forward for insertion:—

A lad, aged 17, employed as a sailor on board a trading vessel, accidentally placed his foot within a coil of chain cable, just as the anchor (weighing 6 cwt.) was let go. His leg was forcibly drawn to the windlass, and there held with a severe gripe, for two or three minutes. A fracture of both tibia and fibula, with laceration of the integuments covering the gastrocnemius muscle, was the consequence. The accident occurred early on the morning of the 19th instant. In the afternoon he was brought on shore and conveyed to the Lowestoft Infirmary. The limb was carefully placed in splints, and all went on favourably, until the morning of the 29th, when symptoms of tetanus were first manifested by slight difficulty of deglutition, and stiffness about the muscles of the neck, with quickened pulse. A large dose of calomel was prescribed, followed by turpentine and castor oil.

In the course of the day the nurse reported the bowels to have been freely operated upon, and that some liquid diet had been swallowed. Towards evening, the rigidity of the muscles of the neck increased, extending to those of the back, producing a tendency to opisthotonos, attended with spasms. Another dose of turpentine was administered, followed by an injection of the same ingredient mixed with castor oil, and a grain and a half of opium ordered every two or three hours. If these means failed to afford relief, a blister was directed to be applied to the whole length of the spinal column, and the injection to be repeated in the course of the night. These orders were entrusted to one of my pupils, who kindly remained with the patient all night.

I was at the bed-side of the patient early on the following morning, and was informed he had passed a disturbed night, and was scarcely able to swallow the

smallest quantity of liquid. The spasms had become more severe, and were repeated every few minutes. Trismus was now complete, together with opisthotonos to a painful degree, and the countenance presented a frightful tetanic grin, expressive of much agony. During the paroxysms, the pulse rose to 160, respiration was performed in a forcible and convulsive manner, and the face was of a deep purple hue. Death from asphyxia seemed inevitable. The patient being completely lock-jawed, we were precluded administering further remedies by the mouth; it was therefore proposed to make trial of the chloroform.

A piece of sponge, containing two drachms, being introduced into the chamber of Coxeter's inhaler, an anæsthetic influence was speedily produced, and maintained, more or less, for a period of two hours and a half. The effect was striking; the muscles became so completely relaxed, that the head could with facility be bent forward, and the spine straightened. The masseter muscles lost their rigidity, so that by depressing the symphysis of the chin, the mouth could be opened to any extent. Respiration was performed with greater freedom; the pulse fell to 140; the countenance became less livid. An attempt was made to swallow one or two pieces of orange, and on questioning him how he felt, he replied, better.

The use of the chloroform was suspended for three quarters of an hour, when the spasms returned, and after two or three paroxysms, resumed their wonted activity. Inhalation was again had recourse to, and was followed by a mitigation of symptoms. It was persevered in at intervals until nearly five o'clock in the afternoon, when a frightful spasm took place, and the poor sufferer died asphyxiated, thirty-three hours from the commencement of the attack, and twelve days after the accident.

Upon a *post-mortem* examination, the abdominal viscera presented throughout a healthy appearance. The lungs were slightly congested, but retained their crepitaney. The lining membrane of the larynx exhibited an appearance of capillary injection, especially about the glottis, which assumed a crimson hue. The brain, with the spinal cord, was inspected, but no traces of structural alteration were discernable.

It may be remarked, that the above case affords an interesting example of the extent to which chloroform may be used, without apparently deteriorating the cerebral functions; for just previous to the fatal attack of spasm, the patient retained full possession of his mental faculties, and although we were disappointed in obtaining a curative effect, yet it was most gratifying to witness its palliative influence, at a time when I believe all other attempts at relief would not only have proved abortive, but, perhaps, aggravated the sufferings of the unfortunate patient.

I remain, Sir,

Your obedient servant,

W. C. WORTHINGTON, F.R.C.S.

Lowestoft, April 7, 1848.