

escape of meconium had been relied upon as evidence of death, would, under the accepted doctrine, have had its head perforated. It may be urged that the child might have been delivered by natural pains stimulated by ergot. A first child had been born alive. But in women of defective organization, exposed to hardships of poverty and toil, it is not uncommon to find the parturient power exhausted by the first labour. I think it possible that energetic uterine contraction might have sufficed to drive the head through the pelvis. But uterine contraction, and, indeed, the woman's general strength, had long given way before the obstacle. Ergot might have failed to rouse them sufficiently, and would, in all probability, not have done so at all under half an hour. Moreover, there was the risk of rupture of the uterus. My experience is not favourable to the attempt to lash the *exhausted* uterus into spasmodic energy by ergotic stimulation. That half hour would have been a period of protracted suffering to the mother, and destruction to the child. The long forceps might have been successful. I entertain a strong bias—a prejudice, perhaps—in favour of delivery head foremost. But the forceps could only have been applied in the transverse diameter of the brim, one blade over the forehead, the other over the occiput, or a little obliquely. The grasp under such circumstances would have had the effect of causing the bi-parietal diameter of the head to bulge out more strongly against the promontory and pubis, increasing the disproportion and difficulty. The operation would have been severe, and the risk to the child great.

I am satisfied that the delivery by turning was, in this case, the least distressing to the mother; admitting of being performed with greater ease and celerity than any other. And if we recognise the right of the child to a share in the appliances of Conservative Midwifery, then must this case be regarded as one of leading importance.

Finsbury-square, July, 1860.

ON

A CASE OF MYELITIS AND EXTENSIVE SPINAL IRRITATION,

WITH

PARALYSIS OF THE LEFT LEG,

CURED BY THE ADMINISTRATION OF ERGOT OF RYE, AND THE EXTERNAL USE OF BELLADONNA.

By C. R. BREE, M.D., F.L.S.,

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SUSANNAH C—, aged thirteen, admitted into the Essex and Colchester Hospital, Feb. 24th, 1859. The following history, down to the middle of November, was obligingly furnished to me by Mr. Johnson, the house-surgeon:—The account this girl gives of herself is, that she has never had any particular illness until about two years ago, when she had fever, which laid her up for about seven weeks; but she has always been delicate. On admission, she complained of feeling weak, and being unable to follow her employment, that of factory hand. She states that she has been accustomed to work in a room heated by steam pipes, and that she was in the habit of fainting away at her work. She dates her present illness from running home one day in the wet, when she felt pain in the side, with slight cough, which confined her at home for a few days, when she resumed her employment for two days. She had medical advice, but received no benefit. On April 22nd (whilst in hospital), she had a good deal of pain in the head and back; and, on coming up stairs, she fell and lost consciousness, and remained insensible from seven P.M. till two A.M., during which time she was very rigid, but did not struggle. On recovering sensibility, she felt pain in her left leg, which she attributed to rheumatism, and did not mention it until she discovered that she had lost all power of using it, and that it had no sense of feeling. About this time she complained of pain in her back. She was put under the influence of mercury, and had the tartrate of antimony ointment rubbed along the course of the spine. From this time she had attacks of insensibility about once a week, until Sept. 29th, when she left the hospital on five weeks' leave of absence, much improved in health. She was readmitted at the expiration of her term of leave, having had several of her old attacks, and was altogether not so well in health as when she went out. Her leg was now more particularly examined, when she was found to have neither motion nor sensibility from the knee downwards. The muscles and integuments of the thigh appeared scarcely,

if at all, affected. She was ordered tonics and good diet, and the leg to be galvanized daily, and frequently rubbed with a rough cloth.

The patient came under my care about the middle of Nov., and I continued the above treatment for another fortnight, without any benefit.

On the 1st of December, I carefully examined the spine, which was extremely tender on pressure from top to bottom. So sensitive was this region, that she could not bear the slightest pressure without pain, and even gentle percussion made her cry out. This tenderness was more pronounced in the lower part of the dorsal region, just below the antero-posterior curvature in this situation, but not localized over any particular vertebra. She had had no fit since she came under my care. Her complexion was sallow and expression dull. She had never menstruated. Appetite bad; bowels regular; urine normal. The left leg was completely paralysed below the knee, and insensible to pain. She could use the flexors of the thigh so as to bend it partly towards the abdomen, and there was no anæsthesia above the knee. I ordered her to have two grains of ergot twice a day, and the spine to be rubbed night and morning with a liniment containing extract of belladonna; the leg to be well rubbed with the flesh brush, and the diet to be liberal, with moderate allowance of beer.

The only alteration in this treatment up to the 25th of January, 1860, was that of increasing the dose of ergot to four grains after a slight appearance of the catamenia on the 22nd of December. After the first fortnight she began gradually to amend, and the notes in my hospital book are—

Jan. 14th.—Begins to walk nicely *without assistance*; sensibility has in a great measure returned in the limb.

23rd.—She is daily gaining more use of the limb; spine is still very tender.

25th.—To be made an out-patient.

On the 5th of February she walked up to the hospital from her residence in the town. She had quite regained the natural use of the limb, but the spine still remained tender. To continue the liniment, but omit the ergot. I have not seen her since.

Remarks.—Now, what was the pathology of this interesting case? We have, in looking over the history, evidence of a lesion of the cerebro-spinal system and its consequences—loss of consciousness, tonic spasms, paralysis, anæsthesia. The spinal curvature I satisfied myself did not depend upon disease of the bony column, and the tenderness along this tract indicated, I think, inflammatory action, as well as that combination of symptoms, as Dr. Brown-Séquard has it, termed "spinal irritation." I think it will be admitted that the amendment was entirely due to the treatment. It was founded upon the above view which I took of the pathology of the case, and upon the principles so ably set forth by Dr. Brown-Séquard as to the therapeutical action of ergot and belladonna in the treatment of myelitis. In my notes of the lectures I heard delivered by that distinguished physiologist in Edinburgh I find the following:—

"Strychnine is almost useless in all lesions of the spinal cord, and especially hurtful in congestions of that structure. It acts by producing paralysis of the bloodvessels of the cord, and therefore in its lesions it can only increase the morbid effects. In sympathetic paraplegia, however, it is very useful. Ergot of rye and belladonna may both be used where strychnine cannot; they excite reflex action by acting upon the bloodvessels of the nerves."

In the summer of last year I saw two cases of myelitis with partial paralysis of the lower extremities, the bladder, and rectum, successfully treated with ergot of rye and belladonna by Professor Bennett, in the Royal Infirmary of Edinburgh, such treatment being founded upon Dr. Brown-Séquard's views. I therefore venture to draw the attention of the profession to the subject by the details of the present case.

Colchester, 1860.

ON THE

NATURE & TREATMENT OF DEFORMITIES.

By HOLMES COOTE, Esq., F.R.C.S.,

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NON-CONGENITAL DEFORMITIES.

In passing from the consideration of congenital to non-congenital deformities, we leave the theories of foetal development, or intra-uterine accidents, and enter on the domain of more recognised surgery.

I cannot select a better opportunity than the present for regretting that the term "orthopædic" should ever have been introduced in connexion with this department of surgery, for it conveys an idea of exclusiveness to which there is no claim, and raises in the mind of the student an ideal barrier, against which it offers a protest.

In the treatment of non-congenital deformities, orthopædic surgery shows only what may be done by time, patience, and gentleness, aided by mechanical appliances, or proper surgical treatment, after disease, accident, or general debility have done their worst. It claims not to be a specialty, except in so far that it requires some study and examination. But I may warn those entering upon practice that the whole subject is not to be "grasped" in a moment. It comprises a study of the morbid conditions of all the great systems of the body.

On the 24th of February, I saw a little child, aged four years, at the Orthopædic Hospital, of whom the mother simply stated that the left foot turned inwards in walking. And such was the case. The foot turned inwards, the inner border being raised, and the boy complaining, after walking, of pain in the sole of the foot at the junction of the metatarsal bones with the phalanges. But when he was put on a sofa the foot could be moved freely in every direction. It was only after most careful examination and comparison that a slight degree of tension of the tendo-Achillis was detected. The left limb was somewhat smaller than the right.

Now what was the explanation of this case? The child was suffering from one of those obscure affections of the spinal cord which manifest themselves by disturbing muscular equilibrium. This or that set of muscles exercises undue force, and the weight of the body is irregularly transmitted to the ground. In the case now before us, there was incipient contraction of the muscles of the calf, causing a tightness of the tendo-Achillis. It was not sufficient to be detected by cursory examination, and was more easily recognised by its results: what were they? In stepping forwards, the child pressed, with undue force, in consequence of the tense state of the tendo-Achillis, the anterior part of the corresponding foot against the ground; from this cause pain ensued, and the boy instinctively turned the inner border of the foot upwards and inwards, thus walking on the outer side. The next consideration was the seat of disease, which was certainly not the foot; and attention was directed to the spinal cord, as well as to the mouth, where the important process of dentition was yet going on, and exerting an influence over the whole system.

Some months ago, an aged gentleman consulted me in consequence of a tight condition of the tendo-Achillis, by which the weight of the body was thrown unduly forwards, and corns were formed, to his great annoyance, on the anterior and under part of the foot. In early or middle life, such an occurrence may be rectified by the division and elongation of the tendo-Achillis; in the aged, it may be alleviated by proper baths, and by processes of manipulation, by means of which the thickened epithelium is removed.

But disease or accident may be yet more local, and confined to a single articulation. Who does not still remember the frequent condemnation of diseased joints, and their subsequent amputation? Surgery has made a bold step in attempting the preservation of the limb by resection of the diseased joint. Nevertheless, we have yet to learn how much may be done by time and patience on the surgeon's part; how limited may be the real issue of disease; how capable parts so changed are of restoration.

I have three young patients under my charge suffering from strumous disease of the ankle-joint and tarsus. In the one case the heel is drawn up in the position of talipes equinus; in the second, the foot is thrown outwards in the position of talipes valgus; and, in the third, the integuments over the tarsus are red, inflamed, and suppurating. In order to treat these deformities, a general knowledge of the principles of surgery is required. Active disease must cease before we attempt the restoration of the displaced parts. The foot is drawn inwards or outwards instinctively, and for the patient's ease; and the division of tendons would be unscientific and reprehensible.

So, likewise, in cases of contraction of the knee-joint during disease the division of the flexor tendons of the ham is a proceeding both unscientific and futile. Why is the knee bent? To relax the ligaments which hold together firmly pressed the inflamed articular extremities of the bones. What would be effected by the subcutaneous division of the flexor tendons? Either absolutely nothing, or else to render the limb more unsteady and likely to reapproximate the diseased surfaces. It is a rule in orthopædic surgery to let morbid processes cease before we attempt the readjustment of displaced parts.

Faulty position may become the cause of non-congenital de-

formity; and this cannot be better illustrated than by reference to diseases of the spine. Lateral curvature! how often do we see it; how rarely is it mentioned! The very subject may be said to falter at the portal of legitimate surgery, in spite of the immense amount of misery which this affection is yearly causing.

Let me mention the following case, the particulars of which may be verified by anyone who chooses to call at the Royal Orthopædic Hospital, where the patient still remains:—

A young woman, the daughter of a professional man, became affected with double lateral curvature of the spine, after being left destitute. She was ultimately removed to a workhouse, where she remained bedridden and paraplegic for seven years. She was admitted into the Orthopædic Hospital above twelve months ago, under the care of Mr. Tamplin, by whose directions proper appliances were fitted to the distorted spine, and the limbs, which were contracted, were slowly extended. The patient can now walk, even some distance, by herself, and finds herself daily becoming stronger.

The treatment of non-congenital deformities implies, then, an extensive knowledge of the general principles of medicine, and proves clearly how impossible it would be to establish orthopædic surgery on the basis of a specialism.

Bridge-street, Blackfriars, 1860.

ON PERIODICITY AS A CHARACTER OF DISEASE.

By RICHARD HUGHES, M.R.C.S., L.R.C.P. Ed. (Exam.),
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THERE is one disease—ague—of the phenomena of which periodicity is an invariable characteristic. There are other affections—the neuralgiæ and nervous headaches—which very frequently assume a regularly intermittent character. And, occasionally, in the course of various diseases a tendency to a periodical type is manifested.

Quinine and arsenic are specifics in ague. They are hardly less valuable in neuralgiæ and nervous headaches. And when, in works on Medicine, we meet with the remark that sometimes the symptoms seem to come on periodically, it is generally coupled with the statement that in these cases quinine will be found of the utmost value.

What is the *rationale* of these facts?

The cause of the regular periodic recurrence of the paroxysms of intermittent fever is discussed at length by Dr. Watson in the first volume of his Lectures on Medicine, p. 758. After passing in review the various theories that have been advanced to account for it, he leaves the subject as one altogether uncertain. Cullen's hypothesis as to the influence of diurnal habit he thinks the nearest approach to the truth; but admits that this will in no way account for the tertian and quartan types of ague. In this state of uncertainty, the peculiar poison—malaria—which causes intermittent fever has been generally regarded as the source of its periodical character. It is supposed to act in the way of a ferment in the blood; and the zymotic process set up by it is supposed to have its regular development and decline, the paroxysms being its effect on the nervous system when the process attains its acme. When other affections manifest a periodic type, it is supposed that their subjects have either had ague, or been exposed to malarious influences. On the other hand, quinine and arsenic are considered to be antidotes to the malarious poison, and thus to counteract its periodic influence in all affections which tend to assume that type. But I think I shall be borne out by general experience when I assert that periodic phenomena are manifested in many a case of neuralgia or other disease, where the hypothesis of malarious influence is altogether shut out. This theory, therefore, in itself *à priori* most improbable, must be at once rejected.

If, then, the periodicity of ague does not depend upon the peculiar poison which occasions it, does it depend upon the peculiar portion of the organism which that poison affects? This is universally acknowledged to be the nervous system. I would agree with this view, but would still farther limit it to a particular division of the nervous system—the *sympathetic*.

Let me place one after another some of the principal phenomena of the cold stage of ague, with those produced by galvanization of the sympathetic in the neck.