TREATMENT OF INFANTILE PARALYSIS.

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THERE is a good deal of truth in the remarks of Dr. R. J. Lee, in his paper on the treatment of "Infantile Paralysis", in the JOURNAL of the 22nd instant, and I am inclined to agree with many of his conclusions; but I wish, in the first place, to protest against the continued use of a term which our advanced knowledge of diseases of the spinal cord has shown to be insufficient, and therefore inaccurate. The disease in question is not confined to infants, nor can we at present say that any age is exempt from its attacks. I have elsewhere suggested a name, which would distinguish the disease by its most prominent and characteristic symptom, and which yet would not imply any restriction of age; that name is "regressive paralysis", and it has been accepted and approved by many of my brethren, both English and foreign, as a convenient and correct designation.

The application of artificial heat has been a recognised and valuable treatment of paralysed limbs for longer than I care to trace backwards, and was perhaps never more strongly urged than by Sir James Paget, in a lecture delivered by him at St. Bartholomew's Hospital in 1864; and very fully and ably by Dr. Roth in his work on *Paralysis in Infancy and Youth*, in 1869.

I have always recognised the great value of the various means, whether by dry heat, as from a fire or from bags of sand, or salt, or flour, heated and applied, and that heat afterwards retained by wraps of wool or silk; of moist heat by warm and stimulating baths of brine, etc.; of frictions with stimulating liniments, of shampooing, of massage, of percussion, and other modes of exciting and maintaining the temperature and capillary circulation of the limb; and I am not at all inclined to object to Dr. Lee's remarks upon the value of such means. But, at the same time, I cannot agree with him that we can safely omit electricity in the treatment of these cases. I have too often seen muscles, apparently irretrievably lost, regain their functions under the careful use of one or the other form of current, judiciously and carefully applied, to ever allow a patient under my care to lose the possibility of recovery, which I believe this means of treatment holds out. In my monograph on Regressive Paralysis is recorded, among many others, a case (No. 17 in the table appended) which has now been under my own eye more than ten years; and, though the attack was very extensive, involving the muscles of the neck and face, as well as an upper and lower limb, and this at the early age of five months, yet he is now able to run and jump, and join in all the pastimes of playfellows of his own age, with only the slightest halt perceptible, due to a shortening of barely one-eighth of an inch, the only muscle atrophied being the extensor longus digitorum of the right leg. This result, I am certain, is due to the careful and persevering use of electricity; in the first instance, the continuous current, and, as the muscles recovered their normal reaction, the induced; and the cause of the failure to save the extensor longus, I believe to have been its deep position between the tibialis anticus and peroneus, preventing the current from reaching the muscular fibres and stimulating them to contraction. By what means but this can a palsied muscle be made to contract regularly and frequently, so as to retain its normal structure and functions? Under the application of heat, the bulk of the limb might perhaps be preserved, but the muscular structure will waste, and be replaced by fat; nothing but constant and regular use will keep the highly organised muscle healthy. Therefore, I would warn all who may have the treatment of these cases not to neglect this great and irreplaceable means, at the period when alone it is of use; that time is the early period of the disease—the earlier, the more valuable—and after the lapse of two years, it is, in my experience, of comparatively little effect.

Next in value to this, nay, perhaps it should stand on the same level, or, were it not that it is impossible to apply the impulse of the will to a palsied muscle, even higher, are the voluntary efforts of the patient to move the limb, thus bringing into use each muscle as it recovers its normal functions; and next to these come passive movements and regulated gymnastic exercises, such as can be provided by apparatus, or by the Swedish exercises.

The greatest difficulty lies with the bones, where the circulation and nutrition are for the most part beyond our reach; and here it is, I am inclined to think, that artificial heat is most useful. But beyond all these, and throughout life, after an attack of this kind, it is necessary to guard carefully against sudden changes of temperature; these patients are peculiarly sensitive to cold, and to changes in the electrical conditions of the atmosphere; and in many, I have known these changes to induce temporary incontinence of urine. They are also peculiarly liable

to boils and chilblains; for these, warm woollen or silken clothing next the skin, with the usual hygienic precautions, are very necessary and very valuable, with the other modes of promoting capillary circulation which I have already mentioned; but I must postpone any further remarks to a future occasion.

CLINICAL MEMORANDA.

PERIOD OF INCUBATION OF SCARLET FEVER.

INVESTIGATORS and recorders of cases bearing on the above subject should, I think, be more careful to eliminate the various fallacies that surround so many cases. If this be not done, then they are almost worthless as part of the data from which to draw accurate conclusions. One sees a good deal of scarlet fever in a children's hospital, but the cases that occur are so difficult to trace to their origin that only a very few can have any value in elucidating the incubation period. The following cases, occurring recently in the East London Hospital for Children, are open to fewer objections than any I have seen there.

A. B. was admitted Friday morning, November 24th, with a burn of the arm. She had attended as out-patient four days.

C. D. had been an in-patient three weeks with eczema capitis. On Friday afternoon, November 24th, A. B. and C. D. were nursed together on the same nurse's lap for half an hour. In the evening A. B. came out in scarlet fever rash, and was sent to the Fever Hospital the same night. C. D. went home Saturday, November 25th, and on Thursday morning, November 30th, the child was brought because of difficulty in swallowing. On examination, I found a scarlatina rash.

E. F. was admitted November 10th with extensive ulceration about vulva. She slept in the next cot to A. B. On Saturday, December 2nd, she complained of sore throat, and vomited. On Sunday the temperature rose to 102°, and a scarlet fever rash appeared.

All these cases were in the same ward, and in cots side by side. No case of scarlet fever had occurred in this ward for a month, nor in the hospital for three weeks. No visitors had been allowed for six weeks. No one had visited C. D. since her admission. E. F. saw her mother for a few minutes on November 30th. There was no scarlet fever in her home. Each case, it will be observed, had some lesion of the integument. In C. D. the rash appeared six days after exposure to infection, and in E. F. nine days elapsed.

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SURGICAL MEMORANDA.

TREATMENT OF NÆVI BY ELECTROLYSIS.

At the meeting of the Midland Branch at Derby in 1879, I brought forward some notes* about the treatment of nœvi by electrolysis, and then gave the history of several cases with details of the time occupied, naming also the number of cells employed. I do not to-day propose to travel over the same ground, but rather to try to mark out as clearly as I can the kind of nœvi to which this mode of treatment seems to be specially adapted. The cases on which the conclusions are based amount, by the courtesy of my friends and colleagues to even a large number, and I am therefore in a position to speak the more decidedly.

It should first be said that this plan is by no means fitted for all nœvi indifferently; it is very far from being of universal application. It would be more true to speak of its range as rather sharply limited; indeed, to the attempt to deal with vascular growths by the electric current without attention to the special conditions of each case must be traced some, at least, of the distrust with which the subject of my paper has not uncommonly been received.

The cases for which electrolysis is eminently suited are superficial dark coloured, sluggish vascular growths, which do not possess special or abundant blood-supply. They waste away after one or two sittings as a matter of moral certainty. Next in order are those nœvi which, agreeing with the above in their actual vascularity, yet have much more of surface covering, and which do not therefore so readily, or to mere inspection, declare the conditions of their blood-supply. A majority of these cases will probably be found to be quite amenable to the electric current. On the other hand the cases in which electrolysis will not, at least as a rule, succeed, are those which are intensely vascular, which are rapidly growing or have rapidly grown, and which it is fair to conclude, have more or less direct communication with blood-vessels near at hand. Especially may this condition be suspected if they are near to vascular trunks, if there be local pulsation, or again if there be

* These notes were subsequently printed as a short pamphlet. I shall be glad to send a copy to any one who is interested in the subject.