

site side of the body. It thus presented the symmetrical character common to some other general diseases; and the same painful process was again and again gone through. Occasionally, the first stage consisted in the appearance of a small painless subcutaneous tubercle, which ran through an identical series of changes. He reported himself in good health, with good appetite; and apparently all the bodily functions were well performed. His urine, however, was anæmic in character, and contained sugar. Puzzled to account for a repetition of the attack during the time when he was scrupulously adhering to the plan of treatment laid down, I yet discovered he had deviated from the regimen recommended by returning to his usual habit of taking animal food once a day only, instead of twice and thrice, as advised. A diet nearly approaching that which obtains for diabetics was now enforced; full doses of nitric acid were given; and the result was a speedy removal of his tormenting complaint.

This case, as far as I have observed, may be taken as a type of its class; the points worthy of note being the causes of the disease; the anæmic urine, (that is, pale and deficient of urea and the urates), and the rapid subsidence of each attack on the free use of azotised food.

The occasional presence of sugar in the urine of persons suffering from boils, and the remark that these are a frequent concomitant of diabetes, are facts long familiar to the profession; but I do not think they have had their due influence on our views of the nature and treatment of this disease. Hence I venture to append some further remarks.

Etiology. We must look for the *proximate cause* of boils to that part of the nervous system which presides over the intricate processes of nutrition and assimilation, and can only call it a mal-assimilation of the gelatinous tissues, leaving them prone to inflame and slough, from their capillaries being morbidly sensitive to the presence of the *exciting cause*, which is very clearly toxæmia. The *precise poison* is an excess of oxidisable material, though not always to be detected as sugar in the urine. Its source may be either—1, an excess in the glycogenic function of the liver; 2, a failure in this organ to elaborate the amylaceous constituents of the food for removal by the respiratory process; or 3, defective eliminative action of the liver and skin.

Again, the *predisposing cause* may be—1, prolonged mental or bodily fatigue; 2, the use of a diet deficient in azote; 3, insufficient exercise; or 4, a residence in a warm and moist, or impure atmosphere.

Treatment. Assuming the correctness of these views the treatment becomes simple and intelligible. The over-wrought nervous system must be tranquilised by rest. We should increase the amount of azotised food, and forbid that which is saccharine or amylaceous; enjoin active out-door exercise, the use of the bath, and if the patient reside in a low damp situation, a removal to an open hilly country.

If stimulants be thought desirable, my experience is more favourable to the use of wine than ale, and theory would lead us to prefer wine. It is probable indeed that the frequent occurrence of this complaint in habitual beer-drinkers has given rise to the common error, that it presents two varieties, one attacking the plethoric, the other the debilitated.

In regard to medicinal treatment, I have lately confined it to an occasional mercurial aperient, and full doses of nitric acid, and so far have reason to think it satisfactory. I have formerly administered alteratives and tonics (the simple bitters, quinine, and steel,) for weeks without benefit.

Locally, I think we should palliate only, as by warm water dressing, or poultices. If let alone the slough soon becomes loose, and may be lifted out with the forceps without giving any pain.

ON ACUPUNCTURE.

By T. OGIER WARD, M.D., Kensington.

I HAVE read in the JOURNAL with much interest the lectures of Dr. Brown-Séguard, especially the fifth, which seems to be the most practical, inasmuch as the experiments detailed prove that irritation, etc., of one part, may be transmitted by reflex action to another more distant part, in the following manner. The irritation is conveyed by an afferent nerve to the nervous centres, and thence is reflected to the more distant part through the sympathetic, which, by producing a contraction of the vessels, reduces the hyperæmia of the affected part. In this way Dr. Brown-Séguard explains the benefit derived from the actual cautery in facial neuralgia and affections of the eyes,

when applied to the ear of the same side, or even between the shoulders. A completely opposed explanation of the action of the actual cautery has been recently given by Dr. Inman, in a paper read to the Lancashire and Cheshire Branch; and certainly Dr. Brown-Séguard's experiments, though they establish the facts in some cases, do not afford any explanation why this action of the sympathetic nerves is confined to a part in a morbid condition, and does not extend, at least, as far as can be ascertained, to the whole system. But whether Dr. Brown-Séguard or Dr. Inman be right, *non est meum tantas componere lites*; the object of the present communication is to offer an explanation, deduced from Dr. Brown-Séguard's experiments, of the benefit derived from two operations much less severe than the actual cautery, which, from its formidable appearance, is never likely to be used extensively in this country, at least, in private practice.

The operations I allude to are, the injection of opiates beneath the skin over the nerve affected in tic douloureux, and acupuncture; in both of which, the great and immediate benefit, by the cessation of the pain, is to be attributed to the punctures, and not to the opiate injected. I do not deny that the opiate may be absorbed, and produce a certain amount of direct effect on the nerve where this is situated superficially; and the profound sleep produced in some instances must be attributed to the opiate; but in cases where the injection has been successful in deeply seated pains, I believe we may reasonably ascribe the cure to the simple puncture, especially as we meet with the same results from acupuncture. Hitherto the *modus operandi* of acupuncture has been involved in mystery, but now Dr. Brown-Séguard's discovery of the reflex action induced by counterirritation, appears to afford at least a plausible explanation of it.

Acupuncture is a remedy that seems to have its floods and ebbs in public estimation; for we see it much belauded in medical writings every ten years or so, even to its recommendation in neuralgia of the heart, and then it again sinks into neglect or oblivion; and it is not unlikely that its disuse may be occasioned partly by fear of the pain, and partly by the difficulty the patient finds to believe so trifling an operation can produce such powerful effects. Another reason for its neglect may be, that, like every other remedy, it fails occasionally, and the practitioner, disgusted at having persuaded his patient to submit to a pain, which, though slight, has been attended with no benefit, will not again undergo such a disappointment. However this may be, its use is not as frequent as it deserves; and now that we know the *rationale* of its operation, I venture to bring forward a few cases in illustration of its remedial powers, in order that others may be induced to give it a more extensive trial, and thus ascertain its true value in the treatment of neuralgic or rheumatic pains.

CASE I. A middle aged labourer came to me with a chronic rheumatism of the parts about the right shoulder, particularly in the deltoid, which was so painful that he could not raise his arm horizontally. I inserted two needles into the muscle, one just below the head of the humerus, and the other near the insertion of the muscle, and in about a quarter of an hour he could lay his hand on his head, and in a few days was quite well, without a second operation.

CASE II. An elderly labourer, suffering from rheumatic pain and stiffness of the rectus and other muscles in front of the right thigh, so that he dragged the limb in walking, was enabled to walk without much limping, after the insertion of three needles down the front of the thigh for a period of twenty minutes; and he required no further treatment.

CASE III. An old clergyman, very liable to sciatica, having been advised to try acupuncture, was in the habit of using daily, previous to dressing himself, two or three needles inserted along the course of the nerve, to enable him to walk down stairs with comfort.

CASE IV. A lady of middle age, suffering so much from lumbago and sciatica, that she could not rise from her chair without assistance, after trying hip baths and mustard poultices in vain, was induced to apply the needles to the most painful parts, when, to her astonishment, the pain was much relieved, and after three applications, was entirely removed.

CASE V. A lady advanced in pregnancy, similarly affected to the last case, and who had failed in obtaining relief from baths and mustard plaisters, used a single needle with complete success, but not without considerable disappointment from the extreme pain produced by the operation. This is the only instance of a complaint of the kind I have met with, as, after the immediate pricking sensation during the passage

of the needle through the skin, the feeling is usually like that produced by the strong pressure of the point of the finger on the part.

In none of the above cases was there any constitutional affection, each patient stating that his health was perfect; nor was there any appearance of local inflammation. Indeed my use of acupuncture has always been confined to such cases as the above, as I should not expect that acute rheumatism or neuralgia would be benefited by such means.

In conclusion, I would remark that, though the benefit of acupuncture has been attributed by some writers to a quivering of the affected muscles, which is indicated by a vibratory motion of the needle while inverted, such an appearance has never presented itself in any of my experiments upon myself or others.

Transactions of Branches.

SOUTH-MIDLAND BRANCH.

CONTRIBUTIONS TO THE MEDICAL TOPOGRAPHY OF BEDFORD AND ITS NEIGHBOURHOOD.

By WILLIAM BLOWER, Esq., Bedford.

[Read May 21st.]

[Continued from volume for 1857, p. 925.]

IV. ASIATIC CHOLERA.

Of the three visitations which Asiatic cholera in the epidemic form has made to this country, Bedford suffered severely in the two first, but entirely escaped in the last.

The first epidemic appeared in this town in the autumn of 1832, commencing its ravages on October 4th, and terminating them on November 26th. It broke out on the east side of the place, and passed across it in a westerly direction. The localities which suffered most were Newnham Street and Waterloo, in the parish of St. Cuthbert, Lurke Lane, in the Parish of St. Peter, and houses standing on ground now cleared at the south-east corner of St. Paul's Square, called Vine's Corner; Dane Street, All Hallows Lane, and Haines Street, in the parish of St. Paul. Only two cases occurred on the south side of the river Ouse, and these were in persons who worked during the day in the infected districts on the north side. The number of cases of illness must have been upwards of six hundred; there were about ninety cases of collapse, and thirty-one deaths.

In October 1833, about forty cases of Asiatic cholera occurred at Wootton, a village situated about five miles south-west of Bedford. Its ravages were confined to a part of the parish; no local cause could be assigned for it, and the epidemic was not known to be prevailing in any other place within many miles, either just before, at the time, or soon afterwards, except at Newport Pagnell, a small market town, a few miles off, where it occurred about the same period.

The epidemic, during its second visitation, made its appearance in Bedford in the autumn of 1849. It broke out on the west side of the town, in Gravel Lane—a place where only one case occurred in 1832. Its ravages here were very severe, but were limited almost entirely to two rows of houses joined back to back. It then spread to other parts of the town, and was very violent in a few localities, especially in Westley Row, Pring Street (in which every house was affected), and in Beauchamp Row. In the parish of St. Cuthbert, which suffered so much in the first epidemic, there were only about four cases; and no case occurred on the south side of the river. The deaths registered in the parish of St. Mary, were those of persons who were removed to the Fever Hospital from other parts of the town. One case occurred on the river itself, in a man resident in a barge moored near the bridge. The number of cases of illness could not have been less than one thousand, and the deaths from cholera were thirty-five.

In the third visitation, the epidemic did not invade the town or immediate neighbourhood of Bedford.

In both of the epidemics which visited Bedford, the disease occurred in certain localities, affecting nearly every house within limited spaces, and leaving the surrounding and intervening places comparatively free. A few single cases, certainly, appeared in other and different parts of the town; but some of the persons who suffered had been exposed to the morbid influence in the infected districts, and doubtless contracted the disease there. In other cases, however, no communication with the infected places or infected persons could

be discovered, and the disease must have arisen spontaneously. The inhabitants generally suffered from the slighter and concomitant forms of the disease; but it was only in particular spots where its virulence appeared to be concentrated, that it displayed itself in its peculiar malignity.

In the commencement of the epidemic, the disease was much more violent, and ran its course in a shorter period than towards its termination. It began in the majority of cases with diarrhœa. The patients complained of aching of the back and limbs, coldness of the extremities, and a frequent gushing of watery fluid from the bowels without pain or effort; and the expression of the countenance was sunken, and the voice husky. These symptoms increased in intensity, vomiting and cramps supervened, and the stage of collapse set in. In a few cases, however, the attack was quite sudden, the patients, apparently well, suddenly became cold, sick, and faint, and the stage of collapse commenced at once. And in a still fewer number of cases, it began with cramps, at first in the fingers and toes, and gradually extended all over the body without any previous diarrhœa or vomiting. In one case, where the cramps were universal, the action of the heart was increased, instead of being, as in other cases, diminished. The stage of collapse was frequently followed by typhoid fever, and some of the patients after becoming better relapsed once or twice.

In most of the cases the skin was quite dry during the stage of collapse; but in a few instances there was a most profuse perspiration, so that the skin became soddened; and when this condition occurred, the patients sunk with great rapidity. In one case the disease was complicated with congestion of the lungs, and the patient died after a very short illness. In many of the fatal cases, just as reaction was taking place, the patients were attacked by coma or convulsions, and carried off by them. Sometimes the body became warmer just before and immediately after death than it was during the illness, and it continued in this state for a considerable time. Twitching of the muscles also was not uncommon after death, and in a few instances there were extensive movements of the limbs. Thus a woman raised her arm from her side, and placed her fore-arm above her head after she had been laid out, to the great consternation of the bystanders; and a boy drew up his knees after he had been placed in his coffin, when the undertaker was about to fasten down the lid.

The period of incubation did not in general appear to exceed twenty-four hours, as most of the patients, after being exposed to the day time, fell during the next night or following morning. And the exciting cause seemed to be more active in the daytime than during the night; for several men who were only at home at night, being occupied in the respective employments at a distance during the day, escaped until the Sunday night or Monday morning, when they were attacked by the disease after spending the Sunday at home. The disease also was influenced by cold, as the approach of winter always checked its ravages.

During the prevalence of the epidemic, other affections, evidently milder forms of the disease, were very common, and the functions of the digestive organs were generally disturbed throughout the town. Diarrhœa was extremely prevalent. It varied in its character; sometimes the discharges were gruelly, constituting the first stage of Asiatic cholera, at others they were feculent and occasionally mucous or dysenteric. Ordinary English cholera was also of frequent occurrence. Besides these affections other forms of disease were very common. Spasms or cramps were of frequent occurrence, sometimes in the diaphragm and muscles of the chest, sometimes in the abdomen, at others in the extremities, and occasionally over the whole body. In some instances there was pain without contraction situated in different parts of the system, sometimes excruciating, and possessing all the characters of neuralgia. When this pain occurred in the abdomen it constituted gastrodynia or enterodynia, and when in the extremities it was sometimes complicated with stiffness and inability to use the limbs, bearing a resemblance to rheumatism, but without the swelling and tenderness which accompany that disease. The uterine functions were deranged, the catamenia were too profuse, recurred at too short intervals, and were attended with severe pain. There was also a tendency to hæmorrhagic diseases; and head affections, particularly a disposition to torpor, stupor, and coma, were not uncommon. In many of these cases, the bowels were obstinately constipated, and sometimes there was considerable irritability of the stomach, indicated by nausea and sickness.