

most sanguinary epochs of English medicine: so that physicians, under the light of their new theories, had an especial occasion to be impressed with the evil effects of the indiscriminate and baneful bleeding which was going on around them. Their theory was there to lead them to a distrust of blood-letting; and then were their eyes opened to the evils which now showed themselves so flagrant to their observation.

With the deepest respect, therefore, to the great authorities to whom I have referred, I must, and as I think most reasonably, ascribe this change in practice—this non-bleeding in inflammations—to our better scientific knowledge; to the rise of modern animal chemistry and physiology; and partly also to the observation of the fearful mischief thereupon noted as done by the murderous bleedings of the first quarter of this century. I see no necessity for the calling in of this change-of-type theory; and I can find no sufficient evidence on which to satisfy myself of the validity of the theory.

[To be continued.]

Original Communications.

CASE OF NEURALGIA OF THE ABDOMINAL MUSCLES FOLLOWING ACUTE TONSILLITIS: RECOVERY AFTER SIX MONTHS' ILLNESS.

By W. H. DAY, M.D., L.R.C.P.Lond., Newmarket.

Miss —, aged 34, a pale and delicate-looking woman, was making a good recovery from a very severe attack of tonsillitis, when she was seized with pain in the right side of her abdomen. Her former attacks of quinsy appear to have been less severe, but of longer duration. The tonsils were large, causing painful respiration. Incisions were made into them, from which a very fetid discharge of blood and pus escaped. Portions of the tonsils sloughed, leaving a moderately clean and healthy surface. The treatment consisted at first in the administration of effervescing salines with spirits of nitrous ether and chloric ether; and brandy and soda water to allay thirst, and to support her feeble circulation. Milk and water was the only nourishment relished for the first few days; but afterwards strong beef-tea, jellies, and port wine, were taken daily. Contrary to my advice, she left her room at an early period of convalescence, and walked out of the house. She returned home, complaining of discomfort (rather than pain) in the right iliac region. As her bowels were sluggish, she took the previous night two strong pills, of her own accord, without effect. During the next day, I ordered a mild aperient; this also failing, it was followed by a warm water enema, to which the bowels responded. The uneasiness now increased to absolute pain, and occupied the right iliac, hypogastric, and left iliac regions, extending through the right flank to the gluteal region. No pressure could be borne. The pulse was slow and weak, and the skin cool and moist. Her face indicated suffering. On the following day, every thing she took made her sick; the pulse was weak, and averaged 70; the tongue was large and clean; and there was headache. She lay with her knees drawn up, unable to turn in bed.

On the 26th of February, she was ordered five grains of citrate of iron and quinine with half a drachm of aromatic spirits of ammonia twice a day; an ointment composed of one part of extract of belladonna and nine

parts of extract of white poppy, to be applied, on linen rag, to the abdomen; six ounces of port wine daily, and strong beef-tea.

Feb. 27th. She had had no sleep during the night, from the violence of the pain. When she took food or drink, she had most acute pain, especially in the groin, through the right iliac and lumbar regions. The pain never left her entirely, and she had occasional severe paroxysms. The pulse ranged from 60 to 80, and was very small and weak. She still felt sick.

February 28th. The pain was excessive, and the slightest pressure could not be borne; especially in the right iliac region, through which, at uncertain intervals, she had most severe lancinating shooting pain. There was also severe pain in the epigastrium, descending colon, and left iliac region. She was perfectly helpless, and cried out when any attempt was made to move her. Scanty menstruation set in to-day, but there had been no action of the bowels since the 24th, and the belly was rather tympanitic. A turpentine and assafetida enema was immediately ordered; an opiate liniment to the body; and half a grain of the muriate of morphia every six hours.

The pain was described as unendurable; she tossed her head to and fro, and spoke in a low faint voice. She had severe crampy pains in the lower limbs, which were relieved by smart friction. The pupils were dilated and fixed, and her expression remarkably vacant and meaningless. She had been once or twice very incoherent. She had had no rest, notwithstanding the morphia. The steel mixture and morphia were omitted. A draught of quinine mixture and chloric ether was ordered every four hours; and one table-spoonful of brandy every two hours in place of the port wine.

March 1st. She slept about two hours, and was more calm and rational this morning. The pain occupied the same situation, but was much less acute. She complained of similar pains under the left breast, and in the left groin. The urine was clear; there was no action of the bowels without the use of an enema. She had taken a good allowance of nourishment regularly; but any attempt at swallowing was painful. She made the most extravagant remarks about people, and imagined her family close to her, and her brother on the bed.

March 2nd. She was improved, except that the pain in the right iliac region prevented her from getting a moment's sleep. A small blister was raised on the right side of the body over the seat of pain, and dressed with a lotion of morphia (eight grains to the ounce of water).

March 3rd. There was pain on slightly pinching up the fleshy portions of the muscles; but the most severe was in the abdomen on the right side. She lay moaning at intervals of a minute, there being partial opisthotonos with the recurrence of pain. The spine and sacro-lumbalis muscles were painful on pressure; and almost any part of the surface when touched was uneasy. The catheter was passed. The turpentine and assafetida enema was repeated. A belladonna plaster was applied to the back. Thirty drops of chlorodyne were ordered to be taken every night; and a draught containing ten minims of tincture of sesquichloride of iron, ten minims of chloric ether, and five minims of tincture of nux vomica, three times a day.

March 4th. As she was sick, champagne was ordered instead of the port wine. In addition to her mixture, I ordered five grains of compound galbanum pill three times a day.

March 8th. The pain now occupied the left side principally. A liniment of equal parts of compound camphor liniment and tincture of aconite was ordered

to be applied to the body. This produced no relief; and on March 11th, an ointment of aconitina was applied, also without any good effect; and on March 12th, galvanism was tried over the seat of pain on the left side.

March 20th. I met Dr. Paget in consultation. He advised a return to the compound galbanum pill, and five grains of bromide of potassium, with a drachm of tincture of valerian three times a day; and, if the motions were scybalous, three grains of compound colocynth pill and two of extract of henbane every six hours. After taking a few of the pills, the pain greatly increased; the body was more distended; and there was no disposition to action of the bowels. I, therefore, gave a rhubarb and carminative draught, followed by a copious enema of tincture of assafoetida and turpentine. During the action of the bowels, which was free, the poor woman cried out with torture; and she had great exhaustion, a feeble pulse, and clammy skin. A pill of belladonna, and afterwards a full dose of chlorodyne, were given.

Two days later, I gave, every six hours, two pills of ox-gall, henbane, and aqueous extract of aloes.

On the 26th, she had taken eight pills, which only gave rise to more tympanitis, and pain radiating over the whole abdomen, with greater aggravation of the pain in the left side. She had neuralgia over the right eye and cheek.

March 30th. She was removed to her own home in Lincolnshire, where she fell under the care of Mr. Collingwood of Corby, who kindly acquainted me of her state from time to time. In answer to one of my letters, he informed me, on April 7th, that he thought her considerably better since she had been at home. The pain in the left side of the body continued; but was much less. She had rather severe pain in the right temple; but with an anodyne pill, she generally had a good night. The bowels were less obstinate; and she had passed her urine in the last two or three days without the use of a catheter. The treatment consisted of tonics and good diet.

More than three months have elapsed since her return home; and she cannot now walk without some help, although the pain has recently and entirely left her.

She has now resumed her occupation for upwards of two months, and is perfectly well in health.

REMARKS. The nature of this case may be described as a condition of abdominal cramp or spasm. The abdominal muscles were the seat of the chief suffering; and they were not excited to morbid action by organic visceral change, by the presence of inflammation, or by irritant matter in the bowels.

For an elaborate explanation of the physiology of nervous and muscular action, we may very profitably read Dr. Radcliffe's lectures, which commenced in the *Lancet*, of Feb. 14th, 1863.

Dr. Radcliffe proves that excessive muscular action, convulsion, spasm, tremulousness, etc., are due, not to an excess, but to a deficiency of vital action. He says, that "the amount of nervous influence generated is in direct relation to the supply of arterial blood to the nervous system"; and that muscular relaxation is not disturbed by convulsion or contraction, so long as the muscles receive a due supply of nervous influence. Now, when any of the great nervous centres are deprived of a proper supply of healthy blood, some disturbance is the result.

The occurrence of violent delirium, cerebral exhaustion, and even epilepsy, in persons who have suffered great losses of blood and general convulsions, especially in children who have sustained wounds or undergone operations attended with great hæmorrhage, are familiar instances. If ligatures be placed around the vessels of the neck of an animal so as to

cut off the supply of arterial blood to the brain, its nutrition is arrested, and convulsions supervene.

The blood holds precisely the same relation to muscular action as does nervous influence. We infer, then, that deficient or impoverished blood primarily exhausts the nervous system, and unfits it to generate sufficient nervous influence to maintain healthy muscular action. Arterial blood and nervous influence favour muscular relaxation by their presence, and muscular contraction by their absence. (*Lancet*, March 21 and June 20, 1863.)

The spasmodic state of the muscles depends on an enfeebled state of the circulation. The spasms increase with the failure of the heart's action. This is the case in tetanus, in cholera, in hydrophobia, etc.; and we are probably right in supposing with Dr. Radcliffe, "that the morbid muscular contraction is connected with a deficient manifestation of vital power in general and of nerve power in particular."

That pain and spasm of the muscular system are the result of fatigue and over-action, without implication of the nervous system at the first, needs no proof. Mr. Hilton, in his *Lectures on the Therapeutic Influence of Rest*, has shown how fatigue is followed by muscular exhaustion; and how the aching limbs of the pedestrian and the inflamed ankle regain their wonted activity from rest alone. Here quiet and repose are wearied Nature's restoratives, without the aid of food or medicine. During the past autumn, I was consulted by several persons for severe pain in the back, which they believed to be lumbago or renal disorder. These persons had been stooping for many hours in the day, mowing or reaping, and were not cured till they gave their over-stretched muscles rest. It appears to me that there are two classes of these cases; one where the nervous system is first exhausted, leading to muscular spasm and cramp, as in the case under consideration; and the other, where the muscles are simply affected from over-work. The diagnosis may be difficult; but I believe in their existence. It is not always easy to decide what is muscular pain and what is nervous pain. In the case before us, if the patient had not attempted to walk, and to exert herself in her weak state, she would have escaped the suffering which her disobedience entailed. The constant action of the abdominal muscles in walking and ordinary respiration, caused them to manifest that shape of contraction which may be expected to ensue in a person whose constitution was delicate, and whose nervous system was lowered by impoverished blood and over-anxiety. The mischief did not originate in the muscles, but in the blood and nervous centres. What is the explanation of the difficulty in swallowing, but a spasmodic condition of the œsophagus, consequent on deranged health and impoverished blood?

Dr. Habershon, in an excellent and practical paper in the *Lancet* of May 9th and 16th, 1863, on Idiopathic Anæmia, thus writes: "The symptoms of chlorosis are familiar, and it is a state recognised with great facility, and one of those in which right treatment soon manifests a most beneficial result; but the source of the changed condition of the blood is not known."

What is chlorosis, but a state of anæmia? Like anæmia, it originates not exclusively in deficient uterine action, but in a weak and watery condition of the blood, which gradually brings about dyspepsia, vomiting, œdema, palpitation, hæmorrhage, and even atrophy, if the source of the evil be not remedied. It leads to various degrees of mischief from malassimilation and defective nutrition. In some cases preceding or following this state of anæmia, we have strumous disease developed in the brain and lungs, fatty degeneration, albuminuria, and other cancerous ca-

chexia; but in some cases, Dr. Habershon says, "although closely allied to chlorotic malnutrition, no source of disease can be traced."

The patient's strength fails, pallor of the countenance ensues, and atrophy slowly advances, till the exhaustion becomes extreme. We occasionally come across cases of this kind, where there is pallor of the face, loss of appetite, pain after eating, weak, slow pulse, and clean tongue; there may be vomiting and depression of spirits. No disease can be detected in the various organs of the body; the patient is, to all appearance, prostrate and nearly lifeless; and our remedies, as in the case before us, are too frequently inert.

As to treatment, I cannot flatter myself that medicines were of any real service. They too frequently become irritants, where malassimilation is so great. If good nourishment and stimulants be tolerated, and the patient do not grow worse, and no organic mischief be lighted up, we may look forward hopefully. Where our art has sustained so complete a defeat, steady pressure, to diminish the action of the muscles of the abdomen, and a rigid avoidance of all aperients, are most to be relied on. Alluding to pressure, Dr. Inman of Liverpool has, in a letter with which he has favoured me, spoken strongly in favour of the efficacy of this remedy, applied by means of bandaging or strapping.

There may be some ready to ascribe these symptoms to *hysteria*, and to what is called *spinal irritation*; and it may be that the hyperæsthesia of the abdominal muscles, and other parts of the body, and the great susceptibility of the nervous system, is shewn at one time, to go far to strengthen such an opinion; but whether it be truly hysterical or not, there is no question about the severe torture which the woman suffered. Pain is real when it can cover the skin with a cold and clammy sweat, and render the pulse too feeble to be found. Sensation is disordered or perverted in the parts involved; this is kept up by the patient's attention being constantly directed to them. Any causes that weaken the body, and exhaust the nervous system, are fertile sources of hysteria, long illness, exhausting discharges, sleeplessness, mental anxiety, etc. "We consider," says Dr. Inman, "that there are *primæ facie* grounds for considering that the connecting link between hysteria, spinal irritation, and myalgia (muscular pain), is, that there is in all cases general and very readily recognised constitutional or acquired debility; and that, in hysteria, the debility shews itself by disorder of the nervous system.

"In the other instances we have described, debility has shewn itself by disorder of the muscular system. The more debilitated the individual, the greater is the irritability or excitability of his muscular system. The more debilitated the individual, the greater is the irritability of his nervous system." (Dr. Inman, *On Mialgia*.)

MEDICAL ORATORY IN NEW YORK. The Academy of Medicine does not, like its great prototype of Paris, maintain a very high order of oratorical reputation. Its discussions are too generally diffuse and pointless. As a profession, we cultivate far too little the art of speaking. In the Academy of Medicine of Paris, the very highest order of rhetoric is often displayed. But a loose and random style of speaking is not the only fault of those who enter the arena of debate in our societies. Not unfrequently language is used by no means befitting a scientific association. No association can ever attain to any very commanding influence which allows its members to indulge in coarse and vulgar language. (*American Medical Times*.)

Transactions of Branches.

BATH AND BRISTOL BRANCH.

CASE OF TETANUS, TREATED WITH ICE TO THE SPINE: RECOVERY.

By R. W. FALCONE, M.D., Bath.

[Read January 21st, 1864.]

THE following case of tetanus, though not presenting the extremely violent symptoms which often characterise other examples of this fearful and intractable malady, is submitted to the consideration of the meeting on account of its having recovered after treatment by ice applied to the spine.

Dr. Watson, in his work on the *Principles and Practice of Medicine*, says that, "Dr. Todd has suggested to him the application of ice to the spine; a measure which he has found eminently beneficial in convulsions. This mode of employing cold as a remedy in tetanus seems well worthy of trial. It would have the advantage of not inflicting any shock which might excite or disturb the reflex function of the cord, through its incident nerves." (Vol. 1, p. 581, 3rd edit.; and 4th edit., p. 585.) Though this suggestion was made sixteen years ago, I have not as yet been successful in discovering any report of a case in which it has been carried into practice. The employment of cold affusion, and occasionally the throwing of a tetanic patient headlong into the water, was resorted to several years ago; in some instances, the sufferers escaped with life from this trial by water; more often the result was fatal.

The subject of the following case was a boy aged 11 years. He was admitted into the Bath United Hospital on November 2nd, 1863. The history given of him by his friends was, that on October 20th, while riding on a gate, he fell backwards, and struck his neck on some stones. He walked home in pain from the contusion he had received, but no mark of any injury of the neck was to be seen. The following day the pain of the neck was greatly increased, and he was unable to move his head. The third day after the accident his jaws were partially closed, and the least movement induced a paroxysm of screaming, apparently caused by pain; and this latter condition appears to have been the main cause of his being brought to the hospital. No twitchings or irregular muscular movements had been up to this time noticed. When admitted into the hospital, on the thirteenth day after the accident, there was no mark of any injury to the neck, but great tenderness on touch about the fifth and sixth cervical vertebræ. He presented a peculiar appearance from the manner in which he carried his head, which was bent forwards, and somewhat downwards; the cheeks swollen, and the slightest movement causing paroxysms of screaming. The jaws were not completely closed. He had lost much flesh since the accident occurred.

Between the 2nd and 11th of November, he had been subject at intervals to slight but distinct spasmodic attacks, with twitchings of the muscles of the arms and back, accompanied by violent screaming. On the 8th, he was described as being unable to move his arms, but not his legs. His jaws were firmly closed, and every quarter of an hour he had a general spasm, with twitchings of the arms and back. He passed urine freely, and voluntarily; the bowels were costive, and only acted on by means of a terebinthinate enema. During this period he had taken small quantities of calomel and opium, and his diet had consisted of beef-tea and wine.

Nov. 11th. The patient was placed under my care,