

d. R. Pilulæ hydrargyri, extracti colocynthis compositi, a gra. xxxiv; olei pimentæ guttam. M. Divide in pilulas xij quarum sumantur ij alternis noctibus.

After ten days, he called on me, and reported that this medicine had effected a decided improvement in his complaint; that he had lost the inflation; that the syncope had not returned; and that, to his surprise, he could bear light solid food upon his stomach.

The medicine was continued several weeks, and for three years (the last time I heard of him) he had had neither inflation nor syncope, and enjoyed a good state of health, excepting occasional attacks of gout.

The sudden deliquia in this case were certainly very similar to those in the true *syncope anginosa*; and that the cardiac function was sometimes functionally involved is shown by the pulse being irregular and probably interrupted during the syncope; but as the pulse always became in every respect normal after the deliquium passed away, and as it was always accompanied by gastric disturbance, and especially by inflation, it was clear that the attacks were not the result of an organic disease, but of functional disorder, and occasioned, probably, by a reflex morbid action of the gastric branches of the par vagum upon the cardiac plexus.

The following case of true *syncope anginosa* will show the difference between the two cases. It happened many years ago, but the symptoms, especially the state of the pulse, were so remarkable, as to make a deep impression on my memory.

CASE. VIII. A gentleman, aged 63, tall, muscular, and of a healthy aspect, whilst out shooting, and getting over a fence, suddenly fell down in a state of insensibility. In a few seconds he recovered himself, and walked home, supposing the symptom to have been the result of some mere accidental cause. Some time afterwards the same thing occurred, from which he recovered as from the first. From this time, however, he became subject to the attacks at irregular intervals; and they continued in like manner for some years, till they suddenly terminated his life.

There were no symptoms nor feelings to warn his attendant or himself of their approach; no marked disturbance of the digestive or respiratory functions; no anasarca of the limbs, and no inability to lie down; in short, he looked well, and occasionally walked about the town in which he lived, as if he were in perfect health. The pulse, however, as the disease advanced, without losing its regularity or its volume, gradually became slower, till it fell to twenty beats in a minute, at which number it remained for a long time. Indeed, it was a pulse of an awful character, which, though perfectly regular, too plainly indicated a sudden and fatal termination of the disease.

I was always hastily summoned to every attack; but before I could reach his house (a short distance from my own) he had generally recovered, and appeared as if nothing had occurred. On one occasion (the last but one) his female attendant met me with the announcement "that her master was dead!" and such appeared to be the fact; but whilst looking at his countenance, a bright scarlet arterial spot formed on the side of his nose, and, as it was extending, he drew a gasping inspiration, and once more recovered. A few weeks afterwards, whilst putting on his flannel waistcoat, he fell back upon his pillow, and instantly expired. Here the absence of any gastric disturbance, and the constant abnormal character of the pulse, showed organic lesion of the heart. I very much regret that an examination of the body was not permitted; as I might have found some morbid condition of the brain, or of the valvular mechanism of the heart, which would enable me to explain the cause of the extraordinary character of the pulse.

It may be objected that the iodide of potassium in these prescriptions is not fairly tested, being associated with other medicines; but as the latter have been unsuccessful when given without it in the same cases, the therapeutic results are clearly due to the iodide of potassium.

When gas is evolved by fermentation in consequence of weak digestive power, especially after eating food capable of yielding a large quantity of fixed air, such as apples or some other fruit, the quantity of gas given off is much larger than when it is secreted by the mucous membrane; indeed, it is sometimes so enormous, that were there not a free exit for its escape through the œsophagus and intestinal canals, the effect may be hazardous to life either from distension or the poisonous quality of the gas; but so long as it readily escapes, no such effect need be apprehended.

CASE IX. A gentleman of advanced age and of weak digestive power, after a long journey, ate a plain dinner from roast mutton and an apple tart, the fruit of which was under cooked.

He felt no inconvenience till about three hours after the meal, when the stomach became unusually inflated—discharging immense volumes of air, such as he had never experienced, and these odourless volumes constantly evolved and discharged were so enormous, that he feared, from their cumulation, some serious lesion of the alimentary canal might take place. However, after a continuance of a few hours, it subsided, either from the fermented body ceasing to evolve gas, or from the effect of a grain of calomel and half a grain of opium, which I thought it right to give him, in order to prevent any ill effect on the mucous membrane. He passed a good night, and rose the following morning in his usual health.

That the ventosity was the product of acetous fermentation, and that the gas evolved was the carbonic, there can be but little doubt; if so, the under baked apples, acted upon by a peculiar condition of the gastric function, were the most probable cause of the inflation, thereby confirming Dr. Hales's evidence of the quantity of fixed air contained in that fruit.

The indication in this case is to put a stop to the acetous fermentation, and, according to Pemberton, this will best be done by the mineral acids, of which he prefers the nitric. He writes—"The acid which I have given with success is the nitric, this not only prevents the acid fermentation, but becomes, at the same times, a tonic to the stomach." (*Practical Treatise*.)

The dose should be five drops in a glass of water, and repeated at short intervals if required; but should the gas, however produced, find no means of escape by the cardiac orifice, and make its way into the bowels, the intestinal canal might become tympanitic, and distended beyond the power of expelling the air by the rectum; if so, it must be drawn off by means of a fine trocar. I have recommended this to be done in several urgent cases of intestinal tympany, from organic stricture, without the slightest injury to the bowel or peritoneum.

[To be continued.]

SUBCUTANEOUS OPERATIONS FOR CLUB-FOOT: RESULT OF TREATMENT AFTER SOME YEARS.

By FREDERIC PAGE, M.D., Surgeon, etc., Cambridge.

THERE is nothing more interesting to the practical surgeon than the results of his operations after a period of years has elapsed; and this is the more especially so in those which are performed for the cure of deformities, distortions of the limbs, and diseases of that nature. I have heard some say, and men of good standing in the profession, that "these operations are of no use, the deformity, after a time will return." Now, I can confidently assert, that when the treatment has been judiciously carried out, there are no cures in surgery more successful. It must be understood, that it is not simply dividing the tendons implicated in the distortions; but an important point is the careful adaptation of mechanical means after the operation. The first case in which I saw the operation performed, by the then most eminent surgeon in London, was a complete failure, from the child having been left under its mama's care, who, of course, relaxed in her efforts, and the deformity was as great as ever. This patient was operated upon some years afterwards, with the greatest success.

I am in the habit of taking a plaster-cast of the limb, for the surgical instrument maker to adapt his apparatus to it. I then continue to superintend their application myself for some days; and, to be able to do so, I have for some years occasionally had patients in my own house, or at a convenient distance.

Until about twenty years since, these cases were considered the *opprobria* of surgery, and left entirely in the hands of the surgical mechanist, who, after years of treatment by mechanical distension, effected but little good, and left their patients in much the same condition as when they found them; and this, after years of great suffering, produced by this rude and unscientific mode of treatment.

At the above period, Dr. Little, I believe, introduced into this country the invaluable discovery of the great German surgeon, Stromeyer; viz., dividing the tendons of the muscles producing the distortions by subcutaneous incision. This was soon taken up by many surgeons; with others, by myself; and I have continued to practise it up to the present time.

I shall select a few of these cases, amongst a great many since the performance of which many years have passed; and

as the parties are alive, I may confidently speak as to their present condition; and I may say, that I know of no operation in surgery more successful, or capable of conferring greater benefit on society, than the great discovery of Stromeyer.

CASE I. *Talipes Equinus: Foot resting on the Toe.* (Reported in *Lancet and Medical Times*, February 1844.) Mrs. Martin, of Newmarket, aged 46, about seven years since, after a severe attack of hysteria, or what was termed so, was left with rigid contractions of the muscles at the back of the legs, which had existed ever since.

December 3rd, 1843. The heel was drawn up, the tarsal and metatarsal bones forming a straight line with the legs, the patient resting on the end of the great toe. Mechanical apparatus had from time to time been applied, without effecting the slightest benefit; and she appeared to have abandoned all idea of ever walking. Having operated in several cases of this kind, I at once recommended it, to which she readily acceded. On the day above named, I divided both Achilles tendons, after the plan of Stromeyer, with but slight pain or loss of blood; they were found much enlarged and thickened; the feet were placed in pasteboard splints; and on the third day, gentle extension was applied, so that on the seventh day, the feet were brought to right angles with the legs, and the patient able to stand.

It is scarcely necessary to recapitulate the daily rapid progress of this case. It is sufficient to state, that in six weeks she walked some distance to church, and was quite cured. In November 1857, I received a letter from her husband, in which he stated that the operation had continued up to that time most successful; that her feet were in perfect form; and that she could walk any distance, as well as she could before her deformity came on. There was no soreness left; nor did she ever feel any pain in the parts operated upon.

CASE II. *Talipes Varus: Feet resting on Outer Ankle.* Henry Webb, of Dullingham, aged 8, was born with this deformity; he had never walked on the soles of the feet. An operation was performed on February 26th, 1846. I divided both tendo Achillis, and treated the case in the usual way. He could walk well in six weeks.

January 1859. This lad (now a fine man, a farm labourer, living at Dullingham) has a perfect cure.

CASE III. James Hitchcock, aged 12, came under treatment on July 3rd, 1846. This was a very severe case. He was a heavy boy; and, from having walked on the outer ankle for so many years, the distortion was very great. There was partial paralysis of the left side; the thigh, leg, and foot, were considerably smaller. The operation was performed.

1858. His condition was much improved; but he retained a tottering gait, which, no doubt, will always continue.

CASE IV. *Double Talipes Valgus.* Mary Cusbourne, aged 6, of Burwell Court, came under care in November 1843. This child was sent me by the Newmarket Board of Guardians, as she was a burthen on the parish. The operation of dividing the tendo Achillis produced a perfect cure.

December 1858. She had not the slightest return of the disease; and walked perfectly.

It would be useless my reporting more cases; but I could enumerate many others that have been done at various intervals, from the years 1842 and 1843, and I do not know of a single instance where there has been the slightest return of the deformities; of course, I mean where the operation has been successfully managed in the first instance.

Many of the early cases were published in the medical periodicals of the day; and it is satisfactory to know of their result after some years have elapsed.

PATHOLOGICAL CONTRIBUTIONS TO MEDICAL JURISPRUDENCE.

By WILLIAM BOYD MUSHET, M.B. Lond., late Resident Physician at St. Marylebone Infirmary.

VI.—STRANGULATION.

A MALE child, aged about 6 months, was found in the Canal, and brought to me, on March 17th, 1857. It was reported to have been twelve hours in the water. It was dressed in a frock petticoat, and the usual articles of clothing, and had a ligature of twisted diaper, of about the calibre of the little finger, tied once very tightly round the neck, the knot being rather to the left of the median line. The ligature caused the skin to be raised in folds beneath the chin, and in the middle line posteriorly. It was so tight and adherent from the wet, that I

thought it advisable to divide it behind with scissors, in preference to attempting to untie it, from fear of lacerating the skin and interfering with the appearance produced by its application. On its removal, a line of constriction was found to exist *entirely round the neck*, over the larynx. Posteriorly and laterally, this line was *whiter* than the adjacent skin; and there was no trace of ecchymosis. In front, the line was *darker*, and had a *greyish, pearly, semishining (parchmenty?)* appearance, with a *faint brownish border* at its upper margin. A very faint ecchymosis was discoverable at the site of the knot, and here the skin was slightly grey in colour. A faint but evident discoloration, of about the diameter of a pea, in a line with the lobe of the right ear, also existed in the circle of constriction.

There were no external marks of violence. Slight excoriation was observed about the groins and scrotum. The fingers were clenched; the nails pale; the palms and soles a little sodden. The tongue was slightly protruded. There was no foam at mouth; no lividity of the tongue or lips. The pupils were contracted; the conjunctivæ were pinkish, slightly chemosed; the palpebral conjunctivæ were darkly congested. Dark patches of redness were observed about the mouth, nose, and glabella. The rest of the body was pale, flabby, and emaciated. The left central incisor had passed through the gum.

NECROPSY fifty-four hours afterwards. The brain was not extra-congested. A few veins of the pia mater were rather prominent posteriorly; and there was fine ramiform injection over the surface of the hemispheres. There was no sub-arachnoid effusion. The brain-substance was firmish. About a drachm of serum was found in the ventricles. The puncta vasculosa were not abnormally numerous. A little dark fluid blood existed in the longitudinal and lateral sinuses. About three drachms of serous fluid were found at the base. There was no contusion, laceration, or ecchymosis, about the seat of ligature, either subcutaneously or among the muscles. No foreign body was found in the mouth or throat. The larynx was uninjured; its lining membrane was pale; and no froth or mucus was present on the surface.

Chest. About two drachms of serum were found in the pericardium. The lungs on both sides were collapsed, especially posteriorly; they were not diseased. There was no fluid in the pleura, or adhesions. The heart was healthy, flaccid, not distended. Some black fluid blood was found on the right side; and a little, also dark and fluid, on the left. The bronchi and their branches were natural; and there was no appearance of frothy mucus.

Abdomen. The stomach was filled with food—apparently, half-digested bread—of sweetish odour. The mucous membrane was dark pink, neither softened nor eroded. The liver was not congested. The large intestines contained yellowish fluid muco-feculent matter. The small intestines contained less fluid, of the same character. The mucous surface was uniformly injected, with ramified vessels at spots. The mesenteric glands varied in size from that of a pea to a bean. The spleen was pale and firm. The kidneys were not congested. The bladder was empty. No fluid was found in the peritoneum.

REMARKS. The inspection in this case did not reveal the presence of any obvious cause of death—the appearances being insufficient to justify the opinion of drowning or *vital* strangulation. The only deviations from the natural standard were, the collapse of the lung (a common phenomenon in infants dying under many different circumstances), and the hyperæmic state of the small intestines. These conditions, with the emaciated appearance of the body, and the character of the faecal excreta, would have inclined me to conjecture—had the child come under notice without history, and the ligature absent—that death had ensued from exhaustive diarrhoea, as the band of constriction, unless specially attended to, might have been overlooked. The mark passed continuously round the neck, and the ligature was tolerably large and soft. In front, the usual *parchmenty* appearance was perceptible, but the remainder of the circle was completed by a line whiter than the surrounding skin (bloodlessness). The redness of the face and state of the conjunctivæ were most probably consequences of the immersion. To sum up, an unqualified dictum could not be asserted. The utmost that could be conceded was, that the appearances were not *antagonistic* to strangulation; but no positive conclusion could be arrived at, whether the constricting force was applied immediately *ante* or *post mortem*. In favour of the latter event, certainly, no