

1. By Dr. Keith: successful removal of a suppurating cyst seven days after tapping. 2. Three cases recorded by Mr. Spencer Wells. 3. One case by Dr. Peaslee. 4. Dr. Wiltshire's case during acute spontaneous peritonitis.

Leeds.

## ON SUTURES, AND THE TREATMENT OF INCISED WOUNDS.

By J. C. OGILVIE WILL, M.D.

SUTURES are undoubtedly the best means we possess for maintaining the edges of cut parts in apposition. Unfortunately their employment is attended by certain disadvantages: such as the irritation, giving rise to suppuration, when silk is the substance of which they are composed; the danger, during their removal, of tearing apart loosely united surfaces; and the pain experienced by the patient when they are constituted of metallic bodies. Another grave objection to the use of sutures is, the unsightly marks—consequences of suppuration—which remain at the points where they had been inserted. These cicatrices are of course chiefly objectionable in parts exposed to view, as in wounds of the face, &c. The object of the present paper is to draw attention to sutures formed of a substance which can be employed without fear of the foregoing undesirable effects presenting themselves. This substance is catgut, which Professor Lister brought into notice some years ago for this purpose, but which he has since discarded, though he still retains it for ligatures. Regarding its use for the latter purpose I cannot speak personally, as I have always found acupuncture answer every purpose; but with regard to the former I can speak most emphatically, for during the last two years in every wound where I have had reason to expect early union—and it is only in such cases that I advocate its use—I have invariably employed catgut sutures, and their employment has been attended by the happiest results. In proof, I may cite a few cases.

1. A child came against a pane of glass in a window, broke it, and in so doing almost severed the fleshy part of his nose from the cartilages. The surfaces of the wound, having been washed and exposed to the air for a few minutes, were brought into apposition, three catgut sutures were inserted, and cold-water dressing applied. In three days the sutures were removed, and a day or two after hardly a trace of the injury remained. The sutures did not give rise to the slightest irritation.

2. An injury causing a somewhat similar but much more severe lesion, the cartilage of the septum being fairly divided, occurred to an old woman. In this case the edges of the wound were very jagged. The same treatment was adopted, with like results.

3. Case of excision of the mamma. Eight sutures; one vessel acupressed; pin removed seven hours after; immediate union. The sutures, not giving rise to the slightest inflammation, were allowed to remain till the thirteenth day after the operation, when they (or rather what remained of them) were removed. Shortly after the points where the sutures had been inserted could not be discerned.

4. Another very striking case was that of a young child who was brought to me with the point of his middle finger hanging merely by a thread, like a piece of skin, the whole of the other tissues, including the bone, having been divided. After carefully cleansing the wounded surfaces, and allowing them to become glazed, I brought them into accurate apposition, and inserted two catgut sutures, remarking at the time to the boy's mother, that I had little hope of a favourable result, and that I would probably have to remove part of the finger, but that I had given him a chance. Fortunately I was not obliged to resort to such a proceeding, as the parts healed kindly, and on the sixth day I removed the sutures. On that day only one small point remained unhealed.

5. Amputation of the third finger, with removal of part of the metacarpal bone, in the case of a boy. Three sutures; wound healed without the slightest suppuration. The sutures were removed on the seventh day, when the child was sent home perfectly well.

6. Same operation as last, on a man. Three sutures; one

vessel acupressed; pin removed four hours after. Edema and slight suppuration, notwithstanding which the sutures were allowed to remain; and on the twelfth day the wound had entirely healed.

This case showed that catgut may be employed with advantage in a different class of cases from that in which I have advocated its use, as, unlike wire, which will cut its way out, and silk, which will resist, catgut will stretch to a certain extent. I might quote many other cases of wounds in other parts, but must content myself with the above-mentioned.

If surgeons will only give catgut sutures a fair trial, at the same time not disregarding other essential precautions to which I shall presently refer, I feel assured that they will have every reason to feel satisfied with the results following their use. The other points to be attended to, in the treatment of incised wounds, are that there be no foreign bodies in the wound—such as blood, dirt, or “dead pieces of meat,” as Sir James Simpson quaintly termed ligatured vessels,—and that its surfaces be exposed to the air till they have taken on a glazed appearance. This last indication is not, I am aware, in accordance with the views entertained by many surgeons at the present moment; but experience here has proved that union takes place more readily when air has been freely admitted than when wounds have been hurriedly closed. It is probable that if there are spores in the air of other places, Aberdeen has its due share of them, but they do not exert the baneful influence ascribed to them in some other cities; and the fact that union by the first intention has been obtained here in so many instances of amputation, excision,\* &c., after they have been exposed to free currents of air, for periods varying in duration from ten to thirty minutes, seems to me to be a proof that the germ-theory of putrefaction in wounds is hardly a tenable one. The only explanation that could possibly be given by the supporters of that theory would be that the air in this city is pure and free from germs; but to explain the why and wherefore of this exemption would be a still more difficult matter. Even if this could be done, it would not be sufficient; for in Edinburgh, where germs are supposed to exist in their highest degree of development, I saw more than one case of wounds after excision of tumours unite *without one drop of pus*,—after Sir James Simpson, not content with the ordinary access of air, used a *bellows* to ensure every part of the raw surfaces being, so to speak, flooded with it. Further, regarding dressings, I find the less the better; when any are employed, a simple strip of wet lint suffices. I have not thought it necessary to enter upon the necessity of obtaining accurate coaptation of the edges of cut parts, as this point is so universally recognised as a *sine qua non* in the treatment of incised wounds that even mention of it seems superfluous. The treatment I have indicated is applicable to all incised wounds; excepting that I would only counsel the use of catgut sutures in those of the slighter order, or in those where, from the nature of the case, there is reason to expect union by the first intention.

I may add that, as I have received several applications from medical men requesting me to obtain for them a supply of catgut, what I have employed has been prepared by Messrs. Young and Son, North-bridge, Edinburgh.

Aberdeen.

## A CASE OF LIGHTNING STROKE.

By J. B. WILSON, M.D.,

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THE scanty information that we possess both concerning the first symptoms and the results following in cases of the above nature, not at once fatal, induces me to record the particulars of one that fell under my notice.

The transient but unmistakable simulation of locomotor ataxy that occurred during the progress of this case is another recommendation for its publication, and I hope will

\* “Since 1864 I have had examples of union by the first intention in every amputation of the body, with the exception of the leg and at the hip-joint (the latter operation I have not during that period had occasion to perform), in excision of joints and tumours, and many other minor operations.”—Professor PIRRIE, THE LANCET, July, 1871.

be, to those who have made nervous diseases their special study, a key to some extent for exploring the pathology of a disease the conditions necessary for the production of the symptoms of which I am not aware had existed, nor that they could be produced except in a permanent and fatal form. It is a matter for regret that apparatus, &c., necessary for a complete analysis of the excretions of the patient were not available at the time, as the data of such experiments might have given more light on the subject.

On the evening of the 26th of August, 1872, at Morar, Bengal, India, a terrific thunderstorm broke out, accompanied with vivid lightning, and lasted for more than one hour. Private Rielly, of the 11th Regiment, whilst engaged in bolting a door in his barrack-room, was struck by lightning during the storm. He immediately fell down, and remained quite insensible for about ten minutes. A rifle placed in its rack in the room was struck at the same time. The current penetrated the scabbard, which was placed over its fixed bayonet, punching out a hole about the size of a pea. The surface of the bayonet corresponding to this hole was partly molten. The electric fluid seemed then to have discharged itself in the stock of the same rifle, which it shattered to pieces. A regimental apothecary, who happened to be in the room at the time of the accident, rendered assistance promptly by actively rubbing the surface of patient's legs and arms. He despaired of his life for some minutes. Upon arriving at the hospital, half an hour after being struck, the patient was in a very excited state, but can remember everything that took place from that time. On examination he showed a diffused, brawny, and elastic swelling of the right forearm (the member that was nearest the bolt), with diminished sensibility in the part, but the motion of the limb was not interfered with to any extent. Both legs, from the knees downwards, were in a condition of anæsthesia, but the swelling of the parts was slight. In addition to these symptoms, there was general excitement, but no further unfavourable indications were noticed. The patient was kept in bed, and stimulating liniments were rubbed over the benumbed parts. This, with a light spoon diet, was the only treatment adopted.

Third day.—The swelling described had diminished in both legs and arms, and sensibility of skin was returning. Pupils were widely dilated. Bowels had not acted; urine slightly acid; no albumen. Temperature 99° F.; pulse 86. The patient in attempting to walk appeared as though suffering from locomotor ataxy. There was that unmistakable swing, that difficulty of balancing himself whilst in the erect posture, and tendency to fall when the eyes were closed. The patient stated that he could not feel his feet properly. The treatment recorded was continued, and a purgative of compound rhubarb pill and subchloride of mercury ordered.

Fourth day.—Swelling had diminished both in forearm and legs. Sensation was returning to the benumbed parts. Was able to move forearm with greater ease as the swelling became less. Pupils normal. Continue treatment.

Fifth day.—Was able to walk with greater ease, and whilst trying them stated that his legs, then normal in appearance, began to feel firmer. There was still some swelling of the right forearm, but sensation was rapidly returning in that member. Bowels now regular, and tongue quite clean, as it had been since the time of the accident. Continue treatment.

(At this time I was called away from the 1-11th Regiment on duty, and have to offer my acknowledgments to Dr. Tulloch, then surgeon of the battalion, for the further particulars of the case.)

Eighth day.—Was very much improved; swelling of the forearm had entirely disappeared; sensation and motion of arm were perfect, but was still a little shaky on the leg supposed to have been struck.

Ninth day.—Discharged convalescent. The entire treatment of the case has been recorded above.

Before making this case known, I have waited for more than six months, and have heard upon inquiry from Dr. Tulloch that the patient has not suffered from any ill-effects since he was discharged from the hospital.

Bengal, India, April 23rd, 1873.

CHOLERA of a malignant type has appeared at Cawnpore, and small-pox rages at Lucknow.

## A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

### ST. THOMAS'S HOSPITAL.

ULCERATIVE ENDOCARDITIS; SEPTICÆMIA; DEATH.

(Under the care of Dr. MURCHISON.)

THE following notes and remarks are furnished by Mr. Greenfield, M.B., medical registrar.

Cases of ulcerative endocarditis are of comparatively rare occurrence, although many are now on record. Two distinct forms of the disease have been observed, both associated with septicæmia or pyæmia; but in the one the pyæmia is the primary disease and is due to some antecedent cause, whilst in the other the endocardial affection is the origin of the blood-poisoning. Lancereaux\* has recently drawn attention to the association of the disease with the malarial cachexia in some cases in which the aortic valves were principally affected. There was no history of the kind in the following case; but it was not specially inquired for. The discovery of bacteria in the softening vegetations is of interest in relation to the observations of Heiberg and Winget† on two cases of the disease which were probably secondary to pyæmia. Lancereaux has also observed them, but considers their occurrence unimportant. So far as the symptoms and post-mortem appearances are concerned, the present case may be considered typical.

George S—, aged fifty-six, a shoemaker, living at Greenwich, was admitted on April 2nd, 1873. Family history good. Patient stated that he had good general health till about twelve months ago. He had small-pox in infancy and again five years ago, but never had rheumatic fever or gout. Had occasional cough for some years. For the last twelve months he had suffered from shortness of breath, and had "wheezing" in the chest, and had been very low-spirited at times. The dyspnœa and cough had increased much for the last six months, and he had had occasional slight swelling of the feet.

On admission the following notes were taken:—Patient is a strongly-built, muscular man, with grey hair, well-marked arcus senilis, and a heavy, anxious expression. Slight lividity of the face and lips; dyspnœa, but no orthopnœa. Veins of neck somewhat full, but not distended; no regurgitation or pulsation perceptible; arteries visible, jerking. Some œdema of legs below knees, but no general anasarca. He is very weak, and complains of severe palpitation and dyspnœa on exertion. Præcordial dulness increased both laterally and vertically; apex of heart beats between the sixth and seventh ribs, half an inch outside nipple. Impulse weak and diffused; marked epigastric pulsation. At the ensiform cartilage and over the lower part of the sternum a loud systolic murmur is audible, which becomes fainter towards the nipple, but is replaced at and outside the nipple by a rough systolic murmur apparently distinct and of different pitch from the other, and conducted to the angle of scapula. No murmur at base. Pulse 96, irregular, and intermittent at times every third or fourth beat. Chest somewhat hyper-resonant throughout; sibilant râles audible over the lower third of both lungs; breath sounds weak in the back; no moist sounds. Some cough, but no expectoration. Tongue broad and flabby, slightly coated. Urine free from albumen. He was ordered one drachm of infusion of digitalis with three grains of carbonate of ammonia, and twenty drops of spirits of nitrous ether three times a day.

Patient continued in much the same condition until May 7th, suffering from severe palpitation at times, and great depression of spirits, and complained of pains in the back and chest. On May 7th there was some tenderness over the

\* *Archiv. Gén. de Médecine*, June, 1873.

† *Virch. Arch.*, vol. lvi., p. 407.