minute with perfect steadiness. The legs were free from movement. There was no cardiac murmur.

CASE VII. Chorea: Three Attacks: much Spontaneous Movement, but no Inco-ordination.—Mary Y., aged 12, a healthy-looking child, had a first attack of chorea when nine years of age, which commenced three days after a fright. The attack lasted only a few weeks. A loud systolic apex murmur was present. She had never had rheumatic fever. A second attack of chorea occurred nine months later, and also lasted a few weeks. She continued free from the affection for two years, and then came again under observation with a third attack. In this there was much spontaneous fidgety spasm in both hands, but hardly a trace of inco-ordination. She could pick up a small object from the table quite steadily. The mitral murmur continued loud: heard both at the apex and at the angle of the scapula.

CASE VIII. Variation in proportion of Spasm and Inco-ordination at different periods of Attack.—A little girl aged 12, when first seen at University College Hospital, had slight chorea, of a week's duration, and confined to the left arm. There were very slight spontaneous movements, characteristic in form. There was great inco-ordination, out of all proportion to the spasm, so that it was with difficulty that she could pick up an object. The grasp of the left hand was distinctly weaker than that of the right. A week later, there was much more clonic (choreic) spasm, marked in both foot and hand. The inco-ordination, however, was much slighter; she could pick a very small piece of paper from the table without any difficulty. There was no murmur at the apex or base of the heart, but just within the apex was a long systolic murmur: heard in a very limited area, not conducted. A month later, she was nearly well, and the murmur could only be heard with an occasional beat of the heart.

These cases prove, I think, the assertion that, in chorea, inco-ordination of voluntary movement bears no relation to the spontaneous spasm, but varies independently. It is clear that this variation must depend on one of two causes; either the power of the will to overcome the spontaneous spasm is subject to variations altogether irrespective of the degree of that spasm; or else there is, as I believe, an inco-ordination to be recognised which varies independently of the spontaneous movements. I believe that it will be found that, when such a disproportion exists, the inco-ordination is in excess of the spontaneous spasm early in an attack, and the spontaneous spasm is in excess of the inco-ordination late in an attack and during relapses.

The independent variation in these two elements in chorea suggest that they may depend on an affection of distinct and separate regions of the nerve-centres. It is not easy to conceive that so considerable a variation as was noted in some of the above cases, can be due to a variation in the affection of one region.

[To be continued.]

ON THE GENERAL UTILITY OF SPONGES AS SURGICAL DRESSINGS, AND ON TEREBENE AS A SURGICAL AGENT.

By FURNEAUX JORDAN, F.R.C.S.,

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I FULLY recognise the value of the antiseptic treatment as taught by Mr. Lister. A method of treatment which enables us to open important cavities and make deep incisions, for diagnostic and other purposes, without danger, constitutes an epoch in surgery as great as the introduction of lithotomy, amputation, or anaesthesia.

Sometimes, however, unavoidable circumstances prevent our using antiseptic precautions. The operating surgeon is frequently called upon to perform even important operations with but little assistance. He may be called upon, especially in country districts, to remove (say) the breast with only three pairs of hands in the room, one pair being confined to the management of anaesthesia.

There are certain localities also, as the face and the mucous outlets and their vicinity, where functional exigencies prevent the adoption of a treatment which, although of inestimable value, involves much detail, complicated apparatus, the isolation of large surfaces, and long periods of non-interference.

For the last few years, I have used sponges as dressings after many operations and injuries. At one time, there was a great dread of sponges, even for operative purposes—a dread which was tersely expressed thus: "Whenever and wherever you see a sponge, throw it into the fire." The introduction of more efficient antiseptic fluids has

changed all this. In reality a sponge conveys, renews, or maintains antisepticity with signal convenience and efficiency. A soft, cleansed, moist antiseptic and sufficiently large sponge may be put over, or occasionally even within, the parts which have been recently injured or operated upon with benefits so marked as to deserve printed commendation. Such a dressing apparently secures all the conditions which favour the healing process; and all that we can do is to control conditions. We have no surgical charms, royal touch, or prayers which are able to heal.

A sponge exerts a soft, uniform, diffused, elastic, and measurable pressure. Slight pressure will keep a wound clean; moderate pressure keeps up efficient drainage of all deep-seated fluids, and renders the ordinary drainage-tube, as a rule, unnecessary. The drainage (and pressure) of a sponge is diffused and complete; the drainage of a tube is local and incomplete. In many cases, where I have used a tube with a superjacent sponge, I have found, on removing the first sponge after some days, all the parts healed, except the locality of the tube. In similar cases, where the tube has not been used, the healing has been complete. There is one structure which, in my experience, strongly resents the presence of an India-rubber tube passed through its substance: it is the female breast, multiple abscesses arising in the vicinity of its tract.

Moderate sponge-pressure also keeps the deep parts in apposition, and thus promotes the deeper solid union—a greater virtue no dressing can possess. A little more, though not at all severe, pressure arrests hæmorrhage from all except the larger vessels; even the latter might, if necessary, be held in check for a considerable time. In operations and injuries, where hæmorrhage is free and from many and not large vessels, as in wounds of the palm, indeed in any operation or injury involving the hands and feet, the advantages of a sponge and bandage are clearly seen. In operations on the breast, especially where axillary glands require removal, I look on a big sponge as my best friend. In some cases such as these, a bit of sponge put inside the wound (Mr. Lister's writings first suggested this to me), the margins being drawn together, or a large sponge placed thereon, instantly stops all bleeding. Here I should change the first dressing, as soon as the probability of primary and reactionary hæmorrhage had passed away, so that deep union might not be hindered. There is probably some physical peculiarity in sponge which tends to arrest hæmorrhage, independently of mere pressure. Protracted pressure with lint or cotton, sufficient to arrest hæmorrhage, would cause sloughing; it is not so with sponge-pressure. Sponge "bites" the skin, and thus keeps the superficial parts in place, while its elastic pressure keeps the deep parts together. I will now merely hint at some other of its qualities. Sponge may be kept very wet or slightly damp, hot or cold, small or large, by merely altering the character and the amount of the fluids which may be applied to it; all this is possible without removing the sponge. The lotion may be nearly boiling, or it may be constantly iced. Fluid may be applied with any frequency; it may be medicated with any approved agent. Lotions which give deposits, as those containing lead, are not so suitable, as they harden the sponge—a condition which can rarely, if ever, be necessary. If the sponge-dressing require to be prolonged more than a few days, the lotion must not be of a character or a strength to unduly irritate the skin.

Turkey sponge is better for smaller wounds and operations; in larger lesions, the honeycomb is more manageable. Sponge-dressings may be removed frequently, or, which is much more important, very unfrequently. The softness and bulk of damp sponge protect from movement, friction, blows, or other injury. Sponges take any shape, may be adapted to any surface, or cut to any size. Two or more (stitched together or not) may be used when one is not large enough or only small ones are available.

It is well to have separate suitably shaped and prepared sponges for dressing; but, if this be overlooked or be inconvenient, the operation-sponges may be used. Sponges which have been used, if completely cleaned and disinfected, are even better than new ones.

How long should we continue the sponge-dressing? Not long; until all danger of urinary and recurrent bleeding has ceased; until deep union is fairly established and there is little fear of the separation of parts; until (which is much the same thing) the discharges have become slight and the wound is mainly superficial. All these results I very frequently find on removing the first dressing, which has remained some days—three, four, six, eight, or ten.

In amputations of the limbs, sponges, one or two, may be readily made to cover the incisions, support the deep parts, check hæmorrhage, drain, and act as splints. In removal of the breast and tumours generally, the sponge-dressing has special advantages. The sponge should be large; say, in a woman of medium size, ten or eleven inches long, five or six wide, and four or five thick. It should be placed

directly over the stitches or strapping; indeed, it is one of the merits of the sponge that it can be placed over any other contrivance. If strips of plaster be needed to relieve tension, they should be long—say from over the shoulder to near the groin—when the slight moisture of the sponge will not spoil their adhesion. A few neat and firm turns of wide, thin, smooth bandage are better than a large number in several ways, especially in the medication or antiseptication (may I say?) of the sponge. During the few years I have used sponge-dressing, I have not had a single instance of early recurrent or later reactionary, or of secondary hæmorrhage. I scarcely ever tie a vessel. One or two may be twisted or compressed a few minutes by spring-forceps; but patient pressure for a time with relays of well-wrung sponges within the wound rarely fails to stop primary hæmorrhage.

In the deep excision of cancers from mucous outlets—a branch of surgery in which it falls to my lot to have much experience—I should be much at a loss if I had not at hand my large sponge with its antiseptic, styptic, compressing, and draining properties. A few months ago, I removed a cancerous penis as far down as the triangular ligament in the perinæum (splitting the scrotum to do so, the man preferring to retain the testes); a sponge with a catheter passed through its centre, stopped the bleeding, dressed the wound, and kept it antiseptic, all at once.

I need not detail every operation in which sponge-dressing is of benefit; I will briefly refer to a few only. I have just had striking evidence of its utility in trephining. Twenty-one days ago, a young man was brought into the Queen's Hospital with a cur, and therefore a comminuted and depressed, fracture of the right parietal bone, caused by a falling slate. Brain was oozing out, and as much as would fill a walnut-shell escaped. Left hemiplegia was marked, but not complete. I trephined, and removed numerous fragments and a bit of felt hat, leaving a gap two inches long and an inch and a half wide. The soft parts were very loosely adjusted, and well covered and overlapped by a soft sponge kept constantly moist with terebene, and fixed by one strip of adhesive plaster twenty inches long and three inches wide. On this, the fourteenth day, his state could not be more favourable.

In wounds generally, in compound fractures, after operations for caries or necrosis, after opening abscesses, superficial or deep, the sponge-dressing is of ready utility.

After operations for hernia, a large antiseptic sponge under a few turns of spica bandage forms an ideal dressing, which at once gives elastic-truss pressure, cleanliness, drainage, and antisepticity.

After lithotomy, when there is free bleeding, there is no mechanism which equals in accessibility, simplicity, and efficiency an elongated bit of sponge, a kind of sponge-tent, passed by the side of an elastic tube or catheter. I have now in the hospital a man, aged 75, who is convalescent from lithotomy. The stone was very large, the incision necessarily free, the hæmorrhage great, and the patient naturally feeble; after a few spoonfuls of iced water, I put a large elastic catheter through the wound, and by its side a sponge-tent of the size of my finger. In a few moments, the bleeding ceased, not to return, the urine shortly came through the catheter. All went on well, save that severe signs of senile exhaustion appeared after seven or eight days; these were successfully checked by repeated alteration in position, and even partially clothing the patient: the risk of a permanent fistula, from getting up too soon, seemed better than death. In lithotomy wounds, as elsewhere when the sponge is put within the wound, it speedily creeps into every corner, crevice, or recess from which blood may flow. It is on this principle that an ordinary uterine sponge-tent, passed along the floor of the nose, as recorded by a surgeon whose name I forget, checks epistaxis immediately, without time, trouble, or apparatus.

In the later stages of injuries and operations, and in surface lesions generally, I find terebene a most useful dressing, pure or mixed with water. It is an excellent addition to the sponge-dressing, which it readily keeps moist and soft. Occasionally, however, if used with firm pressure and under many layers of bandage, it causes a little pimply redness of the skin; this is of slight importance, as it never leads to erysipelas or deeper inflammation. The remarkable experience of Mr. Waddy of Gloucester, who used only one dressing in operations, with frequent additions of pure terebene, deserves more attention than has been given to it.

Terebene, which was introduced by a well-known officer of health, Dr. F. T. Bond, is not poisonous internally; it is astringent and hæmostatic, but not escharotic. It is a powerful disinfectant; as a deodorant, it is without an equal: it is something more than a deodorant, it diffuses an agreeable and soothing odour. It may be used without diluting, mixing, shaking, stirring, or other preparation, or it may be mixed with water, and very readily with olive oil. With a third or half of olive-oil, it forms a surface-dressing of very general utility. Lint and tow absorb it readily. For burns, ulcerations, sloughing conditions, the

various gangrenes and open cancers, terebene does all that a dressing can do, and entirely removes all ill odour from the parts from the room. Terebene is a very suitable dressing for cavities that require to be temporarily stuffed, as after the removal of carious or necrosed bone. Its non-poisonous character and its fragrance especially adapt it as a dressing after partial or complete removal of the upper jaw.

To return for a moment to the subject of sponge-dressings. Now and then, under exceptional circumstances, it is probable that surgeons have left a sponge in a surgical dressing. Since the above notes were put together, I have seen the surgical application of sponges recommended in an American serial. Quite recently, an able surgeon, Mr. Chiene, has advocated sponges as a cheapening adjunct to the antiseptic method. I simply desire to point out the advantages of a general and systematic use of constantly moist antiseptic sponges in checking and preventing hæmorrhage, in adjusting, uniting, cleaning, draining, antiseptising, and protecting wounds.

ON EFFUSION INTO THE PERITONEAL CAVITY ANALOGOUS TO LATENT PLEURISY.*

By JOHN SMITH, M.D.,

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IN the BRITISH MEDICAL JOURNAL of September 16th, 1876, Dr. George Johnson published four cases of serous effusion into the cavity of the peritoneum, which he characterised as a class of the affection which, so far as he was aware, had not been recorded by writers on the practice of physic. He also considered that they bore by their peculiarity an analogy to cases of so-called latent pleurisy, in which we find a copious pleuritic effusion without a previous history of, and unaccompanied by, pain or febrile disorder. I have to record two cases which have come under my treatment, and which appear to bear the same analogy as those referred to by Dr. Johnson.

CASE I.—Jane M., aged 22, was admitted to the Dumfries and Galloway Royal Infirmary on May 15th, 1875. She was unmarried, and had always been healthy until about three months before, when she contracted typhoid fever, which lasted about four weeks. Three weeks or so after rising from the fever, and about a week after she had menstruated, she observed swelling in the lower part of the belly, which increased rapidly. She had no pain or uneasiness, and pressure or handling did not cause her any annoyance. On examination, the patient lying on her back, the abdomen was found much enlarged, having a broad flattened appearance, and bulging considerably and equally in both flanks. Percussion elicited resonance in the anterior and upper part, and dullness in the sides. Change of position altered the percussion-sound, being dull at the most dependent part and resonant at the upper. Palpation could detect no solid tumour, and the fluid wave was quite easily seen and felt. The heart, lungs, kidneys, and liver were, so far as could be ascertained, healthy and acting normally. There was no increase of temperature, and the pulse was natural.

After consultation with my colleagues, this was considered a case of ascites, and she was ordered hydragogue cathartics and diuretics. After giving these a fair trial without apparent benefit, she was ordered syrup of the iodide of iron and full diet, and to have gentle exercise. A short time afterwards, she commenced to improve; and, about four weeks after the supportive treatment began, she left the house much better in health, with the abdomen much reduced in size, but still containing a considerable amount of effused fluid. Several months after she left the Infirmary, her medical attendant wrote concerning her, that the abdominal enlargement had entirely disappeared.

CASE II.—Jane A., aged 28, consulted me in July 1875 for a swelling of the abdomen, which she had observed about three weeks previous to my seeing her. She had several times within the last twelve months observed a similar swelling immediately after her menstrual period; but it never became so extensive, and always went away. She had always been otherwise healthy, and menstruated regularly. From the commencement of the swelling until recently, she had not experienced the slightest amount of pain or uneasiness. Two or three days previously, however, she began to have a distensive feeling, which had gradually increased to severe pain; and her breathing had been rather difficult. The abdomen was much distended, of a rounded symmetrical form, resonant on percussion at the anterior and upper part, and quite dull at the lower and lateral. On altering the position of the patient, the bulging and dullness changed to the most dependent part; and the level of the fluid could be distinctly made out in whatever position she

* Read at the Autumnal Meeting of the Border Counties Branch.