SEA-SICKNESS.

By R. VACY ASH, M.B.Aber., L.R.C.P.Lond.

I WAS glad to see a short communication in the JOURNAL of July 7th on sea-sickness, and hope all who have the chance will contribute something to our at present small stock of knowledge on this distressing complaint. To me it is particularly interesting, for it is my lot to be painfully sensitive to the movements of a ship, and to have passed more than a year of my service on the sea. I have an idea that the sympathetic nervous system is the culprit, for the following reasons.

1. Flushing of the face is a common sign of the approach of nausea, and we all know that irritation of that nerve will cause this, as well as an extra secretion in a gland.

2. There is an increase in the quantity of fluid ejected from the stomach after it has lain there for a short time. In my own case I frequently noticed, and I subsequently verified it in many others, that, if I took half a cup of beef-tea, and lay in the horizontal position for a time, so as to avoid vomiting, when I did again vomit, when the exhausted muscles had regained their tone and were ready for another attack, the quantity ejected was greatly in excess of that taken in. For instance, if four ounces had been drunk, about twenty ounces would be ejected, of a sour beef-tea liquid. Now, whence did the surplus come? That it was gastric juice, may, I think, be taken for granted; for, although I had not the means of chemically examining its component parts, it certainly partook outwardly of the character of that juice, inasmuch as it would dissolve meat and had an acid reaction, and it did not contain any special features that would lead to the supposition that it came from other gastric organs.

Granting then that it was gastric juice, it follows that secretion, induced by the presence of the beef-tea, was in action, while the balancing power of absorption was held in abeyance. Now, if we follow this out we shall see that the sympathetic nerve-power was acting regularly; for secretion of gastric juice is governed in the follicles by the latter, while absorption of fluids direct by the veins which are governed by the former is held in abeyance, or, in other words, paralysed. I do not say that it is so, I only throw these facts out for others to corroborate, or not, as the case may be. Whence could the increase in the quantity of fluid have come? It must have been taken in some way from the blood; and what so ready to do so as the gastric follicles, stimulated into action by the presence of the small quantity of beef-tea?

Again, I noticed a rise in temperature of from one to two degrees in almost all cases on which I made observations. This may have been induced by the excited action of the sympathetic, allowing an increased flow of blood through the capillaries. By the term "excited," I mean "confused" action of that system, corresponding in effect to paralysis in the cerebral system.

Now, as to remedies. If my observations be correct, any drug or remedy acting on the sympathetic nervous system would cure this tiresome complaint; ice to the spine may so act, as well as the remedies mentioned by Mr. Kendall, in a more direct way. The tea-spoonful of Worcester sauce, which, by the by, I have also found useful, may owe its efficacy to the hot condiments contained therein, and I imagine it to be possible that they act through the sympathetic in the coats of the stomach. I need not follow out the other remedies, or name the thousand and one new ones that are constantly being poured down the throats of the unhappy traveller; but I do know that the majority of the quack remedies for sea-sickness contain a mixture of nearly all the carminatives and condiments under the sun, with the hope that one out of the lot will hit, and they do hit, or rather temporarily relieve; as cayenne pepper and Worcester sauce will do. There is one mode of applying remedies that I should like to see tried by someone who would honestly take the matter in hand; and that is, the introduction of certain remedies by subcutaneous injection, for it necessarily follows that, if my idea be correct and absorption be held in abeyance in the stomach, it is of little use to pour any medicine into that viscus when it is impossible to be taken up by the blood. Why the sympathetic nerve is the culprit, I will not attempt to prove. It may be that the motion of the vessel is foreign to the understanding of any cerebral nerves or organs governed by them, and hence is thrown back, so to speak, on the more animal nerves, lower in the organisation for appreciation, and that this, the sympathetic, unable to cope with such a strange motion or phenomenon, gives up in despair and refuses to act naturally. This may be far-fetched, but, at least, it is open to argument in the absence of a better reason.

VESICO-VAGINAL FISTULÆ.

By PERCY BOULTON, M.D., M.R.C.P.Lond.

Physician to the Samaritan Free Hospital.

It is unnecessary for me to give a vivid description of the terrible state to which a woman is reduced who suffers from a severe form of this injury. Probably, nothing except cancer renders her so unfit for every duty or pleasure in life. When such a fistula is favourably situated, that is to say, some little distance from the neck of the bladder, and where there is ample tissue to bring the parts easily together, any neat operator, with ordinary manipulative skill, may succeed. In cases the reverse of this, he will require a considerable fund of resources and patience. Such cases often become plastic operations, surrounded by every possible difficulty, requiring the greatest dexterity and mechanical inventiveness, not only as regards the tissues to be dealt with, but also with the instruments to be used for the purpose of repair.

When the operation seems to be successfully completed, we have to deal with a viscus that is never at rest, and that is the receptacle of a fluid peculiarly penetrating and irritating to raw tissues; and, although our operation may be well timed, so irregular and uncertain are some women, that the catamenia may come on unexpectedly at the very time when it is ruination to all the work.

The two following cases have just left my ward, at the Samaritan Hospital, cured, and a short account of each will be instructive and, I think of interest.

CASE I.—M. E., aged 65; married, had suffered for twelve years from prolapsus uteri, for which she had worn supports. The last one, inserted by her medical attendant in the country, was a "Blackbee," after wearing which for about three months she found that she was constantly damp. After noticing this for four months more, she was seen by my colleague, Dr. Day, who found a fistulous opening into the bladder about an inch from the cervix uteri, through which a five-shilling piece could have been passed. The vesical mucous membrane was everted, and very vascular, like a large caruncle. Dr. Day transferred the case to me for operation.

On January 26th, I carefully pared the edges, using for this purpose a small tenaculum and a pair of curved scissors, the patient being on her back, the parts exposed, with the Sims' speculum in the vagina, and a straight metallic sound in the bladder. I brought the edges together with eight fine wire sutures; and the patient, who refused to be anaesthetised, never uttered a sound. The urine was drawn every six hours, and, on the tenth day, I removed all the sutures, and found the opening completely closed and water-tight. I kept her in hospital another fortnight under observation, and she returned home on February 18th, well.

The age of the patient and the very vascular condition of the vesical mucous membrane suggested some degenerative change as a cause of want of vitality in the parts, leading to such extensive injury, from what must have been slight pressure in so lax a vagina. Otherwise, this was a favourable case for operation, as the result proved.

CASE II.—M. B., aged 37, deserted by her husband, came up from Cornwall to see me at the Samaritan Hospital in November 1881. Her last confinement had been seven years before, and she had never been able to retain any urine since. The labour was a very severe one; for five hours, the patient had been in convulsions, and was unconscious at the time of delivery. She was told that the forceps was applied, and that a strong pain suddenly expelled forceps and child.

On examination, I found the whole anterior vaginal wall torn through from the cervix uteri to within half an inch of the urethral orifice. I could pass four fingers upwards into the bladder, which, from long disuse, was small, and the edges of the cicatrix were hard and unhealthy.

I determined to try to bring the whole together at one sitting, as the number of sutures required would enable me to keep up a slight and even tension that would bring the edges sufficiently in apposition. On November 22nd, 1881, I did this; and, on December 2nd, I removed the sutures, and found all united, except the three anterior ones. This is the part which always gives trouble. Dr. Marion Sims has said he "regards cases in which the neck of the bladder is destroyed as all but incurable."

On December 4th, the catamenia returned after fourteen months' cessation, so that I did nothing more till December 14th, on which day I pared the edges of the opening remaining, and brought it together with three sutures. On December 24th, I found that two out of three had healed, but there was still an opening of the size of a

goose-quill. Christmas intervening, nothing was done till January 11th, 1882, when I again brought the parts together after paring the edges. On removing the two sutures I had inserted, this point looked delicate, but there was actually no leakage, and the poor woman was delighted beyond measure at her altered condition.

She had been in hospital three months, and confined to bed nearly the whole time, so that she was getting out of condition, and was, moreover, anxious to get home to her two boys. My disappointment was great on finding, the day before it was arranged for her to leave, that there was still a pervious point from breaking through at the weak place at the neck of the bladder. She thought so little of this herself, that she was satisfied to be as she was; and as I felt that the chances of healing became less the longer she remained in hospital, I let her go home, with the promise that she should return again another time to be completely cured.

In order to avoid being tedious, I will not relate exactly the various repetitions of paring and stitching that took place, but state broadly that the patient returned to London on October 3rd, 1882, in robust health; just as when she went out as regards her bladder, which was a perfectly useful viscus in every way, except that she was always slightly moist from leakage. It took, however, another four months to attain the desired result. After careful paring and stitching on three occasions—after which (1) the catheter was left in the bladder constantly, (2) the urine was drawn at intervals of six hours, (3) the patient passed her urine from the first—all of which failed, I determined to drain the bladder, by making an artificial opening further back; and in this way, the neck of the bladder being perfectly at rest, the fistula healed. I had then no difficulty in closing the opening I had made, and so the cure was completed by February 22nd, 1883, when she returned home.

This, the most tedious case of the many I have treated successfully, is very instructive. Had I brought only the anterior three-fourths together in the first instance, and left the hinder part open for drainage, I might possibly have completed the case in two operations instead of about a dozen.

SUDDEN DEATH AFTER LABOUR.

By E. PAGET THURSTAN, M.D., B.A.

Mrs. S., aged 35, married, seven months pregnant of her first child, had not been in good health for some years, and had become very nervous since a severe fright the previous year from a lunatic. She complained of shortness of breath, her lips were blue, and her face bore an anxious expression; she trembled on the slightest agitation. Her temperature and pulse were normal, and there was nothing wrong in the chest, nor oedema anywhere. The urine contained one fourth of albumen, no casts, a trace of bile; specific gravity 1030. Marked relief was afforded by carbonate of ammonia, acetate of ammonia, tincture of squill, tincture of belladonna, and aqua chloroformi. On April 11th, she complained of severe pruritus over body. A lotion containing ten minims of solution of acetate of lead and eight minims of hydrocyanic acid to the ounce was ordered, but produced no relief. A lotion of a drachm each of liquor plumbi acetatis, glycerine, and strong acetic acid to the ounce, was then ordered; this gave marked relief, and still more arose from a combination of the two lotions.

April 30th. Labour was said to have commenced at midnight; the os was undilated; the cervix was not entirely obliterated; head-presentation. The abdomen was enormously distended, and the legs and thighs greatly swollen; the breathing was easier, but the lips still rather blue. A mixture of carbonate and sulphate of magnesia was ordered.—May 1st. Pains had continued with tolerable regularity, preventing sleep; the bowels acted twice. In the evening, as the pains still continued, a draught containing twenty grains of chloral was prescribed.—May 2nd. She slept better than for a week past; the pains returned in early morning, stronger, and now regular. At 5 P.M., the os was of the size of a shilling, and dilatable. Until 9 P.M., labour proceeded favourably; the os was of the size of a five-shilling piece. From this time, there was little or no progress. The head was still high up in the pelvis. At 1 A.M., May 3rd, I ruptured the membranes, as there was evidently an excessive amount of liquor amnii. At 9 A.M., the head had descended a little lower into the pelvis; it still moved with each pain, but the os dilated no more; the pains were very strong; the pulse good and quiet. At 11 A.M., I endeavoured to put on the forceps. One blade went on easily, but, owing to the enormous oedema of the thighs, the unyielding nature of a primiparous perineum, the undilated condition of the os, and the fact that the head was still high up in the pelvis, the difficulty in intro-

ducing the second blade was so great that I administered chloroform, and Mr. Lammiman kindly applied the long forceps. The introduction of the second blade was a task of considerable difficulty. After nearly an hour's hard work, assisted by strong pains, intensified by ergot, the head was delivered. The perineum was partially ruptured, and great quantities of liquor amnii escaped at times. After the forceps was removed, the shoulders gave some trouble. At last, the patient was delivered of a very large male child, practically dead. Despite artificial respiration, and bleeding from the navel to an ounce or more, we failed to establish breathing. Alarming hæmorrhage now ensued, which was controlled by firm grasping of the uterus, and free exhibition of ergot. The perineum was then stitched up.

May 4th. The urine was drawn off by catheter. Temperature 99°, pulse 102. Frequent gushes of fluid (amniotic?) took place from the uterus. She was doing well in every respect. On May 6th, she was still doing well; but at 9.30 I received an urgent message. The patient had been seized suddenly with faintness, dyspnoea, and feeling of impending death. She had rallied somewhat when I arrived. Temperature 100.4°, pulse 99. There were no rigors, sickness, or abdominal tenderness. A soft (hæmic?) murmur was heard over base of the heart. No dulness or crepitation was heard anywhere over the lungs; the lips blue, the face anxious, breathing laboured. I ordered a mixture, containing carbonate of ammonia and spirit of sulphuric ether, to be taken whenever any signs of faintness appeared. I ordered that the patient was not to be raised in bed, nor moved more than absolutely necessary. There was no trouble with the breasts. After this, she appeared to be doing well until May 14th, when I received an urgent call at 7.20 A.M. The temperature was 98°, the pulse 93 (114 the day before), and almost imperceptible. The lips were blue; breathing was laboured. She soon rallied after a dose of carbonate of ammonia and ether. She had had a slight attack of faintness at 11 the previous night. In the afternoon, Mr. Lammiman again kindly saw her with me. She still had nervous tremors, but had quite rallied from the faintness. I ordered thirty grains of chloral at bedtime. After this, she went on well, and, on May 18th, she got up for an hour and a half, and sat in an arm-chair. On May 19th, she was still doing well, there having been no signs of faintness since the 14th. In the evening, I received an urgent summons, and found the patient dead on my arrival. Her husband had been sitting talking to her in the afternoon. She seemed quite well and cheerful. He was obliged to go away for twenty-five minutes, and left her alone at her own request. The next door neighbour, sitting with the door open, was ready in case she heard a call. When the husband returned, the patient was lying exactly as he left her, but quite dead; there were no signs of pain or struggle. No necropsy was obtainable.

REMARKS.—The severe itching was followed by papules, but these were in great measure evanescent, and probably the result of scratching. The effect of a strong solution of liquor plumbi, where a dilute form has failed, is well shown. In the labour itself, the pains continued without an hour's intermission, except during sleep artificially procured, from midnight, April 29th, till delivery by forceps at 2 P.M. on May 3rd: over three days and a half. Throughout that time, food was taken freely, the bowels acted comfortably, and there were no signs of exhaustion or failing pains. Actual hard labour-pains continued for twenty-seven hours. Upwards of three days elapsed after the labour before the first attack of syncope. The temperature on this occasion was hardly, if at all, reduced, and the pulse was fair in quality. Seven days now elapsed before the second attack of faintness, which was so far slight that I was not sent for. Early next morning, however, there was a severe attack, and this time the temperature was subnormal, and the pulse very feeble. After this, there was no symptom of anything wrong. When she first got up, great care and watchfulness were exercised, but there was no difficulty or trouble of any kind. On the day of her death, she had not got up at all—indeed, had hardly raised herself. As no one was with her at the time, it is quite unknown whether anything occurred to startle her, or whether the last fatal syncope had no exciting cause.

The Glanford-Brigg Guardians and Rural Sanitary Authority, on re-appointing the Medical Officer of Health, reduced his salary from £150 to £120 per annum. The Local Government Board wrote, refusing their sanction, and the subject was brought forward at the last meeting of the Rural Authority and fully discussed; but the latter would not yield, and affirmed their former resolution by a large majority.