The success which I have met with in the case above alluded to gives me no desire to repeat the operation; for more mature reflection and experience, combined with re-examination of pathological specimens, have led me to conclude that many of the morbid changes, and still more of the attendant suffering, are due to the imperfect carrying out of some of the most obvious and simple principles of treatment; namely, the proper application of warmth, perfect immobility of the limb, and relief of the articulating surfaces from friction and pressure. Moreover, when the head of the bone is exciting ulceration in the acetabulum, or pain and disease, after dislocation, in the neighbouring soft parts, the symptoms may be arrested, the limb may be brought into place, and the patient's health greatly improved by the application of an apparatus for extension—not forced or sudden, but slowly acting, and capable of direction in whatever way will draw asunder ulcerating and highly sensitive surfaces.

I shall be told that these principles of treatment have been long attended to. But I may question that fact. How many children, with incipient disease of the hip, have none other than their usual clothing? How often is it that the limb, somewhat colder than the opposite, has no flannel roller, nor the covering of leather or gutta percha over the joint? As for the repose of the limb, the child is daily taken from its bed to be washed and dressed, to pass its evacuations; and, among the poor, this movement goes on to a far greater extent.

I directed attention to these points in an article on Disease of Joints, which appeared in the *British and Foreign Medico-Chirurgical Review* in 1855; and I have seen no reason to change the opinion there expressed, that these points “merit, in their more complete and scientific application, greater general attention than they have hitherto received in this country.”

I have not the space to enter minutely into the morbid changes in hip-disease of young subjects, concerning the origin of which so much has been written; nor to quote the opinion of those who, on the one side, say it is originally an inflammatory affection of the synovial membrane, or, on the other, that it commences in the cancellous texture of the bones. Pathological investigation shows that, however analogous the constitutional peculiarity may be in all cases, the disease does not always begin in the same way. In many cases, the inflammation of the synovial membrane goes hand in hand with a similar process in the spongy texture of the bones composing the joint; there are others in which the latter morbid changes are either absent or exist in a very slight degree. The destruction of the ligamentum teres, the exudation of pus in the bones, the ulceration of the cartilage, the separation of the epiphysis, are stages familiar to all; but the point to which I would direct attention is the following—that the more serious changes seem in great measure due to the rubbing of the ulcerated body's surfaces—a process which keeps up the morbid action which is often the precursor of fatal accidents. How comes it that we sometimes find the base of the acetabulum perforated, with the head of the femur impacted in the hole (Museum of Royal College of Surgeons, No. 940); or separation of the three imperfectly united bony elements of the acetabulum, the ilium, ischium, and pubis? Is it probable that the matter, which in McDowell's case communicated with the small intestine and external iliac artery, and in R. Adams' case found its way into the vena cava inferior, would have made a passage into the abdominal cavity, had the head of the femur been prevented from rubbing against and ulcerating the acetabulum? I cannot but think that, if care to prevent these accidents be not taken, the patient is spared some risks by the actual dislocation of the bone from its articular cavity. Preparations are to be seen in the Museum of St. Bartholomew's Hospital, where the shaft of the femur had been slowly driven into a cavity in the cancellous texture of the ilium, near to the acetabulum.

The instrument in use at the Royal Orthopædic Hospital for slowly drawing the femur, when dislocated, to its proper place, or for keeping up slow extension, combined with immobility of the limb, when the head of the bone still remains in the articular cavity, is described in Mr. Tamplin's work on *Deformities*, p. 38; or may be seen at the maker's, Mr. Fergusson, of Giltspur Street. It is fixed to the pelvis, and attached by a broad webbing strap to the abdomen. From this a steel bar passes down the outer part of the thigh, where it is fixed by a broad leather strap. Three screws at the junction of the steel bar with the pelvic band allow of three movements—1. Flexure; 2. Abduction; 3. Elongation. “The foot, leg, thigh, and hip, must first be bandaged with a flannel roller; for, unless the

natural temperature is kept up, the restorative process cannot go on.” (Tamplin, *On Deformities*, p. 185.)

I will add, in conclusion, that this treatment may be daily seen in practice in the Royal Orthopædic Hospital; and that I should indisputably try it, not for weeks, nor even months, but for years, if possible, before resorting again to so serious an operation as resection of the hip-joint, which, however successful in its issue, leaves the patient in a crippled state for at least an equal period of time, and which likewise shows, in a large proportion of cases, a fatal result.

NOTES ON SEA-SICKNESS: ITS CAUSE AND ITS REMEDIES.

By J. C. NEILD, M.D., Riversdale, New Plymouth, New Zealand.

THE following notes were made during a sailing voyage to New Zealand, *via* the Cape of Good Hope, from June to September 1853, and occupying eighty-eight days from shore to shore.

From observations during a voyage to New Zealand, and from the remarks of others, it appears to me that the chief cause of sea-sickness is, primarily, mechanical; secondarily, physiological: whilst the cooperation of dietetic or other disorders may much aggravate the malady: and it further strikes me that, unless protracted by other agencies, its subsidence will be found commensurate with our becoming used to the motion of the vessel.

As preventives, simple diet, the avoiding of sweets and fat for a week or ten days before embarking, and the taking of a few doses of blue pill and Seidlitz powders during this interval, have been recommended. I have been unable to note appreciable benefit from these measures, the cautious and the careless seeming equal sufferers.

Another recommendation is that, on the supervening of nausea, one should lie down, and maintain the recumbent position; though for how long, is not told. I greatly doubt the wisdom of this: so long as one reclines, one escapes, to a great extent, the motion of the ship; but the needful seasoning is at the same time “shirked”, or at the least postponed.

It will, I believe, be found that sea-sickness has its two conditions or stages; the first, that of excitement, in which the stomach is frequently and violently disturbed; and the second, that of habit, and some prostration: this stage being marked by retching, debility, and a sense of such misery and wretchedness, as to render the sufferer utterly indifferent to everything around him. The second of these stages is but the natural result of the first; and the first is the effect of the swinging and rolling movements of the vessel on the peristaltic action of the stomach, checking and reversing it.

If these views be correct, it follows that the cessation of sea-sickness must be looked for less from the operation of internal or external remedies than from as resolute an endurance of its cause as the sufferer can achieve. This principle is confirmed by the experience of sailors, and is in accordance with their advice; viz., persist in keeping up and moving about; take exercise; use exertion, if you can (supposing you are a passenger), because you must if you be a midshipman or sailor. Our worthy captain had his first fit of sea-sickness cured by being sent aloft when he seemed too ill for anything but to lie on the quarter-deck; and furling the maintopsail has cured many a youngster before and since.

Let us then assume that it is good to keep up and move about as much as possible, and that to yield to the inclination to lie down and keep quiet only protracts the suffering. I then proceed to consider some subsidiary agencies for better or worse.

1. *Diet.* The sailor will advise us, and correctly, to eat dry food, and avoid fluids. “Eat—get down something solid—if it be rejected, never mind. Eat again, of plain, wholesome things.” My own experience coincides with this; my plate of soup has driven me from the dinner table; but this *contretemps* did not prevent my prompt return to a reasonable meal of solid food. But even this is to be taken *cum grano salis*. I query its applying well, if at all, to the first stage, and think it not available until the stomach has been fully relieved, and some degree of debility induced. Up to this point, demulcents, as gruel, arrow-root, and the like, will probably be best, and these, moreover, taken in the simplest form, without stimulants or spices, and with little or no sugar.

2. *Stimulants.* These in the first stage, I believe, aggravate the symptoms, and are therefore inadvisable. One hears of one passenger being cured by a little porter, another by a little brandy and water, a third by a glass of sherry and a teaspoonful of tincture of gentian; whilst each of these has, on the contrary, made some one else decidedly worse! The explanation of these conflicting statements lies, I suspect, in this: that those whom these agents made worse, were in the first stage, and those whom they relieved, had passed it. The kind and amount of stimulant to be taken will, no doubt, be mainly dependent on the patient's habits and likings. As a rule, I am of opinion the less the better.

3. *Medicines.* Numbers of these have in their several turns been not a little lauded; but their usefulness is probably significantly indicated by their number. Like the asserted remedies for hydrophobia, they are very many and good for very little. People swallow them, and wait; take other doses, and wait again. Thus time is occupied, and attention engaged; the desire for "something to be done" is satisfied, and anxiety appeased; the attack gradually passes by, they get well, and—praise the last supposed remedy they may have happened to employ. This, I believe, to be about the truth with respect to most of the reputed cures for sea-sickness. Sufferers will, nevertheless, continue to use them; and so long as they are not injurious, it is scarcely worth while to forbid them, provided reliance on them do not prevent recourse to the best remedy—exertion.

My own observation would lead me to give a free dose of calomel, six to ten grains, and to follow this in about two hours by one or two pills of aloes and colocynth, after the stomach had been emptied, and bilious vomiting had set in; i.e., about the end of the first stage. A warrant for procuring free peristaltic action is found in the fact that diarrhoea will banish or replace sea-sickness, and that the latter will return as the diarrhoea is checked or subsides. I have noticed some relief from small doses of creasote (half a minim) and magnesia (gr. iij); and that whilst draughts of plain cold water excited vomiting, the addition of a little carbonate of soda obviated it.

4. *External Remedies.* I have used with frequent success a large sinapism over the epigastrium, in the second stage. An opiate plaister in the same situation, and a tight belt, are also well reported of; but with these I have no practical acquaintance. In severe or protracted cases, blistering the epigastrium will probably be valuable as a counterirritant, since the lighter action of mustard suffices for milder attacks.

5. *Mechanical Remedies.* Under this head may be comprised those means which counteract the peculiar motion of the ship or vessel—the cot, the hammock, and the swinging bed of Mr. Brown, with single or double action. My own children had swinging cots for some time, and found much relief and comfort in them. Of merely moderate motion of our ship (a fast sailer, but excessive roller) they were not conscious; but they were sick at intervals for so long a time that I suspect the comfort just named was purchased rather dearly. Lest, however, I be misunderstood respecting the cot or hammock, and in anticipation of the remark that sailors use and prefer one or the other, I would add, that sailors, when afloat, lead active lives; and that their activity both banishes sickness and promotes their general health, thus rendering them independent of either swinging or fixed beds. It is occasionally found needful, in severe cases, to cover the cot or hammock with a sort of canopy, to prevent the patient from being harassed by the apparent movement of the ceiling.

In illustration of some of the preceding remarks, may be adduced the instance of one of our passengers, who suffered severely, and for several weeks. She was of a full habit of body, and of irritable temper; and had a most attentive niece, and no less indulgent husband. Thus favourably situated for "getting her own way", she was always taking little messes and slops of either sweet or fatty food; she drank wine and porter, and lay about in a reclining chair; nor did she even begin to mend till we had passed the tropics, and reached high south latitudes and cold weather.

P.S. During heavy gales, and in the wild seas off the Cape (within the parallels of "the stormy forties", and in the waters of the "South Terrific"—facetious, but most expressive terms), more than one of our passengers was affected, long subsequently to perfect recovery from sea-sickness, with symptoms resembling slight cerebral congestion—headache, flushed face, general oppression and lassitude, but little or no nausea. This *malaise* was, however, unimportant and transient.

THE NATURE & TREATMENT OF CANCER: BEING THE Address in Surgery

READ BEFORE THE TWENTY-FIFTH MEETING OF THE BRITISH
MEDICAL ASSOCIATION,

Held at Nottingham, July 28th, 29th, and 30th, 1857.

By GEORGE SOUTHAM, Esq., F.R.C.S., Surgeon to the Manchester Royal Infirmary.

It has been in full reliance upon the kind indulgence of this enlightened and influential assembly, that I have ventured to undertake the responsible duty of delivering the Annual Address in Surgery, and to occupy a place to-day which has on former occasions been filled by some of the most distinguished members of the profession. I feel still greater diffidence in following these gentlemen, because the address is not intended, as formerly, to be a detailed review of the various contributions of the previous year to surgical science (the improved state of our periodical literature having superseded this course), but a critical inquiry into some special department of surgical knowledge and practice.

To my mind, there is no subject better suited for this occasion than that of cancer, not only on account of its practical and speculative character, but because it has engaged a large share of the attention, both of surgeons and pathologists, during the last few years. To allude to the whole of this question within the limits of an essay would be impossible; my remarks will necessarily, therefore, be of a general character, and be directed chiefly to those points which will lead to the most correct principles of treatment. With this view, I shall call your attention to—

- i. The Origin and Nature of the Disease.
- ii. The Circumstances which modify its Growth and Duration.
- iii. The Influence of Treatment in eradicating or palliating it.

I. ORIGIN AND NATURE OF THE DISEASE.

What is Cancer? In the first place, we must decide what affections are included under the term cancer—a question which, in the present day, may appear somewhat singular. Yet this it is necessary to do, not because recent investigations have not thrown considerable light on the subject, but because some surgeons and pathologists have sought to give undue prominence to one or two particular signs, valuable, no doubt, in connection with others, in determining the true nature of morbid growths, but of themselves insufficient as diagnostic indications. Thus, at one time the *pathologist* maintained that in heterologous and homologous growths might be discovered the distinguishing features between carcinomatous and innocent tumours; at another, that their characteristic signs were to be found in their mode of growth; whilst of late years many have fixed the only true test in the presence or absence of a particular form of cell. In like manner, the *surgeon* thought that he had observed a specific indication of the disease in one or more of the leading symptoms, each having at various times had a certain degree of prominence assigned to it.

Another source of complication has arisen in the variety of names given to the different forms of morbid growths—every new contributor to our knowledge on the subject having generally added some new term to our already over-burdened nomenclature.

Pathologists are doubtless entitled to the fullest merit for their investigations; but it must be admitted that these patient labourers in the cause of medical science have not as yet succeeded in giving us any special sign by which the two forms of growth may be distinguished. It is only, therefore, by comparing the leading peculiarities which both clinical observation and pathological research have revealed as characteristic of each, that at present we can arrive at any satisfactory conclusions.

Description. Without entering into a formal description of carcinoma, I may briefly state that the term includes all growths formed of, or having incorporated with them, an abnormal organised material, which infiltrates itself into the tissues in