

spring and summer traveller be as much in open carriages and boats as he can.

2. He leaves England to shun its sudden and depressing changes of temperature. Let him not expose himself to these abroad. He must be cautioned in winter against the cold frowse of unfrequented churches, usually the most interesting to the antiquarian; the bleakness of picture-galleries, whence a ray of sunlight is excluded as an enemy; and, as a rule, all show-houses. It is hardly necessary to speak of catacombs, as they are dangerous even to the healthy. The night dews are always to be avoided, but are much more pernicious at some places than others. In malarious districts they give one a sore-throat; and may induce ague; I suspect their mode of acting is as a sudden chill on the body long exposed to the heat of the sun.

3. Sunlight is of great importance to the invalid. This is a matter which should never be forgotten in the choice of a house for winter residence. Italian architects in general think much more of shutting out Phœbus when he is too fierce than letting him in when he is wanted as a healer. The consequence is that the most fashionable localities and the most elegantly furnished apartments are by no means those which have the aspect best suited to our sanitary purposes. Choose first the rooms for your patient's use by their windows, and then set to work to make the inside complete. Even in summer *sunlight* is of value, though *sunshine* in the middle of the day is too powerful. I have always observed that those travellers spoke the most favourably of the climate of Italy who had got the most browned by it. By defending the skull with a pugrah or a folded white handkerchief tied round the hat, all fear of sun-stroke may be avoided. And, artist or no artist, it is as well to have a brown-holland umbrella.

4. The invalids whom I should advise being sent to Italy are such as usually are injuriously affected by the chronic action of alcohol. Their vital processes are already too torpid, and alcohol still further retards them. But in England they cannot do without it, to stay mental depression and the wear and tear of the nervous system. In those sunny lands their minds are cheered by the pleasant sauntering life, and their nervous systems are not worn or torn; and so they do not want it. Let them exchange the furnace-heat of British drinks for a glass of those bottled sunbeams which call the white grapes of Orvieto, Monte Pulciano, Capri, or Asti their parent. If these disagree, let them reverence the *nymphæ* and *lymphæ loci*.

5. I think it a prudent rule to imitate the natives of a country in their diet as far as possible. And therefore it is advisable to obey the instinct which in a short time leads us Britons to take less animal food than we have been accustomed to. And I think also medical men may wisely take a hint from the observation I made in the second lecture respecting the practice of their Italian brethren. Acids are more often required in medicine than alkalies. Thus in Italy a summer diarrhoea, which is rebellious against chalk mixture and opium, yields immediately to lemon-juice. In England lemons would have brought it on and chalk stopped it. I believe it is in great measure from taking too much animal food that our countrymen so often suffer from piles in Southern Europe.

6. The knowledge that the deficiency of sleep is normal will prevent the having recourse unnecessarily to opiates. While on the subject of sleep, I will take the opportunity of saying a few words about its murderers. Any spring or summer traveller on the other side of the Alps, who is sensitive in respect of entomological companions in bed, will of course take a sleeping-bag to a country inn. Well, before he starts, let him try one night in it to see that it is long and wide enough. If too small, repose there is as difficult as in a Venetian dungeon; and the materials for a new one are unattainable in country towns. Many persons who are wakeful at night can often take an hour's siesta in the afternoon with advantage. If even they do not sleep, the repose is good for them. They must not fancy that it will spoil their nocturnal rest; on the contrary, that is often the sounder, while it lasts, from the body not being too tired.

7. That intensity of the vital processes which your patient goes to seek as a remedy, is exhibited in disease by an acuteness astonishing to us foggy islanders. You must remember this if any of you go as travelling physicians to Mediterranean climes. People get well quicker, it is true, but they also get ill quicker of their intercurrent or accidental complaints, and pass through their stages quicker than in England. This is especially true in respect of the congestive inflammations of fever, of pericarditis in rheumatism, and of pneumonia in diseased heart. You must, therefore, not lose time or indulge

in procrastination of appropriate treatment; *la médecine expectante* is sadly out of place.

8. Inasmuch as a certain portion of the advantage of going abroad is due to the interesting succession of novelties offered to the mind, do not imprison your patients too much in one spot. If they can travel about without harm, it is sure to do them good. At the same time, I would strongly blame the precipitate hurrying over the greatest quantity of ground in the smallest quantity of weeks, which so often makes our countrymen ridiculous. That is an imprisonment of a still duller kind—namely, in a travelling carriage (often a close one) or a railway car. Stop in each place till its novelties cease to strike, and then leave it for another. Let the guide-book be used as a curb rather than as a spur.

But, above all, I would caution you to use the few known facts about its physical phenomena to check your sending to Italy unsuitable cases. I have already mentioned several classes of patients as likely to be injured, and I would add to that list such as, though appropriate as regards the pathological nature of their complaint, yet are too far advanced for you to expect conscientiously that they will return home alive. I refer especially to cases of rapidly increasing vomica in the lungs. A death-bed abroad is more painful and even quicker than at home. Avoid, also, sending patients who would be more benefited elsewhere. Such are those affected with irritative phthisis, who suffer much with cough in dry weather, and to whom a sedative, soft air is beneficial. To these the warm and moist Atlantic breezes at Madeira and the Azores are so much more suited that, though Italy is better than no change, you do harm in sending them there by preventing their adopting the quite best course.

I hope, too, that you will not think, from my having passed over without mention the numerous spots frequented by invalids even in Italy, that I think them all unsuitable as health resorts. Both you and I have only limited time at our command, and I have tried to economize it by naming only what have seemed to me the best in that country for the forms of disease I have mentioned. I have given my reasons for the selection, and thus you may easily, from any good work on climate, choose those which are next best, in the event of these being objected to.

ON

STRICTURE OF THE ŒSOPHAGUS.

By JOHN GAY, F.R.C.S.,

SURGEON TO THE GREAT NORTHERN HOSPITAL, ETC.

THE case related by Mr. J. Stead in the number of *THE LANCET* for August 5th, calls to my mind two, amongst other cases, of œsophageal stricture which have come under my notice, and which presented symptoms, met with in comparative mildness during the progress of Mr. Stead's case, that I do not remember to have seen remarked upon in treatises on this very serious malady, but which I think deserve attention.

The first was that of a lad nine years old, who was brought to me from Devonshire twelve years ago on account of impending starvation from an impassable stricture of the œsophagus, due to an attempt to swallow a teaspoonful of sulphuric acid given in mistake about two years before. The symptoms of dysphagia which immediately followed were severe, but passed off to give place to others which depended upon a gradual contraction of the œsophageal tube until water could scarcely pass through it. Although every effort was made to nourish the child, he wasted until at length he was literally reduced to a condition most aptly described as that of mere "skin and bones."

No time was to be lost. I explained to the parents that a passage must be immediately opened, so that food might be conveyed into the stomach; and for that purpose I determined first to try a common metallic bougie, bending it in such a manner that, when once introduced into the œsophagus, I could drive the point in the direction of its long axis. I was fortunate enough to give the instrument the right direction, and to get it, with some little force, through the stricture. The bougie was No. 5. The opening allowed fluid nourishment to percolate through in sufficient quantity, with what was taken through the rectum, to sustain life. The operation was repeated the next day; but it was found as difficult to get the instrument through on this occasion as on the former. Still fluid passed,

and I deemed myself fortunate in gaining this point. I kept up the dilatations at first daily, and afterwards, as they gave great distress to the poor lad, only on alternate days. After a fortnight I began to use larger instruments; and, as my patient began to get impatient of the treatment, I determined on more rapid dilatation. For this purpose I had a No. 8 bougie bent in the requisite manner, and, with my friend Mr. Childs' help, I succeeded in getting it through, but not without the employment of considerable force. It was attended with pain, so that the lad screamed; and this pain did not readily subside.

I was called to him in the course of the following night on account of great distress in breathing, which had come on almost suddenly, attended with a short and almost constant cough. On examining the chest, I found congestion of the upper lobe of the right lung. This passed rapidly into pneumonia, with expectoration of blood, and afterwards of blood copiously mixed with frothy and then purulent mucus. This attack was very severe, but the lad recovered from it. At the end of a fortnight, on reattempting dilatation, I found that the opening in the œsophageal stricture had not diminished. After this I conducted the dilatation steadily and with great caution, and with such success that after three months the lad could swallow an abundance of pultaceous aliment. By this time he had recovered his health and regained flesh. He then went into the country for a time. When he returned to town about six months afterwards, I recommenced dilatation by means of ivory balls, and carried it on until he could swallow well-masticated solid food. In this happy restoration of his feeding powers he found a satisfactory excuse for declining further treatment. He subsequently went to New Zealand, where he is now engaged in a lucrative business, without any annoyance whatever from the accident to his œsophagus.

The other case is that of a Mrs. B—, aged fifty, whom I saw with my friend Dr. Tapson, of Clapham. She was a fine, healthy-looking person; but she had for a long time been troubled with a difficulty in swallowing her food. This had gradually increased, so that when I first saw her she rejected the smallest quantity of solid matter, after retaining it for a very short time in the œsophagus. I became readily convinced that there was a stricture of the œsophagus, but had reason to hope that it was not malignant. It was hard, unyielding, and only bled (and then but little) when force was used to dilate it. Moreover, there was no enlarged gland, no wasting, and her functions, with the exception of that of deglutition, were regularly and satisfactorily performed. The disease was, however, gaining ground, and Dr. Tapson concurred with me in thinking that attempts should be made to dilate the stricture. I accordingly endeavoured to pass an ivory probang, beginning with one of a small size. I could not procure a passage, but remembering the incident in the preceding case, I advised that, by making a little persistent pressure on the stricture from time to time, the tissues might possibly become so thinned by absorption or stretching, that ultimately they would give way. After pursuing this course for a period of six weeks, the point of the instrument passed through, and I felt assured from passing it onwards towards the stomach, and for other reasons, that it had gone in the right direction. It, however, gave her considerable pain in the part, which pain lanced down the arm to the left elbow-joint, where she suffered severely. She had complained of pain lancinating in this manner and settling in that joint, during several of the last sittings. The next day she was very restless, and during the succeeding night her symptoms became more serious. I saw her the following day, when I found her breathing with some difficulty, and retching frequently. She had also a constant short cough. Her neck was generally enlarged, but not painful on pressure. There was tenderness over the region of the stomach and epigastrium, and small crepitation generally throughout the lungs. In the course of the ensuing night her symptoms became more alarming, and she sank on the following morning. No post-mortem examination was allowed.

I felt convinced that the instrument—a conical ivory ball on a whalebone handle—had not passed through the walls of the œsophagus.

Many instances of this unfortunate affection have passed under my notice; but I have never known, save in those just narrated, symptoms of so alarming a nature to follow the act of dilatation. To this they obviously were due; and it is also clear that they were immediately induced by reflex action through the medium of the nervus vagus, and in consequence of injury to its superior laryngeal branch; for it is well known that injury to the vagus in the neck is followed by the effusion of bloody and other fluid from the lungs, whilst its effects on

the stomach, though equally marked, are, from anatomical causes, less severe.

In Mr. Stead's case the symptoms were comparatively mild. The day after passing the bougie, the patient had a white tongue, "his breath was bad," and "it was with the extremest difficulty and suffering that he swallowed a little water." In the first of my cases the local injury aroused disorder in a limited portion of the structure to which the vagus is distributed—viz., the upper lobe of the right lung only; whilst, in the second, it would appear as though almost every peripheral filament had been roused into a state of intense excitation. It is to be remarked that in each case these symptoms did not occur until after the dilator had been repeatedly used, and on the application of a little more force than had been ordinarily employed, as though the nerve had treasured up the antecedent injuries for one common act of resentment.

It can hardly be questioned that the new tissue involved in the formation of a stricture, whether situated in the œsophagus, the bowel, or the urethra, is endowed with the organic apparatus common to most normal tissues—that it has bloodvessels, absorbents, and nerves, all contributed by outgrowth from the contiguous textures; but that, in common with the new tissue itself, these constituents are degenerate formations, and that either may exist in excess. How else are we to account for the disorders to which such strictures are peculiarly and (if I may so apply the term) perhaps *normally* prone—such as hæmorrhage, spasm, irritability, &c.?

Whatever be the immediate cause of the peculiar phenomena in these exceptional cases—whether they be due to the implication of some nervous fibril in the new product that constitutes the stricture, or to constitutional hyper-irritability,—it is very clear that the surgeon should be alive to the possibility of their occurrence, and should in all cases conduct the process of dilatation, if it be determined upon, with great caution.

But should dilatation be attempted in these cases, and in what particular class? Dr. Hodgkin has given a very lucid account of their morbid anatomy, insisting, first, upon the tendency on the part of the newly-formed tissue to contract, while its extensibility is lost; and secondly, that to this tissue the mucous membrane is firmly and immovably adherent. In many cases, however, the mucous membrane, having been destroyed, is supplanted by the stricture tissue. Dr. Hodgkin argues that the operation of a bougie on a narrowed canal so constituted must be to excite inflammation and perhaps ulceration of the mucous membrane by the injury which that instrument must necessarily produce, and thus lead to an aggravation of the mischief; and he carries his objection so far as to include within it strictures of the urethra as well. Doubtless, dilatation of any stricture, so performed as to excite inflammatory action, or such local irritation as to cause reflex disorder in remote parts, is objectionable in the highest degree as a general rule; but in those cases of œsophageal stricture in which death is imminent from practical closure of the tube, any reasonable force whereby a passage can be made is justifiable; and, having been once gained, that passage should be maintained by very cautious persistence in the use of the dilator. There is, however, a considerable difference between traumatic and idiopathic strictures of the œsophagus (the malignant I exclude altogether from the scope of these remarks); and it is in the former, from the fact that in these the morbid process usually sooner or later exhausts itself, that dilatation is most easily applicable and most frequently successful. In both classes of these cases the stricture usually involves the mucous and sub-mucous tissue, whilst the muscular and vaginal coats are free; but there is reason to believe that in the resistance offered to the passing of instruments, as well as to the swallowing of food, it is the *muscular tissue*, and not the *stricture tissue* itself, that takes the largest share. A notion may be gained of the firmness with which the muscular coat will, under certain influences, spasmodically contract from the fact that in an hysterical person I have known such contraction to resist the utmost reasonable effort to pass a probang of any size into the stomach. Hence the great importance in all these cases to avoid any but the most gentle efforts when dilatation is adopted, and to guard against the chance of spasm by the constant administration, especially by the rectum, and subcutaneous injection of antispasmodics and sedatives. Sir Charles Bell recommends the application of weak solutions of nitrate of silver to the stricture by means of a soft sponge-probang, and I have found his advice in this respect very serviceable in allaying irritability.

In *idiopathic* cases, dilating efforts are seldom of any avail, and, on the whole, Dr. Hodgkin's advice is, perhaps, the best. It is decidedly so, unless dilatation be carried on in a manner

so that it does but *dilate*; if carried beyond this, it aggravates the malady, and hastens its final termination. Mr. Liston once showed a preparation to the Pathological Society (*vide* "Transactions," vol. i., p. 89), in which the stricture, an inch in length, and leaving an aperture only of the size of a goose-quill, had existed for a number of years. The man had been a patient of Mr. Cruikshank and John Hunter, and lived to between seventy and eighty. It is not said whether dilatation had led to the arrest of this stricture, but the natural inference would be that it had not been employed. Other such cases are, I believe, on record. The possibility of so fortunate an occurrence in connexion with idiopathic stricture of the œsophagus should always be borne in mind; and it would be well to consider whether local and constitutional means, such as are most likely to conduce to the arrest of a process in which inflammation and thickening take the most important part, may not be so employed as to bring about this desirable consummation. Of these means, iodine, mercury, and a half-starving dietary are amongst the most potent.

In extreme cases, œsophagotomy or gastrotomy might add a little to the duration of life.

Finsbury-place South, Oct. 1865.

ON THE ASSIMILATION OF FAT IN CONSUMPTION.

*A Third Report of Cases treated with Pancreatic Emulsion
at the Royal Infirmary for Diseases of the Chest,
City-road.*

BY HORACE DOBELL, M.D.,

PHYSICIAN TO THE INFIRMARY.

(Concluded from p. 535.)

Dr. Moxon, of Kirton-in-Lindsey, writes me as follows of the good effects of the emulsion:—"I have tried the pancreatic emulsion in the case of a young man affected with phthisis in quite an early stage. There is tubercle deposited in the apex of one lung. He had lost all appetite, complained of pain in the side, and tightness of the chest. He had only slight cough, great lassitude, and had lost weight considerably. He had been under treatment by Dr. —, without any relief; tonics had not the slightest effect upon him. On seeing your report in THE LANCET, I determined to try the 'emulsion,' and gave up all other treatment, except the occasional use of a stimulant liniment. He has taken four pounds of the emulsion. He had no difficulty in taking it; but, on the contrary, found it palatable. His appetite has improved, so that he takes food with good relish. Has gained a little in weight. Does not feel any lassitude, except at times; has lost the sense of constriction in the chest, and is altogether much better. It is now six weeks since he has given it up..... I am very pleased with its effects..... I shall certainly use it again when I have a case which requires it."

Dr. Robt. Growse, of Brentwood, writes:—"I have employed the pancreatic emulsion simply for the purpose of increasing flesh. It is much more palatable than the cod-liver oil, is well borne by the stomach, and will, I think, materially aid me in the object I have in view."

Dr. J. W. Phillips, of Cowbridge, Glamorganshire, writes that he gave the emulsion to "a young lady, aged eighteen, in the third stage of phthisis. She had failed taking cod-liver oil for some time. After taking the emulsion she recovered considerably, was able to resume out-door exercise and cod-liver oil. She took in all three pounds."

A remarkable case of recovery has just come to my notice, in which the emulsion appears to have played an important part.

A gentleman consulted me in March last, of whom I made the following note:—"Aged thirty; losing flesh fast; getting very weak; sweats much; appetite moderate; cannot touch fat. Cough troublesome all day, and also in the night; now and then the fits end in vomiting; much expectoration, occasionally tinged with blood. Has had a cough for three winters, with bronchitis and frequent catarrh; but has every appearance now of rapid phthisis. Chest very thin; supra- and infra-clavicular spaces hollow. Left upper lobe dull in front; breathing harsh; expiration long and harsh; no moist sounds. Right upper lobe dull behind; breathing very harsh, especially ex-

piration; no moist sounds; other parts normal. He had been long under treatment for his cough and weakness without benefit, and was fast getting worse. I ordered the pancreatic emulsion of suet, and some other treatment; but at the end of a week he had not improved, and found some difficulty in taking the emulsion. His friends came to me about him in great anxiety, as he seemed to be rapidly sinking. I advised his removal to the south coast, and that, if possible, he should go on with the emulsion. With some difficulty, in consequence of his weakness, this advice was followed. At the end of a week he wrote me that he was now able to take the emulsion once a day, but that he felt getting worse instead of better; and his friends called and reported that they had seen him, and thought he could not possibly recover. I advised that he should put himself under a doctor in the place where he was, who could communicate with me. From this time I heard no more of him; and about a month afterwards filled up my note of his case thus: "From the last reports I fear that he sank rapidly and died." To my great surprise, however, he called upon me last week (Oct. 10th), looking like the picture of health, so stout and strong that I did not at first recognise him. He told me that when my last message reached him he was just beginning to mend, and, therefore, did not send for the local doctor; that he had been wandering about the south coast from place to place, and had taken the emulsion once or twice a day regularly for twenty-eight weeks, with no other medical treatment. On examining his chest, I found the physical signs unchanged since my first note; the dullness and harsh breathing remained, but no moist sounds and no cavities. His own idea was that his recovery was mainly due to the emulsion, because he had found that he missed it so much when he had once or twice been prevented from taking it by the delay of his parcel from London.

July 25th, 1865.—I was consulted about a little girl aged thirteen, chiefly for an opinion as to whether anything more could be done to prolong life. She had been under treatment for several years for scrofulous disease of the right knee, and during that time had taken much cod-liver oil and tonics, from which her general health had been often benefited; the knee had got worse and worse, and all hope of saving the limb had been abandoned for about twelve months by several leading surgeons, and amputation decided on. But the child's health had so completely broken down, and consumption so unmistakably set in, that, after some fruitless attempts to recover her strength, the idea of operating had also been abandoned. When I saw her, she was very thin, careworn and haggard, with hectic flush, loss of appetite, severe night-sweats, constant cough, considerable expectoration, the upper part of the right lung partially dull, breathing harsh; upper half of the left lung dull, copious crepitation and bronchophony back and front; the pulse feeble and rapid. I found that she had been steadily taking a tablespoonful of cod-liver oil twice a day for two months, but losing flesh and strength all the time. As a last resource, I ordered the oil to be taken once instead of twice, and the pancreatic emulsion of suet once.

Oct. 17th, 1865.—I was again requested to see the child for the purpose of saying whether she might now have the operation performed, as her parents thought her so much improved in health. I learned that the emulsion and oil had both agreed, and had been taken regularly since my last visit; she was rather tired of the oil, but not of the emulsion. She had gained much flesh and lost the haggard expression. Night-sweats had ceased, and the cough was so nearly well that she did not even require a lozenge. No expectoration; appetite fair. The dullness and bronchophony remained, but no moist sounds could be heard in either lung.

The length to which this report has already extended prevents me from relating other interesting cases which have occurred in private practice, and from giving some information which I have obtained regarding the subsequent course of cases mentioned in my former reports.

I am anxious, however, not to close this paper without suggesting a rational explanation of the frequent failure of our attempts to keep up that favourable change which so often occurs in a case of consumption when cod-liver oil is first administered. We all know how constantly it happens that a consumptive patient makes remarkable progress for a certain time while taking cod-liver oil, if it is well digested—a progress which might well lead us to hope that it would end in a cure; and we all know equally well how constantly this progress stops at a certain point, beyond which the recovery does not seem able to advance, and from which it too often happens that, sooner or later, a gradual descent takes place. The suggestion I wish to make is, that, assuming a defect to exist