THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. XII.]

WEDNESDAY, JULY 15, 1835.

[NO. 23.]

ON THE TREATMENT OF WHITE TUMORS OF THE JOINTS.

FROM M. LISFRANC'S LECTURES AT LA PITIE.

WHEN the surgeon has carefully examined what kind of tumor he has to treat, and is ready to commence his course, he should, as a principal point, direct his attention to the state of the viscera. There frequently exists so intimate a connection between white swellings and affections of the internal organs, that if the internal disease becomes worse, the white swelling disappears, so as sometimes not even to leave any anatomical trace; while, on the contrary, if the tumor be treated separately, the state of the viscera gets worse, so as to endanger the patient's life, while that of the swelling improves. Nay, more; we have often examined the viscera with care, and having found them sound, commenced the treatment of a white swelling, but the first step towards its cure has been the signal for the development of some visceral affection, either because the latter pre-existed in a latent state, or arose suddenly and the two diseases balanced one another, the first advancing as the second receded, and vice versâ. Hence results the important precept not to attack a white swelling without being assured of the healthy state of the viscera; and should any internal disease pre-exist, or become developed during the treatment, suspend everything until this dangerous complication has completely disappeared. If we found the swelling decrease in proportion as the other affection got worse, it might be prudent even to excite a certain degree of inflammation in the joint, and establish it there until the cure of the internal organ becomes complete.

When iodine was first employed in the treatment of white swelling, it was pretended that the new medicine rendered every other precaution useless, and that the patient might continue to walk as usual. We experimented this method, and accidents were in consequence developed, evidently under the influence of exercise. But without advising the patient to walk about, may we not at least communicate some gentle motion to the limb, in cases where ankylosis is to be apprehended? The answer to this is easy, and its principle readily conceived. When neither pain nor inflammation exists, moderate motion brings no inconvenience. Should a slight degree of inflammation exist, the surgeon must be content to communicate, once a day, some gentle movement to the injured limb; but when any attempt at motion gives rise to excessive pain, &c. we must refrain altogether; the patient can hope for nothing better than ankylosis. This leads me to speak of the conduct which the surgeon should pursue when the impossibility of avoiding ankylosis has been once foreseen, for when the latter accident is complete and irremediable,

it is at least advisable that the fixed position of the limb should bring with it the smallest inconvenience possible ; and if the ankylosis were false, the injured limb is the more readily restored, and the less it deviates from its natural position. When the tumor occupies the elbow-joint, the forearm should be demiflexed. On the contrary, when the lower extremity is affected, the leg should be kept perfectly straight ; indeed it might be even advantageous to fix the whole lower extremity with a proper apparatus. You must not imagine that this continued state of extension is very painful, for we have often employed it without any inconvenience.

If the practice we have alluded to were more generally employed, you would not see so many patients, after having been cured, compelled to drag after them a limb in a state of demiflexion, which is not only useless, but even an inconvenience, from the various shocks to which it is exposed. In the same way, if the limb were fixed in a splint in cases of coxalgia, we should avoid that enormous shortening of the extremity which it is so difficult to remedy. Finally, a precaution of great utility to enable us to observe with exactitude the effects of the treatment, is to surround the tumor with three dark lines traced by means of the nitrate of silver ; one above, the other below, and a third embracing its great circumference. The size of the limb may be taken along each of these three lines with a piece of ribbon, and this manoeuvre repeated every ten or fifteen days indicates precisely any variation in the magnitude of the tumor.

The preliminaries being thus arranged, the surgeon should commence by attacking inflammation where it exists. This is what constitutes for us white swelling in the acute stage. It is a matter of some consequence to study the character of this inflammation ; it is generally of long standing, and exists in tissues already altered ; hence we cannot expect to resolve it as readily as a healthy phlegmonous inflammation. Besides, the constitution of the patient, generally weakened by the effects of pain or a constitutional vice, does not permit us to employ sanguineous emissions to any great extent ; we must spare the patient's strength, if we wish to preserve the power of recurring again and again to these means. When the patient is robust, and the inflammation severe, we may commence by the application of fifty leeches. Under any other circumstances we do not apply more than thirty, and often not above fifteen. They should not be put immediately on the tumor, lest the irritation of the bite should be propagated to the interior, and thus hasten its degeneration ; they must be applied all round, at one or two inches from one another, and after this first application the result must be studied with care. Sometimes the inflammation begins to decrease on the instant, and as long as this favorable circumstance continues it is not to be disturbed. In other cases the inflammation remains stationary, or becomes more acute, and here it will be proper to prescribe about twenty leeches two days after the first set. We admit only one exception to this general rule, viz. when the patient is weak, the pulse small and depressed ; in such case we give the patient time to recover his strength, and we confine ourselves to the use of local baths and cataplasms. The former remedy has often the effect of increasing the volume of the tumor, but this augmentation of size is only momentary, and hence little alarming. After local bloodletting

we prescribe narcotics, applied along the inner surface of the limb ; the regimen must be strict, indeed it is right for the patient to live a good deal at the expense of his own flesh.

Such is the course of treatment we have been in the habit of constantly employing with various success. Sometimes every vestige of inflammation was dissipated in five or six weeks ; but more than once we have seen it break out with increased force at the very moment we thought it extinguished, require a new series of treatment, and persist for three or even six months ; finally, in one case we had to combat the acute stage during fourteen months ; and it was only at the expiration of this long period that we were able to employ excitants. In twenty-two months the cure was complete.

Hitherto we have supposed the surgeon to have been called to a case of white swelling which has presented manifest symptoms of inflammation ; but if these symptoms are absent from the very beginning, should we trust to appearances, and have recourse to excitants, the treatment proper in the chronic stage ? We have already seen that the inflammation may be latent, and then excitants would certainly do a great deal of mischief : it is more prudent to commence with one or two applications of leeches, in order to avoid all chance of accident. Even when the acute stage, combated vigorously, no longer exhibits any symptom, we must not be too hasty in our employment of excitants ; these might bring back the inflammation in tissues already too much under its influence ; hence we should rather give the patient a little rest, and allow him an interval of eight or ten days, when a course of treatment quite different from the former may be commenced.

The means which have been proposed for the purpose of dissipating the chronic engorgement that constitutes the white swelling, are very numerous. We shall now examine the most efficacious, study the manner in which each acts, and point out how each should be employed, or, in other words, explain the indications by which our practice has been guided. We would place in the first rank local bloodletting moderately employed. Like all other agents in medicine, this remedy acts differently according to the manner in which it may be employed. Thus, in order to determine congestion towards the uterus, and bring on the menstrual discharge, we apply advantageously a small number of leeches, or employ a small bleeding from the foot : while, to combat congestion of the peritoneum, we bleed largely from the system, and apply a considerable number of leeches. Everybody knows that a few leeches often determine erysipelas, which very seldom takes place when they are employed in numbers. Experience also proves that according to the number of leeches applied to a white swelling, in the acute stage, we can generally augment or diminish the pain as it were at will. When the inflammation exists in a chronic form, we prescribe from four to ten leeches, according to the patient's strength, with the essential precaution of arresting the hemorrhage from the bites at the end of half an hour, in order to render the congestion more sure. The result of such application is various : sometimes no effect is produced for the first few days ; but we must wait four or five days before we pass any definitive judgment, and then return to the charge. In some cases the tumor diminishes and softens on the

day following the detraction of blood ; in others, on the contrary, it augments half an inch or even more in circumference. This latter phenomenon, on the nature of which the patient must be tranquillized, is in general favorable, and shows an energetic modification in the vitality of the tumor. The tumefaction commonly subsides in twenty-four or forty-eight hours, and it continues diminishing progressively for eight or ten days together. It is also a favorable circumstance when the leeches produce an erysipelatous blush on the surface of the skin, which does not last for any length of time, and aids considerably the resolution. In some patients a slight œdema may come on, which, however, soon goes off, or is easily dissipated by compression. In other cases, finally, we have seen a very intense erysipelas develop itself : here the wished-for effect is exceeded, and we must combat this new inflammation by thirty or forty leeches more. We have said that when the leeches do not produce any change after four or five days, we proceed to a fresh application : but we must not obstinately employ this remedy without good results ; and if, after several trials, it fails, we must then turn to another. When, on the contrary, the amendment is clear, we must repeat the abstraction of blood : but here again there is a rule to be followed : thus, so long as the affection goes on well, we must not trouble the progress of resolution by any unseasonable stimulants. We wait until things become stationary ; and when one or two days have passed over without any progress being made, it is time to have recourse to new applications. The first abstractions of blood are generally followed by highly advantageous results ; but this means becomes worn out, and at length produces no effect whatever : we then choose another remedy, which is in turn worn out, and may afterwards return to the leeches, whose application is now accompanied with its wonted good effects. We should, however, point out some cases in which leeches may produce unfavorable results. We should abstain from applying them to females during the menstrual discharge, or even six or eight days before and a day after. In patients disposed to apoplexy, or attacked with some affection of the thoracic viscera, bloodletting is not proper when the tumor is situated on the upper extremity ; it is equally contra-indicated in white swelling of the lower extremity when the female is pregnant, or when she is affected with sub-inflammation of the uterus.

The most powerful resolvent next to sanguineous emissions is, without doubt, compression. Its good effects are so incontestable, that many practitioners advise it indifferently in all cases of white swelling. It cannot be denied that they have been successful, particularly in chronic cases ; but when the disease is acute, compression, like any other excitant, may give rise to a good deal of injury. We have made the trial in this hospital, and been compelled to abandon it. This, gentlemen, is easily conceived, for when compression becomes painful, even in the chronic stage, what must be its effect on a part still laboring under inflammation ? Compression is not so efficacious when the tumor is hard ; but when, under the influence of other means, softening once begins, when the subcutaneous cellular tissue appears merely infiltrated and œdematous, then its beneficial effects are best witnessed. But to produce all the advantage of which it is capable, we should know how to manage it

well, and hence it may be useful to speak a few words on the method of applying it. Like every other therapeutic agent, compression ought to be dosed (pardon the expression), if we would not depress or miss the object for which it is employed. To give you an analogy which every one will understand, the ophthalmic ointment of Desault often aggravates the inflammation of the edge of the eyelid, which, on the contrary, it appeases when mixed with three parts of cerate. In the same way, compression, moderately employed, answers very well in a case where a stronger compression would spoil everything, and *vice versâ*. We distinguish five degrees, or, to employ the word that best expresses our idea, five *doses* of compression. The feeblest is represented by a simple bandage. In the second we add cones of agaric, two inches high, as a mean by which the tumor is covered, and which are maintained by circles of the bandage. If the tumors be moveable, as we sometimes see them on the sides of a joint, we surround the base of the tumor with a ring, more or less thick, of agaric, maintained by a bandage, and then apply in the centre the cone of agaric destined to act directly on the tumor.

The third dose is given with graduated compresses, which are harder than the agaric, and compress more firmly. A degree above this is obtained with splints, or pieces of metal enveloped in linen. Finally, the fifth and last degree is *malaxation*, which consists in kneading the tumor strongly until we have developed some pain, and then compressing it with cones of agaric. The next day, if the irritation persists, it is a proof that the vitality of the tissues has been awakened, and in most cases a notable diminution supervenes: we now have the amelioration go on tranquilly, and have again recourse to *malaxation*, when it comes to a stop.

As you may readily conceive, it is a matter of the highest importance to determine the exact degree of compression that should be employed. In general it is proper to commence with the lowest degree; we may afterwards augment it according to the effect produced. This precaution is peculiarly essential where we have to treat a joint recently attacked by inflammation, and where we fear to reproduce it. If, on the contrary, we have to combat one of those swellings hard as wood, which are met with most commonly about the wrist-joint as a consequence of external violence, we may commence with the fourth or fifth degree in the first instance. We have seen a tumor at least two inches in thickness, occupying the whole external side of the knee-joint, dissipated by malaxation; the other degrees of pressure, after having produced some trifling benefit, had remained altogether inefficacious. Whatever degree of pressure we may think fit to employ, it is necessary in all cases to roll a bandage from the point of the extremity up to the tumor, in order to avoid the infiltration which it would not otherwise fail to produce. The compression must not only bear upon the engorged points, but, on an average, should extend two inches above and below them; the vessels passing to the tumor are thus compressed, and the afflux of fluids is diminished. Finally, the compression should be renewed every twenty-four hours, both because this lapse of time is sufficient for the relaxation of the bandage, especially when the tumor diminishes, and also to give the part some repose, which feels more sensibly the effects of the remedy if suspended daily for about half an hour. The action of pressure, like other agents,

wears out, and at the end of a certain time it produces no effects ; we must then have recourse to other means. If, however, we are fortunate enough to have cured the tumor by pressure alone, we must still continue its use for some time, gradually diminishing the force, until we arrive at the simple circular bandage. The medicinal agent, properly so called, will furnish matter for a second lecture.—*Lancet*.

FOREIGN BODIES INTRODUCED INTO THE RECTUM.

A VERY interesting case of this kind has been recently reported by M. Thiandière, the leading particulars of which we shall select.

Isidore Chevais, aged 22, with the object of overcoming an obstinate constipation of the bowels, introduced into his rectum a forked oak stick of the following dimensions: the longer branch was five inches ; the other was three inches and a half in length, including the large end by which the two were united. At their point of union, they were separated by the space of an inch, while the greatest distance between them was two inches. The diameter of the branches was four lines ; that of the large end which united them, half an inch. It was introduced with the large end foremost, and when the shorter prong had entered the rectum, the individual made an effort to scoop out the indurated fæces. His efforts, however, proved unavailing, and he was compelled to desist on account of extreme pain. When he attempted to withdraw the wooden crotchet he found it impossible to succeed, and adopted the singular alternative of forcing the whole of it into the rectum, under the supposition that it would be consumed with the aliments. Tormented by horrible pains of the abdomen, difficulty of voiding urine, and great disturbance of the digestive function ; overwhelmed besides with despair, and not daring to apprise his parents of his situation, he lived in constant fear of taking food, betook himself to solitude, and anxiously hoped that the cause of his sufferings would be passed by stool. Finally vanquished by his torments, he determined to seek professional aid. M. Thiandière, on making an examination, readily detected the presence of the foreign body, but it was so high that he could barely touch its lower end with the tip of the index finger. He could neither ascertain its size nor the position it occupied in the intestine. He obtained satisfactory information from the patient relative to the first point, by requiring him to provide a second crotchet of the same kind, and ascertained from him besides, the direction in which it had been introduced. An attempt was first made to extract it by means of forceps passed up through a speculum, but finding that by this means the lower end of the long branch only could be reached, it was determined that it would be useless to attempt to extract it by seizing upon that. He was on the point of abandoning the patient to his fate, when the thought occurred to him to lay aside all instruments, and trust to the hand alone. After washing out the rectum by an enema, the patient was placed with his hands resting on a chair, his breech slightly elevated, and the legs separated. The fingers, previously oiled, were cautiously introduced one by one, until the whole entered the rectum, when passing the index finger forward, and using the