A Lecture

ON

THE TRUE FIRST STAGE OF CONSUMPTION.

Delivered at the Royal Infirmary for Diseases of the Chest.

BY

HORACE DOBELL, M.D.,

PHYSICIAN TO THE INFIRMARY, ETC.

RECENT advances in our knowledge of the natural history and pathology of tuberculosis have made it essential to an enlightened treatment of the disease, that we should no longer delay making a radical change in the nomenclature of its several stages.

That which has heretofore been called the premonitory stage should, in my opinion, be at once recognised as the true first stage of consumption.*

There is no doubt, that many scientific members of our profession have for some time past recognised that the commencement of consumption precedes the formation of tubercle. But, so long as the first stage of the disease is said not to begin till the formation of tubercle, so long will there be a misunderstanding, among the majority of practical men, as to the importance of any period by which this is preceded. The use of the word "premonitory" to the stage which precedes the formation of tubercle, is the most dangerous snare that could be laid for both doctor and patient. Is it not the proverbial failing of mankind to disregard mere warnings or premonitions, and to leave everything to the last? Even in the preparation for eternity, belief in the efficacy of death-bed repentance has always had a fascination for the human mind; and in the everyday affairs of life this spirit of procrastination still more universally prevails. Who, then, can be expected to stop in the midst of the absorbing pursuits of letters, politics, commerce, and society—to change his plans, and adopt a rigorous system of hygiene—merely because he is told by his physician that there are "premonitory" symptoms of disease? that is, so far as the patient can understand, signs that he may happen at some future day to suffer from disease.

This is a matter on which we must not be satisfied because, as pathologists, we ourselves understand what we mean by the terms we use. It is essential to our own action in practice, that we establish a popular appreciation of the facts of the case. Unless our patients and their friends attach the same importance to the words in which our opinion is delivered as we do ourselves, we may as well hold our tongues; for our advice will be disregarded.

[The lecturer went on to show why the stage hitherto called by the "unalarming name premonitory" ought to be called in future the true first stage of the disease. He said:] The first point which I wish to put prominently before you, is the admitted fact that there is no possible means of ascertaining with absolute certainty, during life, the existence of a score or two of scattered tubercles in the deeper parts of the lungs. Yet the formation of one microscopic tubercle is proof of the setting in of what is now called the first stage of consumption. This alone

ought to be a sufficient reason for changing the nomenclature. It is utterly absurd, when applied to practical medicine, to make a disease begin at a point at which a serious structural change takes place, but which it is impossible to identify with certainty during life. [He pointed out that the names premonitory stage and first stage, as now employed, can have no sense except upon the assumption that the deposit of tubercle constitutes the disease, and that thus a false pathology is doubly impressed upon both physician and patient.] What, then, is this first step in the important series of changes constituting consumption? Have we any signs or symptoms indicating its occurrence upon which we can rely with any certainty at all? [He then explained his views upon the nature and cause of tuberculosis, as already published,* and said that, according to them, pure tuberculosis commences when fats properly acted upon by the pancreas first cease to pass in normal proportions into the blood; tuberculisation, or the formation of tubercle, commences when albuminoid matter is abnormally seized upon for its fat elements.] It is to this stage of tuberculosis, beginning with the defective supply of pancreatised fats to the blood and terminating when the loss of fat in the blood has gone so far that the albuminoid materials are seized upon and tubercle produced, that I wish to confine my remarks to-day. It is this which, in my opinion, ought to be called the true first stage of consumption, because it is, in truth, the beginning of the disease; whereas the formation of tubercle is only an effect of the advance of the disease. It is, in fact, the earliest step in the decay of the body, the first yielding up of the tissues to destruction, as distinguished from their normal wear and repair.

[After dwelling at some length on the importance of learning to appreciate the peculiar aspect of consumptive patients, and to identify it under a variety of circumstances, he said:] I will endeavour to give a few guides to diagnosis, which, while they have much to do with the production of the aspect, lie more easily within our grasp, and approach more nearly to the character of physical signs. Three essential elements combine to give the key to all the changes of consumption. Some indication of their existence is very easily detectable—loss of fat and of flesh, loss of strength, and disturbance of temperature and of excitability. They are easily understood if we keep in mind the nature and cause of tuberculosis; viz., defective or deficient supply of pancreatised fats to the blood. Under the head of loss of fat and flesh, he described and explained many sources of fallacy; and, under the head of loss of strength, he showed that it could be at once explained by a consideration of what are the sources of power in the organism, going at some length into the modern views of potential energy, and the relation of heat and mechanical force.

[After speaking of the distinctive diagnosis of tuberculosis, and of its relation to anemia, he went at length into the treatment of the true first stage of consumption; showing, in the first place, what would be the proper curative treatment, if the arrest of pancreatic function were detected at its onset in its simplest form, and then describing at length the many difficulties which usually complicate cases when ordinarily presented to the physician. These difficulties were enumerated under the head of hereditary predisposition; the state of the mucous lining and absorbent system of the alimentary canal; susceptibility of consumptive persons to cold; the daily vicissitudes of life influencing the emotions; bad

* I use the old name consumption, because I do not think we shall ever find a name better suited to the disease.

* Tuberculosis; its Nature, Cause, and Treatment. Churchill.

habits; unfavourable occupations and dwellings; and the imminence of tuberculisation. In the majority of cases of the true first stage of consumption, tuberculisation was just on the point of commencing when the patient was brought to the physician; and this danger must be provided against before anything else could be thought of.

[After pointing out the proper time and mode in which to use cod-liver oil and pancreatic emulsion of solid fat, and the objects to be attained by their administration, he went into the subject of diet, exercise, air, the use of quinine and of iron. With respect to the latter, he said:] Let me caution you never to give iron to a consumptive person until you have effectually supplied all deficiencies of fat to the system; and never to give iron to an anæmic person till you have ascertained that there is no defect in the supply of fats to the blood.

[Climate, or change of air, was then treated at length; the objects of climatic treatment being divided under three heads.]

1. The restoration of healthy pancreatic function; i.e., the radical cure of tuberculosis.

2. The economy of fat and carbon in the organism and the protection of the lungs from undue oxidation; i.e., provisional protection against tuberculisation.

3. Removal or prevention of catarrhal affections of the air-passages, of chills to the general surface, and of local congestions, etc.; i.e., the collateral treatment of tuberculosis.

It happens that the climates necessary for the second and third of these objects are utterly different from those required for the first; and that the climate required for the second object is frequently unfit for the attainment of the third. No wonder, then, that attempts to cure consumption by change of climate, undertaken without any clear appreciation of these important distinctions, should so often fail; and that when they succeed it should appear to be attributable to a sort of good luck. [He then explained these incongruities, showing what kind of climate was adapted to each of the objects in view; and concluded by an elaborate epitome of the chief points by which treatment should be guided in the true first stage of consumption.]

ST. THOMAS. Recent advices show that yellow fever, cholera, and small-pox, still prevailed at St. Thomas, but the sickness had much decreased during the fortnight. The statistics of the mortality of St. Thomas for the last 26 years show that the deaths this season have exceeded by 346 that of any previous season. Cholera has broken out at Grey Town, and was making frightful ravages amongst the population.

HORSE POISONING. Dr. Henry Pearson, of Ely, was on Saturday brought up on remand before the Isle of Ely magistrates, at the Shire-hall, on the charge of having poisoned two horses, the property of Mr. George S. Hall, solicitor, on January 21st. Mr. Wontner, of London, appeared, as before, for the prosecution; and Mr. Naylor, barrister, of Cambridge, for the prisoner. Professor Tuson, of the Royal Veterinary College, London, having proved that crystals of strychnine had been found in the brain and in the stomachs of the horses in quantity sufficient to cause their death, and other witnesses having been examined, the magistrates committed the prisoner for trial, accepting bail—the prisoner's own recognizance of £500, and two sureties of £250 each. Bail had not been procured up to the rising of the Court.

ON THE MODERN TREATMENT OF FRACTURES OF THE LOWER JAW.

By BERKELEY HILL, F.R.C.S.,

Assistant-Surgeon to University College Hospital, and Instructor
in the application of Surgical Apparatus in
University College, etc.

THE lower jaw is most commonly broken at one point only, and that near the canine tooth; nevertheless it may be broken at any other part, and its fragments comminuted. In simple fracture, the amount of displacement is usually very small; but again, it is sometimes considerable and very difficult or impossible to reduce. This displacement is of two kinds, *vertical* and *lateral*. Vertical displacement is caused by the direction of the force breaking the bone, and by the muscles in the floor of the mouth drawing one fragment below the other, which, no longer subject to their influence, is lifted by the elevators. The vertical displacement is also, to some extent, determined by the direction of the fracture; if that be downwards and forwards, the broken end of the anterior fragment is sometimes tilted up sufficiently to produce unevenness of the line of the teeth, without either piece being very much removed from its proper relation to the other.

The lateral displacement varies much; the fragment carrying the symphysis being driven inwards in some cases, outwards in others. Malgaigne says this depends on the condition of the fractured ends, whether they are beveled backwards and inwards or backwards and outwards. In the first condition, the forward fragment would slip outwards; in the second, inwards. Should there be a double fracture, the part that is separated from the rami sinks, and may slip inwards or outwards indifferently.

Thus, the various positions into which the fragments may fall are:

1. Simple fracture in the anterior part of the bone with no, or very little, displacement.
2. Single fracture, with elevation of the posterior part above the level of the other.
3. The same, with the addition of lateral displacement.
4. Double fracture, separating both sides from the front of the bone with backward and downward displacement, and with or without loosening of the teeth and comminution of the fragments.

Any of these may, of course, be complicated with injury to the soft parts.

Treatment. Much attention has been paid by surgeons to the treatment of this fracture, because the methods hitherto pursued do not, in many cases, give satisfactory results. Hence, numberless plans have been tried with more or less success.

The various modes adopted by different surgeons may be collected into four heads.

1. The external bandage and splint.
2. Ligature of the teeth, or ligature through the broken ends of the bone itself.
3. An interdental splint in the mouth, and an external apparatus under the chin, between which the jaw is fixed.
4. An interdental splint fixed to the teeth only.

1. *External Bandage and Splint.* In simple fractures, near the canine teeth, with little or no lateral