CLINICAL LECTURE

ON
ALCOHOLISM.*Delivered at Guy's Hospital, London.*

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THERE is no room for a lecture on this subject in the usual courses, except, perhaps, in that of *Materia Medica* and *Therapeutics*, and therefore I take this opportunity of bringing it before you.

The special interest in our case is that, in addition to the ordinary symptoms of chronic alcoholism, the patient has spinal paralysis. It is not uncommon for the cerebro-spinal system to be involved, yet it is not so sufficiently recognised as it should be, and therefore it is that I draw your attention more particularly to this case. I do not know of any subject that is of greater importance to consider, both with reference to diet and medicine, than that of alcohol. You must be well acquainted with the evil effects of drinking in this great city, whether you look in the medical wards and see the patients brought there through it; in the surgical wards, and notice the number of accidents resulting from it; in the prisons; in the workhouses, where some of their wretched occupants owe their downfall from superior stations to it; or in the lunatic asylums, where 12 to 15 per cent. of the inmates have been broken down by it. The subject, therefore, must be one of the greatest importance. What are the physiological effects of alcohol? It is very remarkable how little we know of them, when it is considered what an enormous quantity of spirits is consumed. I believe twenty-five millions of gallons, at least, are made in this country every year. It is still disputed whether it acts as a food or not. A few years ago, it was said that it all passed out of the system as alcohol, or as some of its products of decomposition. These authorities, French chemists, said that it was eliminated by the skin, urine, breath, etc. They used chromate of potash, which is turned green by alcohol, as their test for it. I have read lately of a test in the French papers, where, to detect alcohol in the brain, this was boiled with benzoic chloride, and, if alcohol were present, it was changed into benzoic ether and recognised by its smell.

But the amount of alcohol excreted in this way is so infinitesimal that the remainder must be in the body, and there can be no doubt that it is oxidised; and this supports Liebig's theory that it is a food for the lungs.

Although it may not be directly a food, yet indirectly it might be so; for, if two men be taken, and one have nothing whatever to eat, and the other have alcohol given him, I presume the latter will remain alive the longer. It must certainly be oxidised; and persons who take a large quantity of spirits grow fat, as we shall presently see.

If, however, we do not understand its physiological workings, yet we can see the effects of it on the system for all practical and clinical purposes. In the first place, does alcohol appear to be a necessary food? There can be but one answer. There are many nations who do not take it, and some whose religion forbids its use. Is it necessary for us? Well, you know many in this country who do not take any. It is not a necessity then; it is for this we have to contend, and, if I can impress this on you, the hour will not be wasted. English people are, however, too often brought up with the idea that it is a necessary article of diet. Patients will take their wine and spirits even when they are doing themselves harm, and, if you object, will ask, "What must they do?" You tell them to do without them; to which they will reply that they must take something. I want you to get it thoroughly out of your minds that there is any *must* in it, and start afresh with the idea of its non-necessity.

Let children always live and grow up without alcohol: in after years, when we pass an artificial life, there may be reasons for taking it; but remember, even then it is not an absolute necessity. Start with this principle; let your patient, even an adult, try to do without it, and then, and if circumstances seem to suggest it, let him have his glass of wine. I do not say that a number of persons can do entirely without any in our present mode of living, but let us regard alcohol in its true light, as a luxury, as we do tea, tobacco, etc. If we do this, we are safe. I cannot recommend you to live entirely by rules and natural laws, and give up all the conventional luxuries of life, for then

we should dismiss more than half the dishes from our table. I do not want this to come about, and, for my own part, I like a glass of wine or a cigar as well as other people. There is in to-day's paper an account of some vegetarians who never eat any meat. I do not advise you to follow their example, but it shows you that meat is not essential to life. We might, I have no doubt, live on what Dr. Johnson states Scotchmen and horses do, viz., oats.

What are the effects of a small dose of alcohol? It is said to be stimulant. If a man be jaded and tired, it gives a sort of temporary support; a little beyond this point, and he is depressed, the stimulant effect lasting only for a time. There is a dilatation of the vessels and warmth of the surface taking place; at the expense, however, of internal heat. In large doses, the temperature goes down. On this point read two cases mentioned by Mr. Carrington, in that admirable essay of his on Alcohol in *Guy's Hospital Gazette*.

Do these small amounts really stimulate and help one in his work? I ask a sportsman; he says he gets tired, and then has lunch, after which he feels comfortable and jolly, but never shoots another bird. It is the same with billiard-players. A violin player in my house was advised to take a glass of wine for his excessive nervousness, but refused, saying, "I know I shall lose all my nervousness, but I shall also lose my touch, and my notes will be blurred, and I shall be the last to find it out, although it will be very apparent to others."

You see, therefore, it does not stimulate or add edge to our accomplishments; but we might ask, does it add to our strength, or enable us to endure longer? To answer this, I will refer to a little book in my hand by the late Dr. Parkes, entitled, *On the Issue of a Spirit Ration during the Ashantee Campaign*. This book contains the reports of the medical officers on the effects of spirits doled out to the men. The result is given in the short preface written by Dr. Parkes, to the following effect.

"When, as frequently happens in campaigns, soldiers are marching nearly the whole of the day, and can obtain their regular food only late in the evening, what can be given to lessen the sense of fatigue, and to enable them not only to continue the march, but to be ready for any emergency which may arise? The usual resort is to a spirit ration, and there is no doubt that for a time this exerts a reviving effect. But is it the best thing which can be given, and are its advantages without alloy? I think it can be shown that it is not a perfectly reliable aid, and requires, when used at all, to be so with a full knowledge of its mode of action. The first effect of alcohol when given in a moderate dose (for example, what is equal to one fluid-ounce of absolute alcohol) is reviving; but this effect is transient. As shown in the report, the reviving effect goes off after, at the utmost, two-and-a-half miles of additional march, and sometimes much before this; then the previous languor and sense of exhaustion not only return, but are sometimes more intense, and if alcohol is again resorted to, its effects now are less satisfactory. Its reviving power is usually not so marked, and its peculiar anæsthetic and narcotising influence can often be distinctly traced. The men feel heavy, dull, disinclined to march, and are less willing and cheerful. It is clear, then, that alcohol is not a very trustworthy aid; for, supposing a commanding officer having marched twelve or fourteen miles, and desiring to cover ten more miles, finds his men weary, and not being able to halt and feed them, orders an issue of spirits of an amount sufficient to revive, but not to depress; the first effect will be good, but, in less than an hour, his men will be as weary as before, or probably more so. If, then, he reissues the spirit within so short a period of time, it is certain that, in the case of many men—perhaps the majority—the marching power will be lessened. Even the reviving power of the first issue is not always so considerable as might be supposed; and, indeed, I have been surprised to find how little good effect it has sometimes produced."

The fact is that alcohol, as usually taken, is not a stimulant at all. It is a depressant and narcotic. People are simply under a delusion when they think it otherwise. We ought to change its name, and we should then get a proper notion of its character. I believe this change would tend more than any other single circumstance to make people cautious in its imbibition. It is taken for the same reason as chloral, and as opium in other countries. If you regard it as a narcotic, you will then better understand all the consequences of its use. A man in a drunken brawl overnight gets his teeth knocked out. The next morning, he has no recollection how it occurred, or in what manner he could have met with the accident. Cases such as this are constantly being brought into the police courts, and to some people seem almost incredible.

Alcohol, you see, is an anæsthetic. The man we have just mentioned has felt no pain. In smaller doses, as you all know, it benumbs not only the sense of touch, but that of sight and taste. Every man

* Reported by Mr. Alfred Pain.

who has drunk much wine feels that he has lost his taste for the time. He does not know whether he is taking good or bad. "Every man at the beginning doth set forth good wine; and when men have well drunk, then that which is worse." If it were a stimulant, your taste ought to be more refined. It seems to be an utter absurdity to suppose that human nature can crave after a stimulant. For what are people craving? For what is a hard worked man longing? not for a stimulant, but for holiday and repose. It is for repose that every one is seeking. Some miserable people even long for death, "where the weary are at rest". Is not the cry of the lotus-eaters as far reaching as humanity itself: "There is no joy but calm." It is contrary to human nature to crave for stimulants. The idea is absurd; and the more one knows human nature and its history, the more one wonders how such a name as stimulant could be given to any substance which has had so powerful an influence on the human race as alcohol. It might be known that anything so craved after must be of a soothing, benumbing, or dulling nature. People say they feel better after taking alcohol. Of course they do; one does feel better.

If any of you, whilst working up for your College or Hall, get down-hearted, and take a glass of wine or spirits, I have no doubt you feel better; but would you go on with your work? or, would you not go to sleep, or take the newspaper and sit over the fire? If a man have a racking pain in his head, a strong glass of brandy and water will often drive it away: a proof of its narcotising effect on the brain. A man worn out with anxiety and pain, does he want a stimulant to increase these feelings? Is he not making use of a misnomer when he takes a stimulant to drown his sorrows in the bowl? Do not the lower orders, as in an Irish wake, know the benumbing influence on grief. Is it likely they would have recourse to a drink in order to increase their susceptibilities? If it were a stimulant, it would bring out our faculties; but, instead of this, it paralyses our intellect and then allows all the bad passions to have free play. This is the meaning of *in vino veritas*, just as a madman loses his will and control by his higher faculties becoming paralysed.

An immense evil has been perpetuated by giving alcohol a wrong name. It is called a restorative and stimulant; but this it is only to a very slight extent and under special circumstances. Its general effect, and that for which it is almost universally used, is for its benumbing action. I want you to think of it as a depressant, an anæsthetic and narcotic rather than as a stimulant, and you will then get an insight into its injurious effects on the human body.

As a medicine, of course, it is a good one. It is excellent as a sedative. After trying opium and chloral without success, alcohol will often give a good result in the severest neuralgia. It lowers the temperature in febrile conditions, sometimes two or three degrees. This is especially the case in typhoid fever and pneumonia. A quick pulse and high temperature call for it. There was an old man in this state last year in the ward; and I believe his life was saved by the large quantities of brandy that he took. It seems to prevent tissue-change; and large quantities seem to make a person fat. There was one case of it in this hospital some time ago, of a woman who had suddenly taken to drink spirits and became inordinately fat. It is curious that, with all my reluctance to order alcohol unless I clearly see its necessity, I never find anyone but myself order spirits of wine as a food in order to promote the growth of fat; but its effects in this respect are very striking. Little children wasting away, such as those who are not suckled, may have cod-liver oil and steel wine given them, and yet still waste; but, if put on alcohol, will often get rapidly fat and well. I have now seen several such cases.

What are the effects of alcohol, if taken in excess?

Now, I am not going into the subject of drunkenness; but may mention that some of the effects are possibly due to the impurities put into the spirit. The adulterations of beer, I have no doubt, give rise to other symptoms than those arising from taking the genuine liquor. It is a horrible thing to contemplate that rich people, holding high positions in parliament and society, should be gaining large incomes out of houses where poison is sold. An officer of a regiment met me one day, almost in tears, because one of his men, under the influence of drink, had committed a murder; and "I believe", he said, "the beer was dugged, and no one is to be punished but the man who drank it". In Paris, there is a terrible liquor called absinthe; and patients are often being brought into the hospitals mad through intoxication from it.

Then, besides ordinary drunkenness, we have dipsomania; a disease for which many want to legislate. The subjects of this are not, for a time, responsible persons. They feel a craving coming on, and sometimes have strength of mind to go at once to a medical man and ask him to take them into his house, or shut them up in a lunatic asylum to restrain them from committing themselves. I once had a clergyman in

a country district affected with this under my care; and he had nearly ruined himself. When the fit came on, he used to go to the village ale-house, and take glass after glass until he was drunk. Now, knowing when the fit is approaching, he rushes away from his home and takes the train for London. There is no use in talking to that man; he is as well informed as you; he merely asks for assistance. There is a little book published on this point, styled *Who is to Blame?* It is well worth your while to read it. It is an account of a man who gets drunk, shuts himself up in an asylum, but, as there is no power to retain him, he rushes out when the fit comes on him, goes to the public-house, then home, and kills his wife.

Then, there is chronic alcoholism, bringing about dyspeptic and other symptoms only too well known. I have no hesitation in saying, although I am speaking against the evil effects of alcohol, that a considerable part of my income is derived from the drinking propensities of my patients. Every day some young man comes to me, with mottled face, yellow eye, and red tongue, saying the first thing in the morning he is sick, and the vomit sometimes streaked with blood; his bowels are loose, and he does not eat his breakfast. I have then heard quite enough to inquire how much whiskey or sherry he takes at 11 A.M. You may have observed that whiskey has taken the place of brandy in the medical dietary. I have failed to discover the reason, so I suppose it is a secret of the distillers. He, of course, remembers well the ominous hour of eleven; and you then have only one duty to fulfil—i.e., to tell him he is killing himself; and, if that be his object, he had better continue in his course. If not, he must desist; and you will assist him in his endeavour.

If the practice continue, the liver undergoes cirrhosis, and the kidneys become granular; and in some cases there is a special tendency for the cerebro-spinal system to be affected. Thus, in delirium tremens, long before the attack, a man is foolish and half-witted, what is called a good-natured fool. The brain wastes, and weighs several ounces less than it should. This was figuratively expressed by Shakespeare when he said—"Oh, that a man should put an enemy in his head to steal away his brains". The spinal cord also is attacked, and a paraplegia may result, so that the popular saying is quite true, that some persons get drunk in the head and others in the legs. The effect on the head is very well-known; that on the spinal cord does not appear to be so readily recognised.

Alcoholic paraplegia is generally found in women of about the middle age of life. It is ushered in by pains in the limbs, then sensation may be partially lost, at the same time some want of power to move them. So you see the chronic action of alcohol resembles much its acute temporary effect where the man getting drunk is narcotised, foolish, and loses sensation, so that one can do anything with him, his hand trembles, he cannot find his house in the street, fumbles in his pocket for his key, and his vision is so indistinct that he declares some one has run away with the key-hole.

Alcohol produces a chronic inflammation of the brain and cord with their membranes. These latter are thickened, and the nerve-centres waste and often become what is called sclerosed. It is very difficult to say when a functional malady has become an organic disease, so that in these cases, however bad they may appear, there is a possibility of ultimate recovery.

I had an instance of this lately in a lady. Her husband was away; she had no children, and was fond of going to the sideboard. When I saw her, she was in bed, quite childish, and unable to move her legs; and had, besides, many of the other symptoms of chronic alcoholism. I considered the case hopeless; but, on leaving off all stimulants and the renewal of good food, she got better, and is now walking about. The great thing you have to do is to get rid of the cause, and have no tampering with it whatever. Women of middle age, at the change of life, have a number of aches and pains, and have recourse to the doctor. He advises a little stimulant, which they soon double, and the case terminates in two or three years. Here is our patient, Sarah N., aged 43. She has had children and miscarriages. Her nervous system is excitable. Seven months ago, she was out of health, lost her appetite, had none for breakfast, and has since had morning sickness. For the past six months, she has been unable to take any solid food. She goes to a doctor, medicine is prescribed without benefit, and brandy and ice are ordered if sickness continue. This advice she followed, and has been living principally on brandy for the last six months. I am not reflecting on the doctor, and I do not say that he ordered it; but it is by no means unlikely that he did, for I am sorry to say some of us do prescribe in a very careless way, and without due regard to the consequences. Four weeks ago, she passed blood by the bowel; this was Nature's effort to unload the gorged liver. She has had melæna more or less until now. She has a large liver, anorexia, a certain amount of numbness in the legs, and an almost total inability to stand. All

stimulants have been left off, and a tonic given. This treatment, you will say, is founded on common sense; but in private practice it seems difficult to follow. You will find a certain amount will be cut off, but not all; a little must be given, just to keep the patient going. I believe this to be a great mistake, as experience proves. I saw a friend's wife some time ago, who was dying from alcoholic poison, and yet he allowed her to have a little, just to keep her alive for a few days longer. I stopped it altogether, and she was sitting at her dinner-table a fortnight afterwards. Why not stop it all? The patient is saturated with the poison, and therefore the sooner he is free of its deleterious influence the better. I have been in practice a great many years, and I have never seen, nor have I heard, although making inquiries, of any harm resulting from the sudden and complete withdrawal of alcohol. What do surgeons of prisons tell us, who have a dissipated class of people put on bread and water; or the medical officers of workhouses, who put the tramps on "skilly"? They say they never see delirium tremens. It used to be said that delirium tremens and other evil effects follow the sudden withdrawal of alcohol; but I have never met with such a case, nor do I know anybody who has. If it be said that the patient will not eat, nor take anything else but stimulants, let him go without eating. One of the worst cases of apparently hopeless drunkenness I ever saw was in a fellow-student. He was in bed, drinking brandy and champagne. He knew my voice, but could not see me—was what is termed blind drunk. I would not have anything to do with him until the wife promised to have all wine and spirits taken out of the house. This was done. By-and-by he asked for some, but could not get any given him; then he tried to get up, and tumbled out of bed on the floor, where he was very sick. He then went to sleep, and, on waking, wanted something to drink; and a little beef-tea was given. The following day or so, he took some meat, and was soon driving about in his brougham, seeing his patients. That man would have died, had he been left in the hands of his friends. As to medicines, I am very fond of the medicine I prescribed in this case—nitric acid, capsicum, and nux vomica. The latter seems to give tone to the stomach, and the patient also seems roused by it. I believe it is a favourite constituent of the draughts they style "pick-ups", sold in the chemists' shops at the West End of the town.

The time has now expired, but one might go on for a week lecturing on the effects of alcohol. In conclusion, let me address you, as members of our noble profession, to endeavour to use all your influence to put a stop to this growing evil, this horrible curse of drink. More solemnly still I am bound to add, with this example before us, do not for self-interest be blindly guided by your patients' wishes, and especially by women who have arrived at the change of life, and order them stimulants or allow them to continue in the excessive use of what you find them already taking. You must clearly see they are following an artificial system, which must soon have its end. I have, unfortunately, seen too many instances of this disastrous method of treatment. We witness the commencement of a plan which is thought to be only a temporary measure, but which soon becomes a habit, and the end can be as clearly foretold in two or three years' time as any other natural event. Be always careful how you order the so-called stimulants.

MILE END OLD TOWN.—There were 4,005 births and 2,077 deaths, the annual birth-rate being 40 and the death-rate 20.77 per 1,000 population; upon which Dr. Corner remarks that a high birth-rate and a low death-rate have obtained for many years in his district. He regrets that he cannot give a complete statistical report for the year ending March 1876, in consequence of not having been supplied with the death-returns from the local registrars. The death-rate from the seven chief zymotic diseases was 4.5 per 1,000 population, and about 25 per cent. of the total deaths, which is high. The number of inhabitants per acre in the two districts into which the hamlet is divided is as high as 211.6 in one (the Western), and 122.4 persons in the other (the Eastern); but the death-rate in the least crowded district is higher than in the most crowded, that of the latter being 18.1, and of the other 22.5. Perhaps the population has increased since 1871 to a much greater extent in one than in the other, or more probably from the deaths in the workhouse, which is situated in the Eastern District, not having been distributed *pro rata* to population over the whole district. The death-rates of infants were about equal, but there were more deaths proportionately from infectious diseases. Dr. Corner thinks that the modern system of metropolitan drainage "is a greater source of atmospheric pollution than the old cesspool system with its local abominations", as the sewer-gases now escape from the sewers into the streets and houses. He also considers that there is much overcrowding in some parts of the district, and that healthy dwellings cannot be expected under present conditions of living and of constructing houses.

ABSTRACT OF A CLINICAL LECTURE ON THE DRESSING OF WOUNDS.

Delivered at the Westminster Hospital.

BY RICHARD DAVY, F.R.C.S.,
Surgeon to the Hospital.

GENTLEMEN,—For the last three years, as many of you know, most of the wounds received into my wards have been exposed to the air without any dressing whatever; and we may now fairly judge of the results obtained by this method.

The following is a list of the excisions and amputations performed by myself during the past two years: Excision of hip, 2; of knee, 5; of shoulder, 1; of elbow, 3; of os calcis, 1; of astragalus, 1; of cuboid bone, 4; amputation of thigh, 1; of leg, 4; Syme's, 5; Chopart's, 2; of fingers, 1; of mamma, 3—total, 33. These cases were treated by the open method, and no death resulted.

But, without asking you to pin your faith to any special style of dressing, I will briefly recall to your minds some of the ancient and modern procedures, and tell you why I prefer the method of the open treatment.

Nothing can cap the elaborate detail of ancient surgical dressings; layer after layer of compounds were heaped upon the raw surface; success was supposed to result in a direct ratio to complexity. Surgical practice ran a race with religious observances; both were highly complicated, unnecessary, and distorted the simplicity of truth.

Here is a surgical specimen.

Ambroise Paré, in 1545, writes: "When I first came to Turin, there was there a Chirurgion farre more famous than all the rest in articially and happily curing wounds made by gun-shot; wherefore I laboured with all diligence for two yeeres time to gain his favour and love, that so at the length, I might learne of him, what kinde of medicine that was, which he honoured with the glorious title of Balsame; which was so highly esteemed by him, and so happy and successful to his patients; yet could I not obtaine it."

On Paré leaving Turin, he says: "Wherefore I went unto my Chirurgion, and told him that I could take no pleasure in living there, and that I intended forthwith to returne to Paris, and that it would neither hinder nor discredit him to teach his remedy to me, who would be so farre remote from him. When he heard this, he made no delay, but presently wished me to provide two Whelpes, 1 pound of earth-wormes, 2 pounds of oyle of Lillyes, sixe ounces of Venice turpentine, and one ounce of aqua vitæ. In my presence he boyled the Whelpes put alive into that oyle, untill the flesh came from the bones, then presently he put in the Wormes, which he had first killed in white wine, that they might so be clenched from the earthy drosse wherewith they are usually repleate, and then hee boyled them in the same oyle so long, till they became dry, and had spent all their juyce therein; then hee strayed it through a towell without much pressing, and added the turpentine to it, and lastly the aqua vitæ. Calling God to witnesse, that he had no other Balsame, wherewith to cure wounds made with gun-shot, and bring them to suppuration. Thus he sent me away as rewarded with a most pretious gift, requesting me to keepe it as a great secret, and not to reveale it to any."

This diabolical dressing Paré recommended as a fit medicine to procure the falling away of an eschar.

Sir Astley Cooper, in his *Lectures on Surgery*, spoke thus: "It is curious to see the difference between the mode of dressing stumps now (1830) and that adopted a few years ago. The old practice was, after the adhesive plaster had been applied, to put some lint, then plaster again, after that tow, and, lastly, over the whole a cap of flannel. If a surgeon were to do this now, he would be laughed out of the operating-theatre, and very deservedly too, because he would prevent the success of the adhesive process by unduly heating the limb. All that is necessary to do is to apply three strips of adhesive plaster over the wound, and one circular piece; if the weather be hot, to apply the spirit of wine and water lotion; and, if it be cool, to keep the limb quiet."

How marked has been also the change in medical practice from the old-fashioned doses of physic (containing admixtures of the most abominable compounds) to the rational treatment of disease by prevention, sanitation, and change of air and scene. But the thought of drugs reminds me of a clinical study of much interest, viz., the dressing of wounds by internal remedies, such as the treatment of wounds of