On the forms and varieties of alcoholism

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ON THE FORMS AND VARIETIES

OF

ALCOHOLISM

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In no field of modern medical research has greater progress been made, both as regards correct diagnosis and rational treatment, than in the study of the varieties, and a correct knowledge of the causes, which modify and characterize many of those pathological conditions, which have hitherto been too generally regarded as separate and complete in themselves, instead of generic terms, descriptive of morbid states embracing many species.

Not only is this true of certain general classes or groups of diseases, but especially so, in many of those affections which occupy a position distinct or peculiar to themselves, even in the nosology of the present day.

Up to the period of the last quarter of a century, the prevailing fault of medical research has been to generalize rather than specialize. This was due chiefly to the want of time or
opportunity to investigate the varieties of many diseases, which, however well known as a whole, had never been studied separately or in their various phases.

At the present day, a great change has taken place in this respect. Not only has more time and attention been devoted to special departments, but the division of labor has so enriched the common stock of knowledge, that Medicine has justly asserted her right to be regarded as a Science as well as an Art.

In no department has this marked progress been more clearly shown, than in the minute study of the various diseased conditions of the Brain and Nervous system, and in the consequent success which has attended the treatment of this intricate and obscure branch of medical pathology.

In the remarks which we propose, at present, to offer we shall endeavor to illustrate our meaning, by a brief sketch of the pathology of a condition which is so closely allied to some of the diseases of the Brain and Nervous system—and is so frequent a cause of them, that it may almost be considered as one of the forms of insanity itself. It is scarcely necessary to add that this condition is known under the appropriate term of Alcoholism.

Under this general term, if we exclude the milder forms of intoxication, are included the two forms of the Acute and Chronic, which although both dependent upon the same cause, are widely different in symptoms, progress, termination and treatment.

Although doubtless known from the earliest periods of history—for since the command to "Look not upon the wine which is red," both of these forms of the disease, has un-
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doubtedly existed—it may appear strange, that, up to a very recent period, no scientific account of this disease has been handed down to us. The Acute form was no doubt classed as one of the forms of madness—as the term "mania a potu" would indicate—and it was not until the year 1849, that Dr. Huss investigated and published his researches on the Chronic form. (Hammond on Diseases of Nervous System). Let it not, however, be inferred from this, that we would convey the impression, that either "Acute" or "Chronic alcoholism," are new diseases, or were seldom seen until the birth of the present generation. Far from it. Our ancestors no doubt were often as "drunk as lords," and their forefathers were "fond of strong potations," and sometimes dreamed dreams and saw visions, which "struck more terror to their souls," than even the hump-backed tyrant beheld before the fatal battle of Bosworth field. All that we intend to assert is, that the disease has never been accurately explained, or scientifically studied until within a very recent period. Let us then first briefly enumerate the varieties which at present constitute what we call Chronic as distinguished from Acute alcoholism.

Taking as our guide, the distinctive characteristics as laid down by Dr. Hammond, which conform to our own personal experience for the last fifteen years, we would enumerate four varieties of this form, viz:—the tremulous—the anaesthetic—the convulsive—and the hyperaesthetic.

Each of those varieties, as their names indicate, are characterized by peculiar predominant symptoms, and as we propose to show, are dependent upon different exciting causes. A full description of each, will be found in Dr. Hammond’s work on “Diseases of the Nervous System,” and we shall
therefore not stop to enter into a more minute detail of their special symptoms. A summary of a few of the chief characteristics of each will suffice.

In the first, the trembling and unsteadiness of the limbs—especially of the upper extremities—the loss of the power of co-ordination of movement—inability to hold objects, without a special concentration of attention—and a general impairment of the nerves of sensation, constitute the well marked features.

The type of this form Huss describes as *paralytic*.

The second variety is characterized by "a perversion or loss of sensibility" from the commencement. The sense of feeling is more or less impaired, and in its more advanced stages all sense of pain is obliterated. With this—*anaesthesia*, there is also loss of a motive power.

In the third form—the convulsive symptoms—chiefly of an epileptic character, are the prominent feature. These do not generally occur, however, until the disease is fully developed, and often disappear as this form of chronic alcoholism becomes more confirmed.

The last variety is characterized by a preternatural development of the sensibility of the skin, and often of the special organs of sense.

These constitute what may be called the *physical* signs of this form of Alcoholism, and we owe our knowledge of them as distinct *varieties*, to the researches of modern times. The *mental* features (so to speak) of each of these states, have been found to vary, not only with the peculiar form of the disease, but as Magnan has shown, both in this, as well as in the *Acute* form, with the *kind* of alcohol
which has been ingested. Among the most prominent of these, are those which affected the intellect, the emotions and the will. (Prevost. *Alcoholic Delirium*). If to them, we add a change in the general character—or rather a perverted exaggeration of the true character, as illustrated in irritability of temper, despondency, want of veracity or principle perversion of the sense of right and wrong, and impairment of memory, we have a group of mental signs, which together with the physical just referred to, will be sufficient, with the previous history of the exciting cause, to mark out a clear dividing line, between this and the acute form of the same disease.

Hallucinations and delusions, generally of a painful or depressing character, usually accompany or follow in the train of symptoms enumerated. When we come to speak of the exciting cause—which we shall presently do in our remarks on the Acute form—we shall more fully point out how the different kinds of alcohol exert their specific power in the development of one or more of these varieties. For the present it will be sufficient to state that the epileptiform, or convulsive variety, has been generally found to follow the use of inordinate or long continued indulgence in absinthe; the amnesthetic, from beer or fermented drinks; the hyperaesthetic, from brandy and gin; and the tremulous, from mixed liquors and wines.

These are, of course, merely approximative conclusions, and not invariable, fixed facts or results, for the simple reason that few habitual drinkers confine themselves to one kind or variety of alcoholic beverage.

In any of these varieties death may ensue, either suddenly from organic lesions or injuries to the Brain and Nervous
system, or from intercurrent and accidental complications; or it may occur more gradually from nervous exhaustion, arrest of assimilation, or other functional disturbance. As a general rule, individual vitality plays a large part, both in the suddenness of the termination and the duration of the disease.

Of the two forms this is certainly the one in which nature holds out the longest, and except in those cases of periodical acute attacks, in which the intervals are sufficiently long to allow a thorough re-establishment of health, this is certainly the one in which longevity, whenever attained, is to be looked for. From this very brief and superficial outline—all that our time, however, will allow—we pass to the consideration of the Acute form.

By whatever name we designate this, whether as delirium tremens," "mania a potu," "folie alcoolique," or the more recent, and to us preferable, term, "Acute alcoholism," there need be no minute description of its general features and mode of attack. And yet, in spite of the general knowledge and familiarity with the disease in question, it may with truth be said, that there is much still to be learned, and more to be unlearned than is either recognized or commonly understood, even by those who profess to be familiar with it.

Like the Chronic form, this has its varieties which are equally well marked, and which are modified by similar causes, and perhaps even to a greater degree.

Before we proceed to the notice of these it may be well to offer a few remarks upon the modifications of the phenomena of this form of the disease, as dependent upon the kind of alcohol which produces them. Our knowledge of
this fact is due to M. Magnan. In some countries, as for instance in France, according to M. Magnan, the difference is great "between Alcoholism, in its acute form, in the working-men of the cities and that of the peasants in the wine growing districts." This difference he attributes to the fact that among the former the ordinary drink is brandy, or poor wines diluted with alcohols distilled from corn, beet-root or other deleterious substances; while the latter class as a general rule, drink unadulterated wine, which contains its proper alcohol (ethylique), with other active principles, such as tannin, which are not only harmless, but in a measure correct its poisonous action.

In Scotland, says the same writer, this form of alcoholism is attended with graver results, on account of the use of the pernicious residuum, which is used in the distillation and refining of the national drink — whisky. The pernicious effects of absinthe, due chiefly to the poisonous form of the alcohol which is its basis, we have already noticed. The same may be said of arrack and other drinks. In our own country, as well as in England, a similar cause has been assigned for the marked prevalence of this disease. In fact it is now generally regarded as a conceded fact "that the various phases and varieties of Acute alcoholism are as much determined by the kind, as the quantity of alcohol ingested into the system." In proof of this, we need only mention that M. Cros, in 1863, made known the poisonous effect of starch-alcohol. In 1873, M. Rabateau demonstrated the fact, that alcohols were dangerous in proportion as their atomic composition was more complex; and M. Dujardin Beaumet and Augigee arrived at similar results, from the study of the effects of the four principal forms of alcohol—the ethylque, prophylique, butylque and amylique. It was established by their experiments, that amylique alcohol was four times more poisonous than the ethylque, and
also that the toxical phenomena, differed not in nature, but in degree of intensity, as the proportions of carbon and hydrogen were increased. (Magnan on Influence of Alcohol on Mental Diseases).

It has also been recently proven that besides alcohol, in one or other of its various forms, there are many other deleterious substances such as fusel oil and coloring matters that are no less especially poisonous.

These facts will, we think, be sufficient to establish the point, that the kind as well as quantity of alcohol ingested, are essential factors in the production of the varieties of the form of the disease which we are now discussing. There is no doubt that idiosyncrasy, temperament and other hereditary or acquired predispositions, also have a marked influence in the production of the characteristic features.

We shall therefore now address our remarks, without farther digression, to a brief summary of some of the varieties of the Acute form.

Of these there are certainly four, if not five, viz: the simple acute or apyretic—the acute febrile or grave—the acute maniacal—and the symptomatic acute, dependent upon transmission or intracurrent affections. The first two and fourth were specially noticed and described by M. Magnan, while the third form, has not, as we are aware, been specially mentioned by any recent authority.

A brief notice, will be all that our space will allow of the characteristics of each of these forms.

Under the common term of "Delirium Tremens" the first variety, will be sufficiently well known. For instance, is we find hallucinations, usually of a fearful or grotesque char-
acter, great nervous tremor of the hands, profuse perspiration, injected eyes, quick and rapid pulse, and general restlessness. *without* febrile disturbance, we have a well marked example of the *simple Acute* or apyretic form. It is a mistake, as is generally supposed, that the third or fourth attack of this form is usually fatal. We have had numerous cases, under our own care, who have passed safely through their twelfth or fourteenth attack, and in one instance the twenty-third well marked paroxysm. There is not, as in paralysis, any special fatality, attached to a certain number of attacks—but the gravity of the case will be determined by its form, and the resisting powers of the constitution. There is one important fact, however, to be noticed here, and that is that the pulse or temperature of the skin is not always to be relied upon, as an indication of fever—as Magnan has pointed out,—but that we must depend upon the thermometer as our guide. If to these symptoms we add not only a trembling of the limbs, the tongue, and muscles of the face, but a *general tremor* of all the muscles of the body, together with a rapid elevation of the temperature, as indicated by the thermometer, we will have an instance of the *second* variety, and generally speaking a serious form, although the hallucinations may even be not so well marked as in the first; and if the tremors continue, especially those of the muscles of the body, after or during sleep, and if there is no diminution during the second or third day, the prognosis is usually unfavorable. Between these two forms then, the important dividing line, is the *extent* and *character* of the *tremor* and the addition of *febrile excitement*—or in other words "the kind of agitation—the extent and duration of the tremor—and the febrile disturbance." According to Magnan, these symptoms indicate
"intense irritation about the nervous centers, especially the rachidian axis," and have been confirmed by frequent autopsies.

We come next to the maniacal form. This, as we have remarked, has not been noticed by any recent writer, but of the reality of its existence there can be no doubt. In this form, a more or less violent mania, with confused hallucinations, intense restlessness, profuse perspiration, very rapid and full pulse, with scarcely any tremor or muscular agitation—injected eyes, and flushed countenance, are the chief symptoms.

To all intents and purposes, it is correctly described as "mania a potu," and differs from the first variety, by the presence of a true mania, rather than a delirium. These cases we have frequently found pass into convulsions, and when this takes place are generally fatal.

They are most frequently met with in persons of strong physical frame and highly nervous organization, and are the only form in which Acute alcoholism occurs, in the height of a prolonged debauch—at least as far as our observation extends.

The are really, in one sense, instances of acute transient Mania, and are often sent to Asylums for the Insane, under a false diagnosis.

The last variety, or that in which the form of alcoholism is associated with intercurrent or transmitted affections, presents no variations from the original type, except such as are directly dependent upon the intercurrent disease. In at least three of these forms, there is a tendency to insanity or general paralysis, although not in as marked a degree as in the chronic variety.
To these might be added a *fifth* form, which for the sake of a better term, we may call the *persistent*.

This variety is almost exclusively confined to beer-drinkers, who for a long period, have ingested enormous quantities. Its duration is from ten days to twenty, and most often presents itself among brewers. There is usually less nervous temor, than in most of the other forms, and the delusions are of more quiet character.

Whether the *lupulin* carried to a point of saturation, plays an important part in the prolongation of the disease or not, is a matter yet to be explained.

In connection with this, we may mention a curious fact, which was also first mentioned by Magnan, viz: that in the epilepsy of Alcoholism, there often exists *two distinct species of delirium* on the same subject—the one following the epileptic attack, of which the patient has no knowledge, and the other, which the patient readily recalls, and perfectly remembers all the phases of his delerium.

We have thus, at a much greater length than we had intended, endeavored to give a superficial outline of some of the forms and varieties of this wide spread disease, and have to crave indulgence for the time and space occupied. To the excellent essay of the distinguished physician of St. Anne's Hospital—Paris—we are indebted for many of the facts which we have incorporated in the foregoing remarks, and it would be an additional item of interest were we able to extend this article, so as to include some of the striking observations, which he has made, upon the influence of Alcoholism on mental maladies.
We however stop here, and to use his own concluding words "the field of Alcoholism is so vast, the questions which come up for solution are so numerous, that it would be impossible to discuss them, within the time allowed to do so." Without, therefore, arrogating to ourselves the advance of anything new or startling, it has been our object, to present the results of a somewhat extended experience, and thus facilitate the labors of others who like ourselves, have been engaged in a special field of observation and experiment.

To those who have less time to devote to specialities, the remarks we have made may we trust prove useful and perhaps repay perusal.

It only remains for us, to sum up the conclusions which may be drawn from what we have attempted to describe.

*First*, that Alcoholism, although a disease distinct in nature and character has many varieties, each characterized by peculiar symptoms.

*Second*, that these varieties are modified by the nature of the peculiar producing cause.

*Third*, that many symptoms, hitherto overlooked, are of vital importance to a correct diagnosis, and proper treatment.

*Fourth*, that the type of each form, is generally sufficiently well marked to indicate its character.

*Fifth*, the cause being known, its prevention is within the range of possibility.

*Sixth*, the line which separates, some forms of acute alcoholism from insanity, is very obscure, and at time almost impossible to determine.

A few words more, and we have done. In the foregoing remarks, we have endeavored to condense, all that bears strictly
upon the phenomena of alcohol when used in quantities sufficient to produce the pathological conditions referred to; and in doing so have availed ourselves of the researches of some of the best modern authorities.

Besides being strictly a medical, it becomes also a question of public hygiene, how far the moral and physical condition of the human race is impaired by the use of this powerful agent.

We are not disposed to discuss this question at present, nor would it be strictly within the scope of this paper. Our aim has been simply to point out, or rather collect facts, which establish the poisonous effects of an agent which is too generally considered as one of the necessaries of life.

We have no crusade to wage against the general usages of the world or society; yet still we can not withhold the expression of our conviction, in the truth of the facts herein set forth; nor can it be denied, that apart from the medical consideration of the subject, there is a deep underlying principle of morality, which is the basis of national as well as individual welfare. These are topics, however, which concern the legislator and the philanthropist rather than the medical world, and to them we leave them. If the teachings of science, shall be the means of guiding their efforts, in the advancement of the general good, it will be another evidence that the modern mission of the healing art is to prevent as well as cure.
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