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OBSERVATIONS ON THE CHARACTER, AND PRÉDISPOSING AND EXCITING CAUSES OF PHTHISIS PULMONALIS.

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[Communicated for the Boston Medical and Surgical Journal.]

THE history of Pulmonary Consumption is one of peculiar interest. Its antiquity, frequency, and extreme fatality, give to it an imposing character. Considering this disease at the head of all others for fatality, and that amidst the increasing refinements and luxuries of modern times it has been greatly multiplied, some notice of its character and the causes which give rise to it may not be deemed unimportant.

The imperfect records of barbarous nations do not allow us correctly to ascertain its proportionate fatality among them, when compared with civilized communities; but we may safely infer from the exhibition of its character among the latter, that the former are much the least subject to its destructive influence. For we find that in civilized countries, it is the delicate rather than the robust who more frequently become its victims; that it is most common in crowded cities, and luxuriates in the feeble and imperfectly wrought systems of the sedentary and confined, amidst dense masses of population. Truly may it be said that this disease is found most prolific of desolation in the abodes of youth and loveliness; pursuing, eagerly, its path through the walks of ease, and threading the avenues of refinement, it tramples in the dust the fondest hopes and the brightest anticipations of life.

It is during the early period of life, just before the completion of maturity, and before the system has acquired solidity and firmness, that consumption appears to hold the greatest sway over the human constitution. Females are most subject to its attacks. From estimates made in several of the principal hospitals of Paris, by M. Benoit de Chateaufort, it appears that the proportion of fatality from this disease, in that city, is about one-tenth greater among the females than males. And it is probable, from all the facts which have been collected to determine this question, that about the same proportion of fatal consumptions, relative to the two sexes, exists in this country as in Paris.

Although this disease is not confined to any climate exclusively, yet the inhabitants of mild and equal regions are more exempt from its attacks, while it has generally proved most destructive where extreme atmospheric changes are most frequent. It is estimated that in Europe one fourth of all the deaths is occasioned by it; the proportion varying, however, materially, in the different parts of that continent. In Paris, it is calculated at about one-fifth; at Venice, one-sixth; while in Russia, a cold

but equal climate, and where less effeminacy exists among the inhabitants, it is said to be of comparatively rare occurrence. In the United States of America, probably not less than one-sixth of the deaths are the victims of this disease.

Having thus briefly glanced at the important character of this disease, I would make the inquiry, has the subject relating to the *causes* of consumption received from medical men, hitherto, its due weight of attention? While some of the most learned physicians assert the disease to be irremediable, and the great body of the profession are following on in the old path of hopeless treatment, and joining in the loud chorus of "incurable," is it not important to investigate causes which lead to such certain ruin, and see whether there is any possible chance of escape from this fatal malady. For while the same causes are permitted to exist, the disease will continue the same in frequency, and we are thrown upon the almost hopeless ground of providing a remedy. Perhaps it is not overreaching the bounds of rational conjecture to suppose, that when the science of medicine shall have attained its ultimate degree of improvement, under the fostering influence of collateral branches of learning and the ripening experience of many successive ages, consumption, in its matured form, will stand, in a majority of instances, an incurable disease. Which, then, of the alternatives have we the most to expect from, by seasonably correcting its causes, or by introducing new remedies to remove the destructive influence of those causes? Has there not, hitherto, been a disproportionate attention, in regard to the causes and remedies of this disease? What experienced practitioner has not lost all confidence in the curative power of the established routine of remedies in confirmed consumption? And what guide has the young physician to direct his steps, through this obscure labyrinth, but one which will surely eventuate in ultimate disappointment? Is it not time to pause in this career of *certain* failure, and to seek some new method of escaping the evil? While new medicines are sought for, let the attention be also directed to the causes which lead to the disease. If fifty per cent. of all the cases of consumption could be avoided by learning and shunning its predisposing and exciting causes, would it not be an acquisition to the healing art, far transcending the most signal of its remedies? Or if only five per cent. could be avoided, would it not exceed all that has hitherto been accomplished on the score of curative means?

That this disease has largely increased in modern times, is an opinion maintained by some of the most intelligent of the medical profession. That the cause of this increase is dependent on the prevalence of various practices and habits of modern refinement, is a rational inference, from the circumstances of the case, and is an opinion, which, it is believed, will be sustained by all the evidence which the nature of the subject will admit. In proportion as mankind have departed from the plain and simple rules of living, and have adopted the refinements and luxuries of modern times, has this disease been multiplied. When our English ancestry possessed the habits which distinguished them during the eleventh century; when plain meats constituted the principal luxury of the table; when the rough sports of the chase were practised, even in some instances, by both sexes; when the coarse but warm manufactures of that age, pro-

tected them from the vicissitudes of the climate, and they reposed their athletic forms, not on the downy couch of modern effeminacy, but on the hardest beds ; they acquired a vigor of constitution which was not easily assailed by consumption. But these invigorating customs have passed away,

“Tempora mutantur et nos mutamur in illis.”

Not that I would recommend a return to the rude manners of a semi-barbarian age, but only the application of modern intelligence, with all the means we now possess, to the correction of the factitious refinements and fashionable irregularities of modern effeminacy.

By far the greatest share of consumptive cases are found to exist among those who possess a peculiarly delicate organic structure. And rare, indeed, does it attack the sturdy yeoman, whose broad, deep chest, and ample muscle, have been wrought amid the mountain air and the rough labors of the field. In every country its attacks are most frequent upon such as are distinguished by particular marks which characterize a delicate organic structure of body. And it matters not whether these peculiar marks are the lot of inheritance, or are stamped upon the constitution by the hand of culture. As no constitution is, by inherited strength, sufficient to resist its encroachments, when attended by certain circumstances of exposure ; so few are by nature so predisposed to its attack, as not, by a proper course of habits from infancy, to be able to escape from its fatal influence.

That the opinion of hereditary or family predisposition, generally entertained by writers on this subject, is correct, I have no doubt ; but of the nature and cause of this predisposition, my views do not coincide with those usually entertained. This predisposition does not consist in a poison or taint, as it is sometimes termed, but merely in the organic tone and formation of the individual. Ever since the days of Hippocrates, the marks usually considered to denote a consumptive diathesis, have been a “smooth fair skin and florid complexion, light hair, blue eyes, a long neck, a narrow chest, slender form, high shoulders, and a sanguine disposition.” These are signs truly of a delicate form and slender constitution. But we find this disease not confined exclusively to any complexion. “In some instances,” says the learned Dr. Good, “the skin is dark and the hair almost black.” And it is unquestionably true that no complexion, however deeply colored, does exempt the individual from an attack of the disease, provided he is exposed to its ordinary predisposing and exciting causes. I have witnessed the disease in the native islanders of the Pacific, visiting this country, who are distinguished by dark hair, eyes and skin ; and instances, I believe, are not less frequent among the colored people in this country, than exist with the white population of similar habits and occupations. The notion that consumption is hereditary, should by no means be disregarded. But instead of viewing individuals, possessed of certain signs, as marked for the disease by the hand of destiny, or considering these as an insurmountable obstacle in the path of the individual’s life, they should be regarded as a premonition of danger, early inviting to the use of remedies.

Man, both in a moral and physical sense, is a being of habit. From infancy to mature life, what changes may be wrought by its influence.

The vine which creeps along the damp floor of the sunless apartment, is not more dissimilar in form and appearance to the most verdant plant, whose leaves expand amidst the genial influence of a summer sun, than are the effects which various climates and habits produce on the human constitution. From this cause spring the great variety in the different tribes and nations of men. Every province has its peculiarities, not only of character and language, but of constitutional structure ; often exhibiting a difference of complexion, and of muscular and organic development. But we need not instance nations who occupy different soils and climates to illustrate this principle. Individuals of the same community, or even the same family, who are engaged in varied pursuits, and have been trained to different habits from infancy, are obviously different in these respects.

In a thousand instances may we trace back this disease to effeminate habits or exhausting indulgences, which have wasted the energies and enfeebled the general tone of the system. The period spent in the nursery is an important one in regard to the future health of the individual. Such a place is too frequently like a hot bed, where nature is forced from its ordinary course, producing an imperfect assimilation of parts, a laxity of fibre, a morbid sensitiveness, which render the individual unfit to withstand the unavoidable exposures of after life.

Scrofula is a disease closely allied to consumption ; the former being peculiar to childhood, as the latter is to youth, and the same constitutional predisposition exists in both diseases. In pathological investigations effects are sometimes taken for causes ; and in regard to a scrofulous diathesis, it is believed to be less frequently the effect of inheritance, than of certain enervating causes, influencing the organization and development of the system. That we meet with scrofula most frequently in those with certain external marks of constitution, is true ; but are such marks anything more than indications of a delicate structure ? Does " a fair, smooth skin, in which the bloodvessels are very apparent, light and soft hair, florid complexion, long and slender fingers, narrow chest and prominent shoulders," indicate anything but a delicate structure ? Not unfrequently have I seen children of the same natural marks of complexion, who were born in open houses, accustomed from infancy to any variation of atmospheric change, thinly clad, not wearing a shoe or stocking through the whole of a northern winter, and daily playing with their naked feet in the snow, who slept on beds of the hardest texture, and whose diet was plain but nutritive, acquire a force of constitution which might bid defiance to scrofula in their childhood, and whose vigorous play of organs rendered them equally secure from the assaults of consumption. In such a case, where is the narrow chest and the prominent shoulders ? They never could form under such a mode of training. But they may be found abundantly with children whose first months are passed in a confined and impure air, who are brought up in habits of indolence or confinement. The remedies in scrofula almost exclusively belong to the class of tonics. Sea-bathing, so well known as a remedy, is a powerful means of invigorating the system. When the disease yields to tonic treatment, what becomes of that potent disorganizer of glands, cartilages and bones ? Is there specific agency in so large a share of tonic medicines, sufficient to

over-rule the laws of hereditary disease? If this view of the subject is correct, then the formation of such early habits as give hardihood to the constitution, are of the highest importance to guard the individual against the encroachment of scrofula in childhood and consumption in subsequent life.

The method generally pursued in regard to education, is undoubtedly one early cause in occasioning a phthisical constitution. I refer particularly to those children who take but little exercise, and are confined on seats, in an impure atmosphere, for six or seven hours in a day. A constitution of remarkable strength may indeed go through such a course of habits without injury; but it is a violation of the laws of health, and the feeble cannot pursue it with impunity. Although in such it may not always eventuate in scrofula or consumption, yet a feebleness is evidently induced by it; a pale countenance, narrowed chest, bowel derangements, and other signs of injury, too frequently follow. And such an individual, especially when the confined air of a city residence is superadded, presents a striking contrast to the athletic form and rubicund countenance of one who continually inhales the pure air of the country, and who calls into constant and even exercise every organ of the body.

Professional men, particularly clergymen, have received much injury in their constitutions by the sedentary habits which they often indulge. A much greater proportion of such, than of those who pursue an active life, are the subjects of phthisis. The bleeding from the lungs, and other symptoms of derangement in the chest, are not generally the effects, as some have supposed, of long-continued labor in public speaking, but are produced by sedentary habits. This opinion, I believe, is well supported by proof, furnished by those clergymen whose lungs are not less exercised in public speaking than the others, but who travel almost daily from one appointment to another, and who, disregarding the weather, accomplish every day, through the week, no inconsiderable journey. The health of such men—notwithstanding the fatigues they undergo, the exposures to bad weather, change of sleeping apartments, the risk of taking cold after speaking for several hours in a crowded room, and going from thence in the cool night air to a place of rest—suffers rarely from pulmonary disease. I was informed by a very respectable clergyman, who, for several years, was laboring under decidedly phthisical symptoms, such as repeated copious spitting of blood, cough, purulent expectoration, &c. that notwithstanding the debility and emaciation thereby induced, he continued to preach a considerable portion of the time. His reason for so doing, was that he viewed his case as hopeless, and wished to improve carefully the small remnant of life which he supposed was allotted him. He practised much riding on horseback, and ultimately acquired comfortable health. A great amount of talents and happiness, no doubt, have been sacrificed in the long-continued practice of sedentary habits. Whatever posture of the body is long-continued, that confines the respiratory organs or obstructs the free circulation of the blood through them, occasions injury. Persons who sit in a bent position, either from carelessness or necessity, are exposed to ultimate bad effects. The tyranny of fashion, in regard to dress, sacrifices many victims, from the multitude

of its votaries, to this disease ; and no doubt the tape of the corset has stopped more breaths than the rope of the gallows.

The habitual or occasional use of narcotics, such as ardent spirits, opium, tobacco, tea, coffee, &c. has a tendency to derange and enfeeble the constitution, and in many instances operates as a predisposing cause of this disease.

Sleeping on soft beds is a practice of almost universal prevalence, at the present day, throughout the civilized world ; yet perhaps there are few practices that have a more generally pernicious influence on the young, than this. Sleep is as necessary to life as food ; the exhausted excitability of the system must be repaired, as well as the channels of nutrition supplied ; but excessive luxuries in either are injurious to health, and the epicure in one is as irrational as the epicure in the other. Children and youth who are accustomed to sleep on soft beds during the warm season, require more than an ordinary force of constitution not to be injured by it.

How far consumption is the consequence of coughs and colds, is an important consideration. And in discussing this question, I wish to appeal directly to the experience of physicians. I would like to put the question to every one who has had experience in this disease, What has, in your opinion, been the most common predisposing and exciting cause in the cases of consumption which have come within your observation ? Would not the answer be, bad colds, which have been either neglected or injudiciously treated ? Of many of whom I have inquired, this has been the answer. This, so far as my observation extends, is the case. A distinguished writer* remarks, "It must be obvious to every observer that a long protracted, obstinate cough, especially if improperly treated, too often lays the foundation for a consumption." He also remarks, that "however trivial, in the view of many persons, complaints of this description may appear, they are in reality to be regarded as of a serious nature, and as frequently leading to the most fatal consequences. A cold, when aggravated or rendered extremely frequent, becomes a malady sufficiently formidable to combat and defeat the skill of the most experienced physician ; and this is the rock upon which the health and lives of thousands have been wrecked."

In a communication received from a very intelligent physician,† who is in extensive practice in the city of New York, similar views are expressed. He remarks, "It is a question of no small interest, and I am sure it ought to rest upon the mind of every physician, what is the *cause* that so many annually are taken off by pulmonary consumption ? As to the predisposing and exciting causes of this complaint, there are doubtless very many, but I have no question in my mind that one fruitful source of this disease is the neglect of catarrhal affections. I am seldom called to a phthisical patient without being informed that he has had repeated colds, which were little thought of until they settled down into the present cough." The doctor farther remarks, "In a climate so changeable as ours, and where there is a constant admixture of land and sea air, colds are very frequent, and yet I know of no affection so little

* Thacher's Modern Practice.

† Elijah Mead, M.D.

regarded and so much neglected as this ; and thus it is that we have the melancholy fact before us, that one-sixth of the deaths is arranged under the head of consumption." There is too much reason to believe that tubercles of the lungs often have their origin from this source ; and having become formed, are by the same cause hurried on to inflammation and ulceration. Prudence in respect to taking colds, affords but a small part of what is necessary to escape the difficulty ; prudence in the use of remedies is a consideration equally important. Every one thinks himself fully competent to treat a cold ; and it is too frequently the case that in the protracted exercise of this general conceit, the natural influence of the complaint, to which is often superadded the worst of treatment, produces an irreparable injury to the lungs, before the case comes under the care of a physician.

The action accompanying a cold in the system is of an inflammatory character ; sometimes slight, but often considerable. When the chest is the principal seat of the complaint, the delicate vessels which are spread over the lining membrane of the bronchial tubes are more or less injected with blood, and not unfrequently a degree of irritative action extends to the body of the lungs. In this state, how very common for persons to make use of stimulating potions, which instead of relieving, aggravate the difficulty. Hot toddy, paregoric, elixir and laudanum, unqualified with any aperient, are frequently used in such cases, and often produce great injury.

It is while treating a bad cough, proceeding from a cold, that frequently the only opportunity exists, that ever will, to escape this fatal disease. It is probable that at this point physicians have done more than at any subsequent period to save their patients from consumption ; while patients, by neglect, have passed on to irrecoverable disease, amusing themselves with the reply to those who chance to admonish them of danger, " Oh ! my cough is nothing but a cold."

Goshen, Ct. October 10, 1835.

SKETCH OF THE SMALLPOX,

AS IT PREVAILED IN MONTPELIER AND MIDDLESEX, VT. IN JULY AND AUGUST LAST.

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THE Smallpox has, for some time past, been unusually prevalent in Vermont. Perhaps "an epidemic constitution of the year," so much insisted on by Sydenham, has been concerned in its prevalence the past season. The principal circumstance calculated to favor its spread among our inhabitants, no doubt is our free communication with the Canadas, where little or no attention is paid to vaccination, and where the disease is permitted by government to exist without any legal restraint. Although we have an excellent *preventive* to the pestilence, it is not until the public are made to feel the *scourge*, that they become sufficiently aroused to undergo a thorough *vaccination*.

There are many reasons why the smallpox should be well understood