

On the influence of Dress in the production of Disease in Females ; read before the Chemango County Medical Society, June 10th, 1847, by Dr. WM. D. PURPLE.

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There is no truth more apparent to the medical practitioner, than the gradual and almost imperceptible change in the pathological characteristics of a given period of time. It is true that some of the great outlines of nosology are applicable to man, in all countries and under all circumstances. It is also true that epidemic and endemic diseases may present them-

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selves in different localities and at different times; but, independent of these well known facts, every person who has taken a more general survey of the phenomena of health and disease of the human family, has discovered a very great disparity in the pathological characteristics of different periods.

It is the imperative duty of the members of the profession to note these changes, and in their associated capacity to investigate their causes; to enquire how far they depend on external agents beyond our control, or are chargeable to the habits and customs of society. It is a maxim no less trite than true, that "man is a bundle of habits," and that those habits are fleeting and transitory, and so far as they can be relied upon, as causes of pathological characteristics, so far will diseases be found ever varying, ever changing.

There is no more potent sovereign over human habits and actions than fashion. It is true that man is a philosophical being, and a large majority of our sex are controlled by the principles of comfort and convenience in our dress, and although there may be a few who "ape the ape," and bow implicit obedience to the laws prescribed by fashion, yet they are not allowed to contravene the utilitarian standard so far as to interfere with pathological characteristics. But the "fickle fair" of this genius Homo is gregarious in all her habits, with her no sacrifice is too great at the shrine of fashion, her whole soul is engaged in her devotion, and she not unfrequently offers her "body as living sacrifice" to the god of her idolatry. The spring and fall costume of Paris or Broadway, has entire control over her—no matter how grotesque she may appear—no matter how it may burlesque the "human form divine"—no matter what may be their present inconvenience, or their permanent influence on health, the rules prescribed by a few interested dress makers, must be implicitly followed.

It would be truly interesting to enter a gallery composed of female figures, habited in the various fashions that have prevailed for the last fifty years. Nor would it be less amusing than instructive to the pathological enquirer. We should see as the representative of the commencement of this period, a lady dressed in what was delicately called a "petticoat," made of flannel, barely large enough to go around the body, and enable her to walk with the measured pace which was then requisite to good breeding; it is pinned loosely around the body under the arms and supported by short suspenders or shoulder straps. The calico gown, or what was called a "short gown," loose and free, tied with a few tape ties, completes the dress of this representative of our grandmothers in the mild seasons of the year. Then the body had a natural shape,

that which an allwise Architect gave it—the several cavities were fitted in size to contain in their natural position, the various organs. Then there was in ladies, as pertains in gentlemen, a cylindrical form, whose circumference was nearly the same in the thoracic abdominal and pelvic regions—then the functions of the viscera were duly performed, and all moved in harmonious concert. The heart beat freely, the lungs were duly expanded, the stomach and bowels were circumscribed by muscles whose province it is to promote free, general and peristaltic motion—the pelvic viscera had ample room for all their healthy action, and were not compelled to seek less circumscribed quarters to manifest their various functions.

The representative of a modern lady shows us that a change has come over this native simplicity and natural form. An edict has gone forth from the throne of fashion, that art must usurp the prerogative of nature. Not content with her legitimate sphere of controlling in all their endless variety the habiliment of the sex, she advanced a step farther than she even ventured before with reasoning mortals, and declared that the female must be moulded into a more angelic form, and be made to approximate by an hour-glass contraction the sylph-like form of the ant upon the mole-hill.

The mechanical arts were immediately brought in requisition, and the combined powers of the screw, the wedge and the tackle were had in requisition to abridge the work-shop of the vital and animal functions. This was no difficult task. Habit stimulated by pride of personal appearance, at first made the requisite effort—the slow and gradual yielding of the flexible parts at a young and tender age, stimulated the votary to perseverance. The stimulus of pressure became more and more tolerable, until like other bad habits, it became to a certain extent essential to personal convenience.

Every anatomist knows that the internal organs of the body receive originally the germ of a specific amount of physical development—that the cavity that contains them is adapted in size to their full and healthy expansion—that the shell of the fish is controlled by the growth of the soft parts—that the scull in man is moulded in its capacity to the volume of the cerebral mass—and that the chest, and the parieties of the abdominal cavity, receive their dimensions from the necessity of their respective contents.

It is equally known to every physiologist, that the health of an organ very much depends on its free and unrestrained action. Thus the functions of the brain are destroyed by a very slight compression. The free admission of air to every part of the lungs, so that their cells may be fully distended at each

inspiration, is essential to their healthy action, and a due aeration of the blood, on which every function of the system so entirely depends. It is the province of the bony and muscular walls of the chest to adapt themselves to the wants of the lungs. This is noticed in the spacious chest of the trumpeter and the facility with which the ribs adapt themselves to a collapsed lung. These and numerous other examples furnish indubitable evidence that nature not only abhors a vacuum, but repudiates the slightest compression.

The thoracic, abdominal and pelvic cavities, are so intimately blended, that any pressure on one, necessarily involves the whole internal viscera—the functions of each and all are in a degree affected by it. The heart, the arteries and veins—the lungs, the stomach and bowels—the nervous system, the liver and the pelvic viscera, all and each proclaim in language that cannot be misunderstood, that they require room. Not such room as the caprice of a ridiculous fashion may chance to allow, but *such space as their due development and functional action will make for themselves*—and whoever turns a deaf ear to their voice will find a physical demonstration of the sentiment that the “way of the transgressor is hard,” will find that there is no atonement made for those who sin against nature’s laws, will find that they shall reap the fruit of their doing, in the shape of lingering disease, or premature death.

The following are among the most prominent symptoms that present themselves in a very large number of the females that apply to us at the present day, representing that they labor under weakness and debility; there is difficulty of breathing, palpitation of the heart, weakness of the voice, hectic flush of the face, gone sensation at the pit of the stomach, pain in the sides, in the region of the uterine ligaments, torpid state of the bowels, prominence in the lower portion of the abdomen, obstruction of the bowels from mechanical pressure, tenesmus and hemorrhoids, sudden stoppage of urine, prolapsus, leucorrhœa, numbness of the thighs, and œdematous deposit in the lower extremities. In addition to these symptoms, there is not unfrequently excessive weakness of the back, severe pain at the lower extremity of the spine, with most of the symptoms usually denominated spinal irritation; these symptoms are usually accompanied by a sense of pressure upon the lumbar nerves, described as a dragging or falling sensation, as though the pelvic contents were about to escape.

These symptoms are emphatically modern in their advent. That they might have existed in some rare cases fifty years ago, I am not prepared to deny, but they were not sufficiently

common to attract any very considerable attention at that period; nor am I prepared to deny that they may occasionally exist from causes beyond our control; but in almost every instance they depend entirely on the influence of *mechanical pressure* over some portion of the body. It is certain they have presented themselves with the fashion of taper waists, and I doubt not they stand in the relation of cause and effect.

The pathological condition of the vital organs, in consequence of compression of the chest, has already been alluded to. I will further add, that by the yielding of the cartilages that form the anterior articulation of the ribs, they are often found jutted over the sternum in a manner that shows a great diminution of the cavity of the chest. The pressure over the ensiform cartilage, and around the floating ribs, so diminishes the size of the body as to prevent the descent of the diaphragm in the act of inspiration. This occasions a heaving of the shoulders in respiration, as the abdominal muscles have little agency in that act. Hence the difficult breathing that uniformly exists when the respiratory muscles are paralyzed in their action, and are "held and firmly bound" in a state of quietude. In this condition there is a diminished quantity of air received into the lungs, and the blood is not properly arterialized. This impure blood has more direct influence on the nervous system than any other—hence the train of neuralgic symptoms that supervene. And, in addition to this, we all know the effect of a gentle blow over the nervous center, and there cannot be a doubt that long continued pressure over the same part must diminish the action of all those viscera that receive their nerves from this point. This more directly falls on the digestive organs, and the torpid state of the stomach and bowels is a universal accompaniment.

The frequency of consumption in the human family is truly alarming, and in the region of my personal observation it is evidently on the increase; indeed, statistics exhibit the fact that about one-fourth of the adult deaths are from this fell destroyer, and also, that a very large proportion are females from eighteen to thirty-five; and there is no doubt that the "tight chest" produced by the "tight dress," is the cause of a large proportion of our modern cases of "quick consumption."

But a change has come over the spirit of fashion within the last few years, and already we see its pathological effects. Pressure about the chest is less common than formerly, but an equally pernicious practice has succeeded it. The corset has to a certain extent been superseded by the large and heavy skirt, and the supporting bandage is girted around the abdo-

men instead of the chest. It is the order now to have as large a circumference of clothing about the hips and lower extremities as is possible. To make a mammoth-like appearance below the pit of the stomach, while all above is as small as a tight fit can exhibit. This Griffin-like appearance is the sine qua non of modern fashion, and the extent to which it is carried, in the higher circles, can hardly be computed.

Each quilt has almost twelve yards of cloth in it, and filled with from three to four pounds of wadding, and two or more are frequently worn at a time; and I doubt not, on inquiry, we shall find the weight suspended by a quilt around the upper part of the abdomen, is from six to ten pounds. Now, I ask, what must be its physical effects? Let any gentleman suspend even half that amount in like manner, during an hour's walk, and I doubt not he would seek relief by finding some more convenient mode of carrying the burthen.

We all know the influence of voluntary effort with the abdominal muscles to produce alvine evacuations; we know the power of constant effort in removing costiveness, and its tendency to produce hernia where there is a weakness in the walls of the pelvis; also, that pressure on the abdominal muscles greatly aids parturient efforts, and there is not a doubt that many of the symptoms we are now considering depend on the same cause, unremittingly applied for a series of years, at an age when the system can least resist its influence.

The physical condition of the female of our species is different from that of any other animal that bears their young; her vertical position requires her to have a small pelvic outlet, and this firmly guarded by ligamentous and fasceous structures, fitted to bear the weight of all her viscera, with the addition of the gravid uterus. She is, more than any other animal, emphatically doomed to "bring forth her young in sorrow;" but it was never intended she should be

"—— So doubly desperate,
To join against herself with fate,"

and place an additional burthen, and a great excitant to muscular contraction, and thereby weaken the very part where she most requires strength.

But such is the result of this modern fashion. This great weight, worn for weeks, months, and years, must stimulate to greater exertion the abdominal muscles, it must increase their power of pressure on the contents of the abdomen and pelvis, and its whole burthen, thus sustained, must constantly produce a depression of all the movable viscera of these cavities. *There is a subhernial state of the pelvic organs, the perineum is dis-*

tended to its utmost tension, the pelvic outlet is invaded by the protrusion produced by the pressure from above. The uterus is impacted between the rectum and urethra, and a mechanical obstruction of one or both of those passages is the result. There is a pressure of the lumbar nerves, producing severe and constant pain in the back, with numbness of the lower extremities. These sensations are more severe when first resuming a vertical position, after resting in a recumbent posture. Hence the subject suffers much for the first hour in the morning, when the parts resume their wonted forced position.

The most severe suffering often exists on an effort to produce fecal evacuation, in consequence of the accumulation above the point in the rectum compressed by the uterus; every effort forces that organ to a narrower pass in the pelvis, and thereby increases the lateral pressure on the bowels—this causes an accumulation in the colon, and adds to the torpor of the bowels—from well known sympathy there exists much pain in the head, and the general train of neuralgic symptoms that usually supervene on habitual costiveness. Dysmenorrhea often presents itself; leucorrhœal and other debilitating discharges are universal accompaniments. In a word, the foundation is laid for a long train of neuralgic symptoms, from their mildest form, to that fashionable disease, "spinal irritation."

It is often difficult to detect this state by examination. The condition of the uterus in relation to external integuments is about the same as in health; the whole pelvic viscera, with the perineal integuments are displaced in an equal degree. It is only by reference to the location of the organs in relation to each other, and the osseous rim of the pelvic outlet, that the mechanical influence of the displacement can be duly appreciated. That this influence is the cause of nearly all the above symptoms is clearly proved by the fact that in almost every instance they entirely subside when the gravid uterus can no longer be confined to the pelvis, but compels the subject to loosen the ligature about her body, and suffer it to escape for a time from the imprisonment it has, in common with the other pelvic viscera, been chained by the tyrant fashion.

I have, in these remarks, confined myself almost entirely to the mechanical influence of displacement in the production of these symptoms. But it cannot be denied that pressure on the living organs, independent of this, must necessarily have a very great influence over their functional action. What its peculiar effects are, it is difficult to explain, but so universal is

the law, that a group of organs require and receive at the hand of nature a certain amount of pressure, that it cannot be doubted that any increase or diminution of it would seriously disturb their functions. The delicate functions of the stomach, the liver, and the whole chylopoetic viscera, doubtless require the amount of support the abdominal muscles yield, and an increase of it would produce all the above mentioned symptoms that do not flow legitimately from displacement.

I am aware that early rising from a recumbent posture, after parturition, may often produce the above symptoms; but, as they were seldom known before the advent of the fashion of tight lacing, I think this even may be regarded in the light of a concurrent cause, that would seldom exist, if the ligaments and fasciæ of the pelvis had not previously been weakened by long continued external pressure.

Can I be mistaken in the charge that this general displacement, and the consequent symptoms, are produced by the pressure of the modern style of dress? Is there a doubt that a large proportion of these cases are mainly or entirely chargeable to external pressure? Why do not these symptoms occur in the male? Can there be a doubt that similar sensations would, in him, follow the same abuse? These symptoms are not confined to the uterine system; they are not the result of uterine action; they do not belong to its physiological or pathological characteristics, and yet all grades and classes are affected by them, and perhaps not one in five is entirely free from their influence. The higher circles of society, those most subservient to fashion's control, are the most exposed to all these symptoms; they exist for years unknown to their most intimate friends:

" They are deep and hidden griefs,
That come from sources that admit of no complaint,
From things of which she can not, dare not speak ;"

and hence they become chronic, under the nursing care of the cause that produced them.

This abuse of the system is insidiously introduced. It is interwoven in the very formation of society. The subjects themselves know not its influence over their physical health, and like the deluded votary of the intoxicating bowl, they are the unconscious authors of their own abject wretchedness. It is true that some can endure it with impunity, but others, of a lax muscular fibre, are greatly affected by it. Hence we see all varieties and grades of disease from this cause, from slight nervous irritability, to the confirmed bed-ridden subject. If the subject is alluded to by a medical adviser, a broad de-

nial is the usual reply, and the subject is evaded, as delicate and holy ground. A large proportion will tell us they do not "dress tight;" but it is only *comparatively* they speak; for if they should dress as the other sex, they would feel "all unstrung." The habit is commenced in early youth, when the system is growing, and although after the attainment of a certain age, it may be gradually diminished, yet the organs have an artificial position, and its effects exist in many instances through life, and may, and doubtless in some instances do, transmit its deteriorating influence to posterity.

The ordinary modes of treatment, when successful, confirm the pathological views here taken. The pessary, the supporter, and lace, all, to a certain extent, exert a counteracting mechanical influence, and relieves momentarily the hernial tendency. But while the cause remains, they only serve to compress the viscera into a still smaller compass, increasing many of the symptoms without relieving the remainder.

The curative indication is to remove the cause; to remove every obstruction to the due development of the internal organs, and a healthy discharge of their functions. Let them, as nature designed, control their own space, and their own appropriate position in the animal economy, and a healthy and vigorous action will be the result. These symptoms are, as I have endeavored to show, the creatures of *fashion*, are entirely of modern origin, and are not among the "*ills that flesh is heir to*;" and when the cause is removed, by restoring the female form to its legitimate proportions, they will entirely cease from among us.

In connexion with this subject, I must allude, before I close, to the very imperfect manner the skin is protected by the fashionable dress of the females of our country. Whoever regards with a physiological eye the functions of the skin, and takes into consideration its very delicate texture, the extraordinary amount of its excretion, and its very intimate sympathy with the functions of the uterus, cannot but be convinced that the health of the female very much depends on its being well protected from sudden changes of temperature. The warm stove rooms of our modern houses, form a very great contrast with "the peltings of the pitiless storms without," in this our northern climate. The dress of our ladies bears no proportion to the rigor of the colder seasons of the year, nor to that worn by the more hardy sex. It is true, if they are to ride, more care is taken; but if their daily avocations call them to the open air, they are found with the body but feebly protected; the chest with a thin, tight fit; the neck bare, the arms with but a single thickness of calico, their feet with the

thin soled slipper; the ample folds of their skirts so carefully removed from the body that the wind "bloweth where it listeth," and although we "cannot tell from whence it cometh," yet it is no difficult task to tell "whither it goeth." It finds ample room to revel in all its "wanton wildness" on three-fourths of the surface of her body. Clothing, in order to guard the delicate functions of the skin, requires to be in actual contact with it; and the style, imposed by fashion, of the female dress, doubtless lays the foundation of much of the weakness of the "weaker vessels" of our species.

It is our duty to awaken attention to these subjects; to expose the "folly of fashion" in our daily professional avocations, and to attack the *cause* of many of the diseases and weaknesses incident to females; to explain the reason why our ladies are not as healthy as their grandmothers were, and are becoming every year more and more effeminate. In reply to their complaints, we should endeavor to convince them that medicine will have little or no effect, unless the cause is removed; we should appeal to mothers, to let nature mould "the human form divine." We should cry aloud and spare not, until the galling bonds of *fashion* shall cease to drag our ladies to the dust; then, and not till then, will they breathe more freely, and posterity assume a more hardy character, and award the meed of praise to those who closed this prolific source of some of the most dangerous and uncomfortable diseases that have in these modern times escaped from Pandora's box.