The Journal of the American Medical Association

VOL. XXXV

CHICAGO, ILLINOIS, SEPTEMBER 1, 1900.

No. 9.

Original Articles.

TRAUMATISMS AND MALFORMATIONS OF THE FEMALE GENITAL APPARATUS, AND THEIR RELATION TO INSANITY.*

GEORGE HENRY NOBLE, M.D.

ATLANTA, GA.

In writing this paper it occurred to me that instead of using the small amount of evidence in my possession to emphasize facts already adduced, an expression of opinion by the alienists and gynecologists of this country and an analysis of their views might aid in reaching a true consensus of medical opinion upon the subject. Accordingly I addressed a number of letters to the superintendents of insane asylums in the United States, and to the members of two of the most prominent gynecological societies, in which I requested replies to the following questions:

1. Do you regard malformations and traumatism of the female genital apparatus as causes of insanity?
2. If so, in what per cent. of this class of cases, in whom physical examinations of the genitals have been made with the view of ascertaining the facts, can insanity be ascribed to these causes?
3. Please state character of malformations and traumatism, and if any operations were done for their relief.
4. Please state the form of insanity, including hysteromania and nymphomania.
5. Please state if there were any hereditary tendencies to insanity.
6. Please state results of operations done for relief of malformations and traumatism.
7. Please give the impressions you have received along this line.

These letters were so framed as to offer a free opportunity for the alienists to make negative replies. Much to my surprise, however, they have replied in a much larger percentage than the gynecologists, and their answers have been more uniformly affirmative. A few years ago they stood in solid phalanx, bidding defiance to the surgeons and as vehemently denouncing them as in the days of 1864, when Storer, a man many years ahead of his brethren, was denounced with the extreme bitterness known only to members of a sect who feel that in their hopeless and helpless condition, they are being driven to newer things by outsiders who possess no knowledge of their art. Storer made his observations from the standpoint of a far-seeing surgeon; he believed that woman's disease in such circumstances was like

a mill-stone around the neck of a drowning person; that it keeps them down, and is a barrier which prevents them from rising above the stigma of a diseased mind. He was right, but the alienists opposed his advanced views and held the insane woman in bondage for thirty long years, until, thanks to Milton, Rohé, Hobbs, and others, the constant lashing with facts, scientifically applied, whipped them into line so that now they are about to take the subject-matter from the gynecologist's hands. In this way they may have a right, for their opportunities for observing the insane are many times greater than those of the latter, who occasionally meet with cases.

To the letters sent out there were twelve negative replies; one alienist simply and emphatically says "No." Another adds that he has never seen an insane woman operated on who has recovered. A rectal surgeon replies, "I do not," but perhaps he never sees the female genital organs except through the rectum.

Drs. McMurtry, Pratt, Fry, Cumston, and Hill are discouraging, the first-named thinks that entirely too much prominence is given to the subject. Dr. Maury, of Memphis, is more decided in his views. He has operated a number of times, but can not recall a case of mental recovery, and stated that his cases of surgical traumatism showed evidence of previous insanity. Wishing to get at the facts of the subject, I requested him to write more fully of his cases, which he did, and the letter appears in the tabulated report.

Dr. Cartledge replies: "Briefly, I should say that, except the curable mania frequently accompanying interstitial fibroids of the uterus and which are so often manifest near the menopause, I do not regard diseases in this locality directly a cause of insanity."

From the above statement he evidently does regard these tumors as direct causes, and in this he differs from most opinions. They seem to act in an indirect manner, impairing the general health. This class of tumors is more often associated with insanity, but it is not due to the particular variety of tumor. It is the effect produced upon the uterus, by exciting increased growth of that organ, by keeping it in a state of chronic irritation, engorgement, etc., thus intensifying the nervous phenomena usually arising from the womb. Any other tumor that could develop in the wall of the uterus would be followed by the same results; for instance, myomata are not infrequently found to act in the same way.

All but one of the asylum reports are favorable. Some superintendents answer very positively "yes" to the first question, others consider that malformations and traumatism occasionally are direct or sole causes in a small percentage of cases, but all seem to believe they are exciting or contributing causes, which affect the general health.

*Presented in a Symposium on the Relation of Pelvic and Intra-Abdominal Diseases to Nervous Diseases, before the Section on Obstetrics and Diseases of Women, at the Fifty-first Annual Meeting of the American Medical Association, held at Atlantic City, N. J., June 5-8, 1900.

A few gynecologists do not hesitate to state they regard them as causes. Among these are W. L. Robinson, Geo. F. Hulbert, Joseph Price, E. F. Fish, E. H. Hyde, G. M. Hughes, J. F. Baldwin, Edward French and others. Some of these consider them to be causes in a small percentage of cases, but the most of them make no qualifications.

Among those who believe them to be exciting and contributing causes or an aid in development of insanity, are R. T. Morris, Walter B. Chase, Bovée, H. M. Hunter, I. S. Stone, Manton, Rohé (recent writings), Hobbs, Humiston, Sherwood-Dunn, F. Blume, Carstens, Moses J. White, Edward Walker and others. This last class is composed of men who do not believe that malformations and traumatisms act as causes, except indirectly, by depressing the general health.

These letters show the views of an array of thinking men whose opinions should demand the confidence of the people. Such a number coming with common consent tells us that no longer can traumatisms and diseases of the female genital apparatus be ignored in the treatment of the insane. Indeed it has been shown that these women do suffer these misfortunes, that they impair the health and indirectly influence the mind in a certain percentage of cases. Then why should they be denied the means of relief? On what grounds can it be prevented? Certainly not on that of injury, for we are told that chronic insanity is not made worse by operation, but upon the other hand, that the patients all gain bodily relief, and 23.52 per cent. recover their minds, and 17.64 per cent. are improved. Hobbs' percentages are higher than this.

The reason why the alienists now support these views and accept gynecology as an indispensable aid in their work is that they have had their eyes opened to the fact that the gynecologist does not operate for insanity, but in pleading for attention to bodily discomforts. On these grounds they meet their fellow-men in suffering and pain. According to the reports received, the percentage of cases to which insanity is ascribed is small. Price, on the contrary, states that it is very large. He is supported by insane-asylum reports, which give from 11 to 20 per cent. I wish to point out as a notable exception, the Buffalo State Hospital for the Insane. Dr. Frederick states that he is informed by the female resident physician that she has never found any malformations nor traumatisms in patients admitted to that institution. The East Michigan Hospital for the Insane has found 81 per cent. suffering from some pathological condition calling for attention; but perhaps in the latter institution a more thorough and methodical system of examination has been in vogue as the subject has been well in hand for several years.

In answer to the third question, relative to the form of malformations, diseases and injuries to the female genital canal, accidents incident to childbearing seemed to occur most often, next infection and preputial adhesions; masturbation and puerperal insanity are recorded as commonly found. The remarkably large proportion of good results from operations is a striking feature even in cases of chronic mania. A few instances are given with no results, but such may be expected when the best success does not exceed 40 per cent. of cures and 26 to 30 per cent. of improvement. One is likely to meet with all failures when he does only a limited number of operations. It is not denied, however, that patients are relieved of physical suffering and

distress. Absence of vagina, uterus and ovaries is mentioned several times. I have noticed in my own work that palpable external deformities are more frequently associated with insanity than deformities of the internal genitalia. One woman became melancholic and required institutional treatment on account of absence of the vagina. Before she was mentally affected, she claimed that it was not on her account she wanted a vagina established, as she enjoyed the orgasm sufficiently, but on account of her husband. He was opposed to the operation on the grounds of the danger, but she suspected him of regarding it as a sort of free license for making visits to other women. This seemed to wear on her mind until she became melancholic. Another woman came to me from South Carolina, who had had an occluded vagina for twenty-six years, and eventually became unbalanced. The form of insanity was first confusional delusions and then melancholia. She was completely relieved in a few weeks after the vagina had been re-established by a flap operation, and as soon as she could understand that it was a success, her mind improved with remarkable rapidity. A young woman with a partially developed vagina sought relief, hoping thereby to bring her husband back to her. She was melancholic but recovered after operation on the vagina.

Obstetric lacerations are very potent factors for evil and should not be neglected. The general practitioner and obstetrician should make careful search for injuries of this character, especially in women bearing the stigmata of degeneration or a hereditary tendency to insanity.

Simple displacements of the uterus play a considerable rôle as a contributing factor; this is due perhaps to the fact that many women are subjects of these accidents and therefore that more with hereditary tendencies must necessarily be encountered. Often it is hard to realize that a simple displacement can have such an effect, but when immediate recovery follows replacement, as I have seen, we are constrained to ascribe it to some contributing influence.

While I have never observed any mental derangement in cases of uterus bicornis, uterus didelphys, uterus duplex, etc., Clarke, of Cambridge, mentions these malformations in his letter. My patients with multiplicity of pelvic organs regard themselves as freaks of nature, and express satisfaction thereat, while those with defective development, prohibiting intercourse, are caused domestic trouble and much unhappiness. With one exception those of the latter class became insane.

Gynecologists are divided on the question of heredity.

No less an authority than Price says: "Heredity is rare." Gresham H. Hill, D. S. Moon, and George L. Kirby, of insane institutions, put the heredity at a high figure, ranging from 20 to 23 per cent. Hill says that one-third of the women admitted to the hospital have some hereditary tendency, and nearly all who are suffering with disease of the reproductive organs are so affected. T. O. Powell, of Georgia, and others, say it is about as much one way as the other, while other alienists claim that some bad heredity, either insanity, alcoholism, or some kindred condition, must exist, hysteria excepted.

The alienists perhaps are entitled to first credit as being men of a habit calculated to draw out these points, as they see far more cases than gynecologists. So it seems that a bad heredity, degeneracy, or a neu-

rotic family history, is common to many of these patients.

No particular form of insanity follows these lesions. Simple mania, delusions, kleptomania, confusional delusions, nymphomania, hysteromania and melancholia have all been met with; the last three, increasing in the order named, are the most frequent. I have believed nymphomania a comparatively rare disease, but these letters show a surprisingly large number of cases. Preputial adhesions are regarded as the exciting cause, and cures are reported after separation of the adhesions. However, it is not invariably successful, as a few become hopelessly insane. The largest number of cases seem to come from melancholiacs and nymphomaniacs, and here too the best results are found. Carstens does not operate for hysteria pure and simple. Hystero-epilepsy is mentioned by a few writers, but no particular lesion is given. I have found it more often associated with displacements of the uterus, and rarely attributable to disease of the appendages. This perhaps is a digression, but as it pertains to the nervous demonstration of uterine diseases, it is mentioned.

Manton says: "If disease of the reproductive organs is included, I have seen and operated on quite a number of cases of hysteromania and nymphomania, which were cured or greatly relieved by the removal of diseased ovaries. I cannot say that I have ever seen a case of insanity, mania, melancholia, etc., cured by such operative treatment, but relief has often followed. Hysterical conditions have generally been cured."

Here he strikes the key-note and it is hoped that it will have its influence on the needles, and unscientific removal of the uterine appendages except for the relief of local disease with exhaustion psychosis. Patients who retain normal ovaries suffer less nervous perturbation and psychical symptoms. Hysterical conditions are more often found in traumatisms and diseases affecting the uterus. They may seriously hamper the treatment of the diseased mind and demand attention.

With very few exceptions the writers give glowing accounts of their results. R. T. Morris says: "In properly selected cases apparently due to peripheral irritation in patients without marked hereditary tendencies, and without family-acquired neurotic habits, the results of operations have often been striking."

Doubtless following these precepts will result in brilliant achievements as far as mental recoveries are concerned, and if it were right to operate only for the effect upon the mind, it might be well to select the cases, but it will work hardships upon the mentally incurable to condemn them to continual suffering of physical pain. We operate upon bodily disease in the mentally sound and promise them nothing but bodily relief, why, therefore, should we promise more to the insane when identically the same things are done? We should observe the marked conservatism displayed by Manton and Hobbs, and operate only for local disease and somatic pain; then if mental relief is afforded, as it surely is in a large percentage of cases, more will have been achieved than was promised.

All operators, with three exceptions, no matter what forms or stages of insanity exist, say that the results upon the mind are good, very good, satisfactory, very satisfactory, beautiful, improvement in all, improvement in about half the cases, none made worse, etc., while three, notably Dr. Maury, of Memphis, report no benefit in any of their cases. These gentlemen were

unfortunate in having to deal with a few incurables, and doubtless will fare better in the future, as the percentage of cures is estimated at about 38 per cent., improvement 33 per cent., mortality 2.5 per cent. (Hobbs). They should therefore get good results in two out of three cases. Though there was no mental improvement in the cases reported by these gentlemen, they do not deny the relief of pelvic pain; their work was successful from the standpoint of cures of local troubles.

Thus there is a brilliancy in the work unlooked for, and a natural tendency to promise too much to family and friends. One should therefore ever keep before him the remarks of a distinguished surgeon¹: "Indeed, so frequently have the mental manifestations undergone a decided change for the better that I have now come to look for this almost as certainly as for recovery from the operation," and then adds, "I have never yet seen a patient entirely relieved of her mental disorder as the result of operative treatment."

While a few think that little is to be accomplished by surgical treatment beyond the relief of somatic pain, the great majority believe that it is the physician's duty to examine every insane woman for disease of the pelvic organs and to remedy traumatisms, malformations, and treat inflammatory troubles; that while only one-third, or a little more, receive mental cures, another third gain some relief; as a rule all are benefited locally.

Price says that it has been necessary to remove patients from insane institutions in order to cure them, intimating that the surroundings have a bad effect mentally. He further states that many cases should never have been sent to such places. It is believed that pelvic disease acts indirectly upon the mind, that there are also other powerful factors at work which have great influence, notably heredity, yet in a very large percentage of the letters it is claimed that heredity does not necessarily take part in the causation of insanity. Peripheral irritations and depression of the general health are the ideas as to causation held by the larger number. In inflammatory diseases the percentage of insanity is greater, and this is due, in all probability, to absorption of toxins, not necessarily to pus or pus-producing agents.

Continued elevation of temperature, even of slight degree—one-half to one degree—for months is an active factor, especially when associated with large fibroid tumors. I have observed this when there was nothing to account for the fever but the presence of and the irritation caused by the tumors. In such cases the temperature will occasionally drop to normal on removal of the tumors, and if it again reappear will persist for a day or so only; the insanity disappears with the normal, and reappears with the abnormal temperature, and finally cure results when the fever is ended.

Removal of the normal ovaries in the insane as well as in the sane woman is condemned as not only unproductive of good, but as a factor for serious evil. Dr. David T. Gilliam, however, believes "in removing the essential organs of generation from an insane woman during the child-bearing period, upon the broad principle that the world should not be peopled by the progeny of such, both for the sake of the offspring and the world at large." I presume that as the word "insane" is used without modification he intends it to be applied only to the incurable. Robert T. Morris says: "In insane asylums and institutions for the cure of drug

¹ Manton.

habitues there is regularly a percentage of cases that are completely curable by operation. My impression, amounting to a conviction, based upon careful observation, is that patients curable by operation are not apt to be comprehended, are often never examined, and further, that a vista of enlightenment is just beginning to open for men who should be, for the best interests of their patients, in insane asylums and institutions for the cure of drug habitues."

Dr. Van de Veer said, when asked his impression: "Try some operation in every case." He does not believe that traumatisms and malformations contribute to insanity, but the good effects of operations have not escaped his eye. A few others who are not prepared to acknowledge any connection as etiological factors, do not deny the benefits that have been accomplished by surgery. It is a mistake to carry the principle announced by Dr. Van de Veer too far, for fear of encroaching upon the grounds of empiricism, by removal of normal organs. The latter, as stated, is to be deplored. He surely did not intend that his statement should be spread as a blanket alike over ills, real and imaginary.

Very little is said in reference to post-operative insanity. It is mentioned, under the head of surgical traumatisms, but the impression is that they are more often temporary melancholia or hysteria, and that they usually occur in predisposed subjects or in the puerperal state; the latter being influenced in many cases by septic infection. In one case I operated on, in the second week of the puerperium, for complete tear of the perineum, the insanity did not appear until after she had fully recovered from the operation and attempted to take bodily exercise. I was informed that she lost an excessive amount of blood at her confinement, which must have been true, as she was almost exsanguinated when I saw her. In this case there was no sepsis, but extreme anemia, which did not show its bad effect upon the brain until she assumed the upright position. Her recovery was prompt and kept pace with the increase in red blood-corpuscles and hemoglobin. In this case the operation had nothing whatever to do with the cause of the insanity, but if it had not been done, I believe the bad effect of the complete laceration and involuntary evacuation from the rectum would have produced, in connection with the anemia, a very pronounced mental disturbance.

I have noticed that the violent post-operative nervous changes following hysterectomy are more apt to occur in women whose wombs have grown to a large size. Patients with pedunculated fibroids and small wombs are not apt to suffer in this way. The nearest to an exception to this proposition in my experience was a case of carcinoma of the fundus uteri, in which the womb was about six times its normal size. Although of a very neurotic family, the patient made a good recovery, but succeeded in nearly worrying the life out of her physician and family for eighteen months before showing any signs of improvement. Another strange feature is that insanity existing before the removal of these tumors is often instantly relieved, while, on the other hand, insanity following the operation may be weeks or months developing.

Dr. J. F. Baldwin says: "Occasionally insane cases are made worse by operative interference." Manton claims they are not; and others speak as though operations are not to be feared in these subjects.

Hobbs' impressions are: "Organic lesions of the

inflammatory type are the most prominent factors among pelvic diseases in exciting mental alienation, and displaced organs rank next in importance, and tumors last in the order of causation." . . . "that neglect of gynecic surgery in any institution for the treatment of the insane is a serious omission, as where so many women are congregated together there must exist many cases of unsuspected, and, if not investigated, untreated, forms of pelvic disease."

The gynecologist is to-day curing cases of nerve exhaustion or neurasthenia in which the neurologists have failed, by correcting pelvic lesions in addition to the general treatment. We know that the gynecologist repairs injuries, replaces organs, removes septic centers, and couples with them rest and seclusion, with the best results. In many of these cases the neurologist, from prejudice or lack of skill, fails to recognize the disease in the pelvis. I have in mind a patient with grave hysteria and neurasthenia who suffered many things of many men and at last fell into the hands of a neurologist, who declared, after a most careful examination, that she had no pelvic disease. He failed utterly, but fortunately her uterine displacement was recognized by another man, and immediate relief followed his treatment.

We know that cure of disease of the female genital organs is a most valuable and essential aid in the treatment of many nervous troubles in the sane woman; why therefore, have we the right to deny insane women the privilege her more fortunate sister receives?

THE CAUSAL RELATION INTRA-ABDOMINAL DISEASES BEAR TO NERVOUS DISTURBANCES RECOGNIZED BY GYNECOLOGISTS, IGNORED BY NEUROLOGISTS.

HENRY O. MARCY, M.D.

BOSTON.

Perhaps the most difficult of subjects for the master to teach or the student to master are the reflexes of the nervous system and their influence upon the functions of the various organs. In a certain sense are we not yet students?

That all-pervading, ever-acting force that from infancy to old age should hold in stable equilibrium the harmonic rhythm of the individual, for want of a better term we may designate "vital." This life power we know has its definite limitations, although, as one forecasts the future of the individual, he is aware that it must be expressed in the unknown terms of the algebraic formula " $x+y$ " or " $x-y$." If in health it is so difficult to graduate and measure the possibilities of the individual or determine his daily perturbations within the limit of normal function, how much more abstruse is the problem to detect and to judge aright the pathologic, which it is a part of the daily duty of the conscientious physician to take into careful consideration!

These problems are as old as the mental development of man, and have been coincident with history. Each generation views them with new interest, and it is very probable that certain of their most abstruse factors will remain unsettled as long as modifying conditions and influences produce such infinite kaleidoscopic variations

*Presented in a Symposium on the Relation of Pelvic and Intra-Abdominal Diseases to Nervous Diseases, before the Section on Obstetrics and Diseases of Women, at the Fifty-first Annual Meeting of the American Medical Association, held at Atlantic City, N. J., June 5-8, 1900.