## STAMPING OUT HEREDITARY DISEASES BY STERILIZING THE SEXES.

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That hereditary taint is a greater menace to the human race than all other evils combined, to which flesh is heir, every thinking physician and surgeon must admit. This great destroyer of, we might say, soul and body of mankind, not only shortens the lives of the human race in general, but prevents those suffering from the blight from attaining that fruition of physical and mental well-being that God and nature intended.

The evils of the hereditary curse are legion, and are to be met in every station of life; and are to be considered and contended with in a very large percentage of the cases which a physician is called upon to treat in his daily routine of work. The number of those who have to, in one way or another, pay the penalty of being the offspring of tainted parents, whose lives are shortened, and whose usefulness is depreciated, is simply appalling. And this number is increasing in a ratio that makes it a question of but a few generations more before no man can stand forth and say, "My blood is pure." As a result of this deplorable condition, we may well ask, "What are we coming to?"

It is not my purpose here to enter into a discussion of the present longevity and physical prowess of man, as compared with the same in past ages; but I do assert that, whether greater or less than in the past, and however great at the present time, animalman, physically and the God-man, mentally, are both but pigmies to what they could and would have been had there never been instilled into the human blood that subtle poison which has never been eradicated, and which has never ceased to spread nor to lessen its contaminating influences.

Do we not daily witness the ravages of some disease the origin of which was pre-natal? Are we not, as medical men, daily confronted with conditions that confound us? Conditions for which we cannot account; and with which we cannot successfully cope? Yes, yes; and this perversity of condition depends on the perversity of a contaminated being.

Can anyone imagine what a race of beings we might be, if, starting with pure blood, for fifty generations there was not a contaminating element allowed to enter? It would be a race Solomon-like in wisdom, Adonis-like in symmetry and beauty and Sampson-like in size and strength. Except from some indiscretion in food or drink, in dress or from exposure, there would be no disease; and death would come only from violence or senility.

Of course, this is only a phantasm, a dream, and this millennium will never come; hence we shall deal with facts, and facts are stubborn things.

I now make the assertion, and without fear of successful contradiction, that more than half the ills which we are called upon to treat are influenced, to a lesser or greater degree, by a constitutional taint that affects the natural course of the disease, and affects, and sometimes vitally, the natural physiological action of the remedies we prescribe.

The most lamentable phase of this fact is that we do not and cannot know to what exent the symptoms, as manifested in a given case, are produced, changed or influenced by this subtle agent. Nor do we know how different the so-called physiological action of a drug may be when under this evil influence, and when acting under normal conditions.

These all being irrefutable facts, what are we to do? Just so long as present conditions are allowed to exist, just that long will we have this hydraheaded monster to deal with; and, as before stated. the time will come when every human being will be blighted by its poisonous breath.

To strike at the root of this evil, then, is our only hope. And to bring before the profession how best to do this, is the purpose of this paper.

I have studied and experimented on this subject for the past ten years, and I am now ready to say that the problem has been solved.

I began in 1896, experimenting on the proposition of rendering women sterile without producing any pathological conditions, or physiological change, whatever, except sterility.

After thinking over the anatomical construction and physiological functions of the uterine appendages, I arrived at the conclusion that the ovum. after being expelled from the ovary, and while traveling on its journey to the uterus, could be sidetracked without harming in the least the patient on whom this was done.

When I first made known my convictions, I was hooted at by some of my confrères, and all kinds of calamities were predicted. One suggested that the woman would cease to menstruate; another said she would have painful menstruation; another said the ovaries would dwindle away because they could not perform their natural function; and still another said I would convert the tubes into sacs filled with blood, which would, later, degenerate into pus.

After carefully and prayerfully giving due thought and weight to all of these consoling (?), and encouraging (?) suggestions, I determined to put my ideas into execution; but I admit that it was with fear and trembling that I did so the first time.

I reasoned that the Fallopian tubes filled but a minor, functionary office, similar to that of the ureters, in that their sole service is that of transmitting the product of another organ, to still another organ whose only purpose is that of a receptacle to retain that product for a certain time, and then expel it; and that it matters not to the producing organ, after having performed its function, what becomes of its product.

The kidneys perform their function equally well, whether the urine passes, naturally through the bladder, or whether it is diverted through a fistula, opening through the back or into the rectum. So will the ovaries perform their function naturally, whether the ovum passes normally through the tube to the uterus, or is diverted into the peritoneal cavity.

Having reasoned thus, I also reasoned that I could accomplish this diversion of the ovum without in any way interfering with the blood or nerve supply of the ovaries; hence I could not see how they could be affected.

Method.—The first time I operated for the purpose of producing sterility, I simply ligated the tube on one side, and ligated in two places on the other side and cut between. Later, I ligated the uterine end only of the tube and cut, leaving the distal end free. This I did, that anything entering at the fimbriæ would have an unobstructed passage out at the end where cut.

I have now perfected the operation, until I do not believe it can be improved upon. I make a small slit through the peritoneal covering of the tube, at its proximal end, and hook up the oviduct (Fig. I, a)—which is almost a counterpart of the vas in the male, except that it is much smaller—and sever it at its uterine juncture, reflecting the severed end, on the distal side, out through the incision in the peritoneal covering and closing the incision, with two or three continuous stitches of fine catgut, as shown in Figure I, b.

By this last method there is absolutely no destruction, nor even disturbance of the nerves or blood vessels supplying the structures; hence, positively and absolutely, no interference in any way with the physiological functions normally performed by the ovaries and uterus. The tube, alone, is made unable to fulfil its office. The oviduct should be severed nearer the uterine body than shown in the cut. It should be made as close as possible.

A patient thus operated on could never know that the operation had been done—where the abdomen had been opened for other cause—so far as

concerns any effect upon her menstruation or sexuality, or by reason of any other abnormal condition or feelings.

Before taking up the question of sterilizing the male, I want to go on record as saying that not one-millionth part of the flow in a normal menstruation passes through the tube; nor one-millionth part of the seminal fluid passes through the vasa in the male. In both cases it is only a microscopic entity that passes; and this entity is equally harmless whether it passes via naturales, to its ultimate destination, or whether it be diverted into the peritoneal cavity, or into the scrotal tissues.

Furthermore, if, as is generally believed by the laity, and to some extent by a certain per cent. of the profession, the seminal germ is the *vital* part of man, and his vitality is lowered in proportion to the loss of this germ, then he who was so fixed that he could not lose this germ, would be the gainer, and *not* the *loser*, by having had done the operation I propose, and which I now describe.

The operation to sterilize a man is much more simple, and I would say, much less dangerous than that for sterilizing a woman; though I consider neither of them dangerous, with our present surgical knowledge and technic.

To sterilize a man, I simply remove a section of the vasa. This is done thus: Inject a little cocain, or other local anesthetic at the site of contemplated incision; then grasp the scrotum with thumb and finger, and separate the vas from the other structures of the cord, and bring it to the site of incision. Cut down upon and hook up the vas, and draw out a loop (Fig. 2, c) and excise ½ to ¾ of an inch. Close scrotal wound with couple of stitches, as shown in Fig. 2, d.

This operation will not stop a man from ordinary, light work; for more than one day at most.

Though I have not tried it, I conclude that it would not be a safe proposition to ligate the vas without section; it has a direct continuity with the organ whose secretion it is to carry, and the ligation would thus cause a damming up of the secretion within the testicle, that would, in all likelihood, cause trouble, though I know not what.

In this respect the vasa differ from the tubes, which have no direct connection with the ovary. But I have ceased to ligate the tubes, except that where, from any cause, I am unable to hook up the oviduct, I ligate on the uterine side of the tubal section. This I do to prevent any infectious germs passing outward from the uterine cavity. The necessity for this precaution will be seen later, when discussing the class of cases to which this operation

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ic applicable for other purposes than the production of sterility.

I wish to here state that I have had the opportunity to operate on but one man; though I have been experimenting on animals for the past three years. As to operating on the tubes, I have done this so often that I have lost track of the number, but I think it is near the one hundred mark, and, thus far, without an untoward symptom or sexual effect.

effect has been produced on the size and shape of the animal, generally?

The calf is now eighteen months old, and I have this report to the above questions: "The calf is doing fine. He pays as much attention to the cows as other bulls of his age. His testicles are like those of other bulls. Cannot tell about his horns, as he is a 'muley.'"

In operating on the vasa, the same care to not

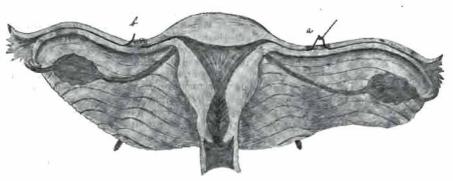


Fig. 1. Sterilization of the female. a, hooking up the oviduct. b, distal end of tube reflected into peritoneal cavity: incision sutured.

The man on whom I operated I have not seen for a year; but when last seen, he said the operation had not affected him, sexually; and the testicles, if affected at all, were in better condition than at the time of operation, having been rather flabby at that time.

In my experiments on male animals, I have demonstrated that I absolutely make them sterile. But I have not been able to decide what effect, if any, the operation has on them, sexually. All of my completed experiments have been on adult animals; and anyone at all conversant with the lives and habits of domestic animals, knows that those that have reached maturity before castration, are just as rampant for the female after castration as before. But I will soon be able to know what effect section of the vasa will have when done on young animals.

Last summer I operated upon a bull calf, four or five months old, and then gave it back to the former owner, on the agreement that he is to keep it until of proper age for service, and then to make full report to me on these questions: What effect has been produced, sexually? What effect has been produced on the testicles. What effect has been produced on the size and shape of the head and horns? What effect has been produced on his pugnacity? What

disturb the nerve or blood supply should be observed as in operating on the tube; and in both cases, the utmost precaution to prevent sepsis should be observed.

The greatest minds in the world are now considering, and favorably, too, the question of matrimonial legislation. They hope the time will come—and it surely will—when every person wishing to enter into the marriage relations, will have to submit to a mental and physical examination. Those found with either mental or physical defect, especially if this defect be of such nature as may be transmitted to offspring, shall not be allowed to marry.

As such a law would be robbing mankind of one of the dearest of God-given rights, it will be a difficult matter to have that law passed; and when it is passed, it will be evaded in every way possible.

How much better will it be to have a law that will say to the unsound: "You may marry, but you must first submit to an operation that will prevent you from inflicting upon coming generations the taint that is within you as the result of the misfortune or folly of yourself or your ancestors."

This law should be applied, not only to those with a physical or mental taint, but to every criminal who commits an offense of such magnitude that the penalty may be a term in a state's prison.

An habitual and confirmed drunkard, man or woman, especially if the predisposition to this habit is inherited, should also be subject to this law.

We all recognize the influence and effects that environments have upon the children and youth of our land, and even upon adults. Then what are we to expect of a child begotten in debauchery, and reared in the midst of filth, degradation and crime? Of a child whose mother from the hour of concep-



Fig. 2. Sterilization of the male. c, hooking up the vas. d, vas resected and wound sutured.

tion to the birth of the child, if not herself dissipated, has had to contend with a dissolute, drunken and abusive husband? Of a child whose first look falls upon a drunken father? Of a child whose earliest recollections is of poverty and squalor, of street fights and discord and brawls at home, of profanity, vulgarity and illiteracy on every hand; and who grows up poorly dressed, poorly fed, with little or no education, and with the seeds of some horrible disease sown in the system? When such a child grows up and goes wrong—and the chances are largely in favor of its doing so before it is grown up—we mete out to it the severest punishment. Punishment for crimes for which, from the very nature of things, it is not responsible!

How much better, how much more just, how much more humane would it be to stop the begetting and rearing of such children, and under such circumstances! The maxim that: "An ounce of prevention is better than a pound of cure," is never more applicable than in this case.

Now, I fully believe that when the people are convinced that a harmless operation can be done that will prevent the begetting of degenerate offspring, they will be ready for such a law, and will compel choice between submission to such operation and remaining single. And such law would be more easily

passed than a law which would entirely prohibit the marriage of persons whom a Board of Examiners might pronounce unfit.

What father, if he knew that he had the seeds of tuberculosis or of syphilis lurking in his blood, could be so selfish, so heartless, as to want to be the father of a child who might be born deaf, dumb or blind, or, what would be a thousand times worse, imbecile, or escaping these, be afflicted in other ways with the effects of a disease inherited from him? What mother would not rather see her son dead, than behold him a drunken, dissolute criminal? And would she not consider it a boon to have no son at all, rather than to have one born with a predisposition to strong drink and crime?

Concerning the operation on the tubes for other purposes than preventing heredity: I have done the operation in cases where, from deformed pelvis or other causes, a woman could not give birth to a full-term child. In cases of women of the "half-world," on whom I have operated for single pyosalpinx, I would feel myself, to say the least, crim inally derelict in my duty, to close the abdomen leaving the other tube subject at any time to a similar condition, and thus expose the patient to another attack of sickness, suffering and a life-or-death operation.

In any case where a woman has fully and determinedly made up her mind that she will not have any child, or another one, and says that if she becomes pregnant, she will interfere with it at whatever cost, even if it be her life, I advise her to "get fixed" so that she will not become pregnant. I consider it a much less wrong, morally, legally and physically, to thus prevent pregnancy, than to become pregnant and then destroy the fetus.

I say, I thus advise such erratic cases; but I have never opened an abdomen to do this operation without a better reason than to please a foolish fancy.

I have recently read in two of our leading medical journals, articles by surgeons of some note, upon the subject of ectopic pregnancy. Both writers referred to the liability of a woman who had had a tubal pregnancy on one side to have a like misfortune on the other side; and both of them discussed the justification of removing the ovary on the wellside to prevent future trouble.

Think of such a procedure! When a woman has unfortunately lost one ovary, to rob her of the other; when the simple operation I have devised would prevent the possibility of a future pregnancy, tubal or otherwise, and yet leave the patient as though no operation had been done (except to make her sterile)!

To sum up:

The Reasons for the Operation.—To stamp out hereditary diseases. To prevent offspring by those predisposed to crime. To prevent offspring by those who, by heredity or otherwise, have an uncontrollable desire for strong drink or harmful drugs. To prevent those who have had ectopic pregnancy or venereal pyosalpinx on one side, from having future like trouble on the other side. To prevent the pregnancy of any patient with a contracted pelvis, or in one who, from any cause, could not give birth to a full-term child.

In cases where it is only a whim of the patient; or cases where for more just reasons—though not a physical impossibility—a patient is determined to not have children, I leave each individual case to the conscience and judgment of her physician; whether he would better prevent pregnancy, or let her go on in the dangerous practice of child-murder.

The Effects of the Operation.—It will increase longevity of the human race. It will decrease crime. It will increase the size and strength of mankind. It will prevent hereditary inclination to alcoholic drinks and the use of noxious drugs. It will prevent the greater part of chronic diseases. It will lift a world of burden from the minds of those who cannot or should not bear children. It will positively have no bad effect sexually or physically, and will change the physiological functions of the parts directly involved. It will make mankind a larger, stronger, healthier, happier and better race of beings.