## THE INDICATIONS FOR AND ADVISABILITY OF ARTIFICIAL STERILIZATION.\*

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THE controversy between theology and medicine concerning the rights of the patient and the physician's duties to his various maladies is as old as the history of medicine. Where science has shown undeniable facts theology has given ground begrudgingly toward the real protection of the patient's interests. The sanctity of the human

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body has always held the reverence of men to the extent that inherently we shrink from desecrating either the living or dead form.

In preparing this paper I have experienced the strange change of opinion from one of rather enthusiastic belief that artificial sterilization should be freely practised to a wonderfully more consistent opinion that the indications for such procedure are very few, but when present are decidedly advantageous. The subject is one in which no broad rule can apply but only very particular cases may be so treated and then only with many safeguards.

In his writings upon sexual hygiene after detailing the ill effects of intercourse with efforts to protect against conception, Edgar says: "There is, however, one course possible, which may be recommended as both safe and efficacious, which can hardly be abused. This is obliteration of the Fallopian tubes for a short extent by the vaginal route. This is unobjectionable from any standpoint, and yet I fear it hardly constitutes a solution of the problem."

There are legal grounds for the support of sterilization operations. The following States have enacted laws allowing sterilization of defectives and making the sterilization of criminals obligatory. These are Indiana, Washington, Nevada, New Jersey, New York, North Dakota, Michigan, Kansas, Wisconsin, Texas and California. Pennsylvania has three times passed such statutes only to be vetoed by two governors in 1905, 1909 and 1911. To Pennsylvania belongs the claim of priority for such legislation, since the Indiana act, the first to become a law, was not passed until 1907. The first attempt was made in Pennsylvania in 1905.

At present the laws of this caliber are very much alike, but in two States only have operations been done, Indiana and California. The truth is these laws are imperfect and in two instances have been repealed as unconstitutional, in New Jersey and Iowa.

The problem of personal liberty has been brought to view in this matter in a conflict with the eighth Constitutional Amendment of the U. S. which reads as follows:

"Excessive bail shall not be required, nor excessive fine imposed, no cruel nor unusual punishment inflicted."

There is also conflict with the fourteenth Constitutional Amendment which guarantees equal protection to all.

With regard to criminals this seems cruel punishment inasmuch as the possibility of inheritance is much in doubt with regard to both insanity and crime. It is believed that the laws of psychiatry, formerly accepted to prove the surety of inheritance in mental



tendencies will be rewritten to the effect that what has formerly been ascribed to inheritance will be seen as due to environment.

Hence to quote White we find "It will be seen that by constructing elaborate family trees, reaching back over several generations it may not infrequently be possible to trace a bad trait and see its culmination in certain individuals; but that is a very different matter from predicting what the next generation is going to show. It is the difference between explaining and forecasting.

In an article, "Inheritance as a Factor in Criminality," Drs. Edith R. Spaulding and William Healy report "In the 1000 cases we have reviewed, we carefully sought for evidence of direct inheritance of criminalistic traits, as such. However, in no one case of the 1000 have we been able to discover evidence of antisocial tendencies in succeeding generations without also finding underlying trouble of physical and mental nature or such striking environmental faults as often develop delinquency in the absence of defective inheritance."

Continuing they say, "All told, the indirecti nfluence of heredity on criminalism in our cases appears to be that in 35 per cent. there is predominantly a transmission of mental and physical defects and that in 9 per cent. inheritance is partially responsible."

Concerning our ability at the present time to ascertain those who should be sterilized, Dr. Wm. A. White, Superintendent of the Government for Insane, Washington, D. C., says, "A word in this connection with regard to negative eugenics. There has been a tendency of recent years to pass laws providing for sterilization of certain classes of defectives and delinquents in the community."

"The amount of knowledge of an individual that would make it scientifically justifiable to sterilize him is an amount that is rarely obtainable in so far as I know where this work has been done, there has been little or no effort to obtain that knowledge, whether its desirability was or was not appreciated. The only condition where this method might theoretically be justified, with the minimum amount of knowledge, would be conditions in which the disorder from which the person suffered was dominant, and therefore, would be transmitted to the progeny. We must remember, however, that even in dominant traits, union with healthy persons may produce healthy children, and unless there are going to be at least two children, no prediction is justifiable."

"If the mating were productive of only a single child, as so many matings are these days, there is no reason why the child should not be the well child, and if well, it might grow up to useful citizenship. "To take the responsibility of intervening at this point and preventing such an issue is a very grave matter and warrants a much profounder knowledge than we can claim at present.

"On the other hand, if the trait is recessive only a very careful examination will make that clear, then only rarely will it be anything more than a probability. To sterilize such a person is a still graver responsibility, for a mating with healthy stock will eliminate the disease without even any sick progeny as the price."

Dr. Henry H. Goddard in work done in connection with the Russell Sage Foundation in speaking of sterilizing feeble-minded persons, teaching them to work, and then sending them to their homes, obviously a long and laborious task, says: "We thus see that in the present status of the problem, neither of the plans, segregation nor sterilization will solve the problem at once but since both are good, and both contribute somewhat to the solution, the only logical conclusion is that we must make use of both methods to the fullest extent possible." Continuing he says, "The situation is fast becoming intolerable and we must seize upon every method that is suggested and offers any probability of helping in the solution of the problem. In other words, it is not a question of segregation or sterilization but of segregation and sterilization."

Dr. Martin W. Barr, Chief Physician to Pennsylvania Training School for feeble-minded children says, "There is nothing that clings through generations like insanity, so related as it is to idiocy; and after all the difference is one of degree rather than of kind. In a careful study of insanity covering a period of nine years based on investigation of 138,500 individuals 20.5 per cent. was found due to heredity." He also says that it is estimated that there are 15,000 feeble-minded in the State of Pennsylvania and one in each five hundred throughout the United States.

In view of the fact that the information at hand concerning hereditary influences and the power to transmit them is in doubt, as shown by expert opinion and that these experts differ widely it would seem that at present mental defect should not constitute ground for sterilization, since scientific and legal right is in doubt.

Investigators in embryology and also in obstetrics seem to show that the rate of so-called spontaneous abortion occurs once in six pregnancies. Any standard obstetric work in its chapters on the pathology of pregnancy will give the indications for and describe at length conditions that demand emptying of the uterus either after curative treatment has been instituted, or forthwith as soon as diagnosed.



Certain systemic, infectious and constitutional diseases seem prone to cause abortion or premature labor in the majority of instances when pregnancy occurs and yet this condition will result nearly as readily as in the normal.

Recognizing these points it seems that nature is a prolific provider, but pathologic conditions have caused an inordinate waste. It is also true that such efforts are attended with some severe penalty by the human economy. It would seem that diversion of these tendencies would result in advantage.

It is true that there is a stronger tendency at this time toward terminating pregnancies, for just cause in the unfit, than ever before. This is legal, ethical and scientific. It meets religious opposition properly and when not based upon the soundest scientific necessity should be met by stronger objection from the profession than religious sects could ever offer. However, does not the need of therapeutic abortion, done with religious conscience, admit the probability that there are those who are unfit to go through pregnancy and labor? I think so. There is not the merest suggestion here that a sterilizing operation may be a less formidable undertaking to the patient than emptying of the uterus, but to say that, in some instances, where abortion will be necessary, sterilization can be done and thus anticipate that risk without adding but reducing ultimate danger in particular instances. Individualization is the keynote upon which this matter rests.

Investigators of psychology and neurology with derision decry the practice of continence in the married. The younger Keyes likens the situation to that of the wild beast fed without meat. He says that for the most part there is no need of sexual gratification, although the appetite is present, until the first taste of carnal food. After initiation there is a different mental and nervous complex, a near necessity. Contact without normal expression produces defense reactions that tend toward mental and nervous instability. The sexual act was originated in all its attraction for the purpose of procreation, but also as a means of expression of the deepest emotion that souls possess.

Unquestionably there are those who are unfit and those mentally deficient so that offspring would not be desirable. In such instances if sexual life is entered into, emptying of the uterus will spontaneously occur or should be induced in by far the largest portion, according to the conditions as they occur. There are particular instances, however, where emptying of the uterus is not to be chosen for

sterilization will protect the physical and moral life of those whose strength cannot surmount the strain of pregnancy and labor.

The classes of cases in which sterilization may be considered are:

- 1. Conditions where the severity of the lesion warrants steriliza-
- Conditions that are so fraught with danger when the strain of pregnancy and labor are added and particular experience has been known to be attended with calamity.
- 3. Patients who have done their part toward procreation successfully and in whom other operative procedures are necessary that makes sterilization also possible and attended with no additional risk.
- 4. Skeletal deformities presenting absolute disproportion between the passenger and the pelvic canal.

Within these groups are the tuberculous patient, the one who has severe cardiovascular upset during pregnancy, the kidney group, principally Bright's, attended with the kidney of pregnancy, the faulty metabolic conditions attended with diabetes.

Standard authorities on obstetric treatments are pronounced in their teaching that the tuberculous patient, the typical heart patient and the kidney case should not marry and should not bear children. What should be the course of procedure if any one of these conditions obtains when the prospect of pregnancy is likely, for instance after marriage, when no evidence of such had been formerly suspected? The operation to effect sterility is not of major importance and may even be done with cocaine. In well-guarded conditions it should be advised.

Osler in his writings on tuberculosis has said that, "There is much truth in the remark of DuBois: If a woman threatened with phthisis marries she may bear the first labor well; a second with difficulty, a third never."

The effect of pregnancy upon tuberculosis is universally believed to be grave; failure occurring after delivery, while the course of pregnancy is oftentimes without serious moment. Tuberculous women are known to conceive rapidly, giving birth to well-developed normal children. There is little evidence of intrauterine infection of the fetus, the children when infected, evidently contract the disease from contact with the mothers. In view of the universal failure of tuberculous women following delivery, sterilization would seem to be plausible, especially in incipient cases, when operating for some other indication.

Concerning the valvular heart lesions that become decompensated



during pregnancy Williams quotes various series of cases estimating maternal mortality to be from 6 per cent. to 60 per cent. according to different investigators. His own view seems to be optimistic. He says, however, that women suffering from heart lesions should oftentimes be dissuaded from marriage and child-bearing. On the other hand, it is his opinion that such cases oftentimes present agreeable surprises, although the seriousness of this lesion should always be kept in mind. In view of the fact that the decompensated heart lesions, especially double lesions, do present serious complications to labor sterilization may well be done in such instances. This is particularly true when a former labor had been attended with serious circulatory failure, jeopardizing the patient's life or requiring emptying of the uterus. In such instances chronic heart lesions should be looked upon as indications for sterilization on account of the condition itself or when some other operation is being done.

DeLee in speaking of decompensated heart lesions and advanced kidney disease, nephritis, says: "These patients should not marry, but if they do should not conceive." He says, however, that both conditions tend to premature labor, and that the ultimate risk is great.

Defective kidneys are seriously injured by the advent of pregnancy. The promise of recovery by induction of abortion in such cases is productive of disappointment, the disease seeming to have been given added impetus by pregnancy. Where nephritis exists, especially after experience of disquieting nature in the course of pregnancy terminating in spontaneous or therapeutic abortion, excision of a portion of the tubes may be done and will greatly insure the welfare of such sufferers. It is obvious that no such undertaking could be considered as an elective procedure, the necessity of such immediate shock would tend to offset too greatly the future advantage. The nephrectometized patient is not a candidate for sterilization unless the remaining kidney is decidedly crippled. Emptying of the uterus should answer her need should it come.

The disorders classified as the toxemias of pregnancy do not warrant prophylactic excision of portions of the tube. There is not enough evidence to prove their successive appearance and the serious cases may be better handled by therapeutic abortion.

With regard to skeletal deformities much change of opinion has come about. With the improved technic of Cesarean section and publiotomy it is much less urgent to arrange that such patients cannot conceive. Within the proper surroundings absolute pelvic contraction and spinal deformities do not constitute indications for sterilization. This is certainly so with the first pregnancy, since although the fetus be delivered in prime condition other offspring may be desired. Even if the patient so desires she should be dissuaded after the first Cesarean at least. Should two sections prove necessary the patient's wishes may be given first consideration and the operation done at the time of Cesarean.

Osteomalacia constitutes the only positive indication for sterilization per se. In this country this condition is a rare occurrence. It is a peculiar coincidence that this tropho-neurosis is of such severity in producing skeletal deformity as to demand immediate salpingo-oophorectomy. It is also strange that it offers the only instance among these conditions requiring sterility that removal of the ovary and not excision of the tube is necessary.

There is a large group of cases that deserve relief from further child-bearing. These are women who have well done their share toward procreation. In such instances where four, five or six children are living and a repair operation is being done while these patients are still in the child-bearing age, they should be allowed to divert their attention to the more perfect care of these already born. I feel that this is right where it is the patient's choice. For the woman who seeks to avoid the anxiety and danger of pregnancy for convenience only of course no consideration is deserved.

The attendant circumstances under which such practice may be undertaken are:

It shall be done with the patient's or guardian's approval.

With the exception of osteomalacia no disorder is of itself sufficient to warrant sterilization without at least one trial pregnancy and labor.

It may be done when an individual patient's experience with pregnancy and labor has been shown to be a serious menace to health and life.

Those women who have thoroughly done their part toward childbearing, in whom other defects demand operative procedures that would also allow sterilizing operations to be done, should be protected from further efforts.

For the majority of instances where this practice is to be instituted consultation should be necessary.

Nature has taken it upon herself to provide spontaneous sterilizing processes, gonorrhea and syphilis. The former effectively sterilizes a large deficient class, the prostitutes; the feeble-minded is likely to choose one infected as her sexual consort and is thus much more



frequently exposed. Syphilis insures the success of the former by aborting those unfit to finish the task of pregnancy and later parenthood.

The other indications for birth control, namely, the heart case, the kidney case, the metabolic case are prone to abort spontaneously; hence, there is a natural sterilizing process which belittles the efforts of humans.

Inasmuch as the first order of nature is reproduction, has man in the absence of undeniable fact upon which to base his action the moral or technical right to reduce this fundamental principle? In the presence of positive lesions of gravity, with previous experience of near fatal termination, sterilization is like any other therapeutic procedure and should be advised when it saves life or preserves health.

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