WHEN IS STERILIZATION OF WOMEN JUSTIFIABLE?

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It has long been an accepted rule of obstetrics that pregnancy may not be interrupted except on the ground that such interruption be necessary to save or prolong the life of the mother or to preserve the life of the fetus. Another rule is that pregnancy shall not be interrupted on the judgment of one physician alone, but, except where circumstances render this impossible, only after deliberate consultation with one or more physicians of recognized standing. Moreover, from the physician's standpoint there is no debatable time during pregnancy when these rules do not apply. Scientifically and practically the rights of the fetus are the same from the moment of conception to the hour when natural labor begins. A physician has no more right to empty the uterus after the skipping of one menstrual period than he has to interrupt pregnancy at a later date, the only difference being that his opinion as to when pregnancy shall be interrupted in the event of the mother's life being endangered may be influenced by the effect of such interruption upon the chances of the fetus for extrauterine existence. For instance, in a case of a woman with cardiac decompensation with small chances of the pregnancy continuing up to the point when the child would be viable, it would obviously be the part of wisdom immediately to empty the uterus in the interests of the mother whose life is endangered. On the other hand, if in a case of marked cardiac decompensation pregnancy has advanced to the sixth month, the physician naturally in the interests of the fetus soon to reach the age of viability will not be in favor of the immediate interruption of pregnancy if the mother's chances are not markedly diminished by such delay.

trust I may be pardoned for setting forth ese rather trite and generally accepted obtetric rules of procedure, but it seemed a necessary preliminary to the consideration of the question of the sterilization of women. Although there exists quite a literature on artificial sterilization, it must be acknowledged that the profession is not nearly as conversant with the rules governing this procedure as is the case with the artificial interruption of pregnancy. This is explainable on the ground that the interruption of pregnancy being a safer procedure has been performed since the beginning of obstetrics while artificial sterilization has only been safe and practicable since the advent of antiseptic and aseptic surgery.

Only those having to do with large public and private clinics have any realization of the number of women which for one reason or the other has been rendered incapable of reproduction. Much of this work has been performed for disease and is justifiable in that it restores the woman to health. It must be confessed, however, that in many cases the woman was sterilized through inexcusable errors of diagnosis and upon insufficient pathological grounds. It is not the purpose of this paper to deal with the class of cases where sterilization resulted from the removal of the diseased female organs of generation but to confine it to the indications for the artificial sterilization of women, either with or without a coincident operation, when the purpose of the procedure is to prevent future conception.

It will be at once apparent why the question of interruption of pregnancy is exceedingly valuable to a consideration of the indications for the artificial sterilization of women, for both have grounds in common although they differ in other respects. Stated generally, bearing in mind the interests of the State, fetal life should not be destroyed or conception prevented except on the ground that the mother's life be endangered by the continuance of the pregnancy or by the advent of future conception. In other words, the same rules ought to govern both procedures with this difference; in pregnancy at all stages there is another life to be considered, such life to be sacrificed only to preserve the mother's, while in the other class of cases, sterilization is performed entirely in the interests of the woman, for only a possible future life need be considered.

The physician will be spared much if he agrees to the above statements and acts upon

these rules of procedure. The physician who is not firm in his refusal to interrupt pregnancy except to save or prolong the life of the mother, if he is even willing to discuss the justifiability of interruption in a given case on other grounds, is in a very disagreeable position to say the. So many apparently good social and economic reasons why particular pregnancies should be ended can be advanced that the minute he makes this debatable ground, his troubles In artificial sterilization this is even more true. The woman dreads to have a child or go through the ordeal of another pregnancy and labor; she has enough children and for social and economic reasons does not desire more; these and many other reasons are advanced and would be given far more frequently than is the case except for one thing. The laity are not as yet so well educated regarding artificial sterilization of women as they are along other physiologic and operative lines. Sterilization of women carries with it in the public mind the loss of the ovaries from which women shrink, since it means diminished or gradual loss of sexual desire. That this is true is demonstrated by the comparatively large number of cases where women refuse certain types of operations necessitating sterilization until they can be assured that their ovaries will not be removed and that tubal sterilization will not interfere with sexual desire or marital relations.

It will be necessary in any consideration of the indications for artificial sterilization to keep in mind two kinds of sterilization, which in lieu of better definitions may be spoken of as, 1. Primary Artificial Sterilization, 2. Incidental Artificial Sterilization.

- 1. Primary Artificial Sterilization. Under this classification would come all cases where artificial sterilization is the primary end in view, the patient not being pregnant at the time, and the operation performed solely to prevent future conception.
- Incidental Artificial Sterilization may be defined as sterilization performed during the course of another operation in the belief that the patient's life or well being would be seriously impaired by future pregnancies.

Obviously, if artificial sterilization can only be performed on pathological grounds, for serious organic changes in the maternal organism, or because the past history of the individual has shown that pregnancy will bring about changes which will seriously threaten her life, primary sterilization will not often be performed. The

surgeon will hesitate to advise sterilization in the presence of organic disease which renders any kind of operation hazardous, for he will reason correctly that he is not justified in exposing his patient to certain risks in order to safeguard her against a possible additional danger by which she never will be menaced in case she does not become pregnant. For example, a woman with diabetes of a certain grade can never be subjected to operation without considerable risk. Artificial sterilization of such a woman would be subjecting her to certain risks. If the operation be not performed and pregnancy does occur, the latter can be interrupted with minimum risk to the patient. The same line of reasoning will apply to other organic diseases, the indications for primary sterilization depending upon the extent of the disease and the dangers of the operation in each individual case. However, it may be stated in a general way that this careful weighing of the indications and contraindications for primary sterilization is bound to narrow the field of this operative procedure. If the condition of the woman is such that pregnancy would be a serious additional menace to life, her condition would be such as not to warrant the performance of an operation to prevent something which may never occur.

In the second class of cases, incidental artificial sterilization, the situation is entirely different. Another operation must be performed for the safety or comfort of the patient. The puerperal history of the patient may show that her life would be seriously menaced or made so miserable as to be unendurable by another pregnancy. In such a case, since the additional operative risk of coincident tubal sterilization is practically nil and need not be considered, it is not only justifiable but it is the duty of the physician to consider the advisability of sterilization. For example, a woman with chronic nephritis in the child bearing period who must be operated upon for the removal of a pelvic or abdominal tumor should be sterilized as a part of the operative procedure if pregnancy would seriously jeopardize her life and if without sterilization her puerperal history is such as to warrant the assumption that she will become pregnant.

It is important to study each case carefully in order to decide wisely whether or not to sterilize, and the careful study of the patient's nuerperal history is absolutely essential in this connection. While incidental sterilization may be indicated in a young woman who has frequent pregnancies during her married h it may perhaps be decided unnecessary in an older woman who has been sterile the entire period of, or a greater part of her married life.

If artificial sterilization can be performed upon pathologic grounds alone, only those cases can be judged suitable for the procedure where the organs or organism of the woman is so impaired as to render future pregnancies extremely dangerous, or parts of the birth canal may be in such condition as to make it necessary to provide against future conception. In any case there should be definite reasons for sterilization which time can not change except to make them more urgent. If this be true, there is no place for temporary artificial sterilization and all operations with this end in view are based upon false premises and need not be considered.

A woman never should be sterilized without the knowledge and approval of the patient herself, that of her husband and the family or another physician. This applies not only to the removal of diseased tubes or ovaries or both but to artificial sterilization as well. It is the custom in the University Clinic for the husband or the woman herself if she be of age, unmarried, widow or divorced to sign a paper before operation authorizing the surgeon to perform such operation as he may deem necessary. It would seem advisable to be even more explicit when artificial sterilization is contemplated, for it is an extremely serious thing to deprive a woman of her capacity for reproduction. That is why, personally, I am not enthusiastic over primary sterilization of the insane, or those who are defective mentally, since they are incapable of giving assent to the operation. I would not refuse to perform incidental artificial sterilization on people of this class when the operation is advised by an alienist of high standing but I -certainly would hesitate under the existing laws of the State to perform the primary operation. Most of the sterilization laws passed by many states have been declared unconstitutional. showing that it is a debatable question and that one should not lightly perform such operations upon this class of people.

Conditions where sterilization may be considered:

Pulmonary tuberculosis.

Primary sterilization will rarely be indicated in pulmonary tuberculosis. Great advances have been made in the treatment of this form of tuberculosis, so that it would never be justifiable sterilize for the incipient or moderately decloped case. In advanced cases, primary sterilization will seldom be employed on account of the danger of any operative procedure under these conditions.

Incidental sterilization should be considered where the woman with advanced tuberculosis must have a laparotomy for other imperative conditions. In case the woman has children and desires future sterility on the ground that pregnancy will augment her disease, the operation would be justifiable and therefore indicated.

2. Other forms of tuberculosis.

Each case must be judged on its merits but generally speaking sterilization will rarely be indicated except in tuberculosis of the abdominal and pelvic organs. In tuberculous peritonitis in the female the genital organs are usually primarily or secondarily involved and when affected will be removed.

Disease of the kidneys.

Both primary and incidental sterilization may be indicated in chronic disease of the kidneys. Experience has shown that a woman with chronic nephritis should not marry since the patient's condition is bound to be made worse by pregnancy. Not only is this true but the chances of the pregnancy going to term and a healthy child being delivered are greatly reduced by the presence of the disease.

Each case should be carefully studied as to the type of severity of the kidney lesion. If a woman marries against advice she should not be subjected to the dangers of sterilization for fear of pregnancy since this condition may not supervene. If she become pregnant and either aborts spontaneously or the pregnancy is interrupted to save her life, it is well to consider the advisability of primary sterilization and to perform the operation if the kidney lesion so warrants, with the idea that future pregnancy is probable and that in that event her life will be endangered. Moreover, under these conditions her chances of going to term and giving birth to a healthy child are very poor.

Under the heading of disease of the kidneys should be included those numerous cases where the woman has threatened or actual eclampsia with each pregnancy although she is in quite normal condition with no or very slight urinary findings when not pregnant. In my experience such women have had scarlet fever or some other contagious or infectious disease when young which has left its mark on the kidneys, the lesions being increased to the danger point

by the advent of pregnancy. This class of cases is very well illustrated by the following:

Case I. No. 1516, age 40, married, American, housewife. Had scarlet fever at age of ten. Nephritic symptoms developed at age of 30. Has two living children, 13 and 10 years old. Miscarried during second pregnancy at second month due to typhoid fever. Had eclampsia with third pregnancy at eighth month, in convulsions for several hours, child removed manually and saved. About a year later aborted at fourth month on account of nephritis. Three years later a vaginal Cesarean section was performed for nephritic condition at the seventh month and child died. Had influenza and active nephritis in October, 1918, and has had a great deal of headache and backache since.

Pelvic examination showed an enlarged, retroflexed uterus, a badly lacerated cervix and a second degree tear of the perincum. The urine was quite normal showing neither albumen nor casts.

The patient was operated upon January 11, 1919, the series of operation consisting of dilatation and curettage, bilateral trachelorrhaphy, perineorrhaphy and shortening of the round ligaments. In addition the patient was sterilized by removal of wedge shaped pieces from each uterine cornua and burying the distal ends of the tubes between layers of the broad ligaments. Convalescence was normal.

4. Diseases of the heart.

My own experience has shown that women with organic lesions of the heart where the compensation is even fairly good do remarkably well during pregnancy. Where compensation has about reached its limit or where there is persistent decompensation with its attendant symptoms, edema, ascites and congestion in various parts of the body, due to a dilated and overloaded right sided heart, and experience has shown that the woman will probably become pregnant if not rendered sterile, primary artificial tubal sterilization is indicated.

Incidental sterilization in this class of cases should not be performed upon insufficient grounds but only after careful study of the patient's past history in reference to pregnancies and labors and after careful estimation of the present and future severity of the heart lesion.

The following is illustrative:

Case II. No. 1614, age 19. First para. Has severe mitral and aortic lesions with a greatly hypertrophied heart which is on the border line of decompensation. Her condition was such that it was thought inadvisable for her to undergo the strain of labor in a first pregnancy, although as far as could be judged the pelvic measurements were normal. Abdominal Cesarean section was performed August 28. 1917 and a healthy female child weighing six and one-half pounds delivered It was deemed advisable to sterilize the patient at the time of the operation which was done by

cornual resection. Mother and child made good recoveries.

5. Mental diseases.

Primary sterilization for these conditions has already been considered and the conclusion arrived at is that the operation cannot be often performed on account of the uncertainty of existing laws. This is not absolute and under certain conditions I would not refuse to do primary sterilization, but I would want to be certain that the facts in the case warranted the operation beyond any shadow of a doubt. My reasons for this hesitancy are based upon the changing opinions of the alienists themselves regarding the prognosis of many of the mental diseases. The worse or hopeless cases are carefully guarded in places where pregnancy is not apt to occur. Recovery may take place in the other class of cases and the surgeon confronted under these circumstances by a woman justly indignant at being deprived of the possibilities of becoming a mother, absolutely without her consent.

I would look upon the question a little differently in mentally deranged women who had to be operated upon for some other condition, although even here the surgeon must be doubly careful since he is dealing with a patient whose competency to consent to the operation may always be questioned.

Some of the patients have been subjected to incidental sterilization in the clinic but only upon the advice of alienists and those most concerned with the patient. The following is an illustrative case:

Case III. No. 10,120, age 34, married, two children 5 and 1 year old. Has suffered from a mild form of manic depressive insanity since birth of last child. Family surroundings very bad. On February 15, 1919, the uterus was dilated and curetted and an extensive colporthaphy for rectocele performed. The abdomen was then opened and a diseased appendix removed which was followed by a shortening of the round ligaments for marked retrodisplacement. Cornual resection of the tubes was performed upon the advice of Dr. Barrett who had given a careful consideration to all aspects of the case. Patient made an uninterrupted convalescence and has improved greatly mentally and physically.

Pelvic contraction.

At the present time an otherwise healthy woman with obvious pelvic contraction has no right to demand primary sterilization to prevent pregnancy, if she has never borne a child. Presumably she knew her condition and assumed the risks when she married. Furthermore, the risks of elective Cesarean section at term are not

much more than primary sterilization. The retically in this class of cases sterilization incidental to the Cesarean section is not warranted, no matter how many sections may be performed. Practically, however, common sense leads us to accede to the wishes of the patient and her husband if she has risked her life twice and does not care to assume the risk again. The following is an illustrative case:

Case IV, No. 1373, age 20, married, slightly, generally contracted pelvis, large child. Test of labor, no progress after 24 hours of labor. Delivered of male child weighing 10 pounds and 7 ounces, May 16, 1916. Mother and child made excellent recoveries. The second pregnancy differed from the first in that the patient suffered a. great deal from nausca and vomiting and edema of the feet and ankles. Female child weighing 6½ pounds was delivered by abdominal Cesarean section May 6, 1918. At the request of the patient who claimed that she did not want to take the chances of a third pregnancy and operation and with the consent of the husband, sterilization was brought about by cornual resection. Mother and child made good recoveries.

Defects in the reproductive organs due to previous labors or operations.

There may exist certain defects in the uterus or its appendages or in the birth canal which render delivery by the natural passages extremely hazardous and undesirable. Time does not permit of the consideration of all the possibilities along this line. I will merely illustrate by the following cases:

Case V, No. 1518, age 37, married, housewife. Personal history negative, married and has three children aged, 8, 11 and 14; labors normal. For the past two years has known she had a fibroid tumor. Examination showed a large uterus with a fibroid nodule the size of a lemon on the anterior surface of the uterus and slightly to the left of the median line. As the patient had lost considerable weight and strength from excessive flowing, an operation was decided upon. April 21, 1919, the abdomen was opened and a club shaped adherent appendix removed after the fibroid nodule had been enucleated. The nodule occupied the entire anterior uterine wall and the uterine mucosa was exposed after the enucleation. The cavity was filled in by interrupted catgut sutures and the peritoneal edges brought together.

The case had been discussed prior to the operation with the physician in charge, with the patient and with the husband, and it had been agreed that it was inadvisable to take any chances in case of a myomectomy of a rupture of the uterus at a subsequent labor. Hence, it was deemed best at the operation to sterilize the patient by cornual resection which was done. Patient made a good recovery.

Case VI, No. 858, age 27, married, was operated upon for a complete tear of the perineum resulting from a protracted labor in a funnel pel-

s and a large child. Examination showed the soft parts terribly lacerated and the vagina so contracted that the cervix could not be located. There was a complete tear of the perineum, the lower part of the rectovaginal septum being torn upward one inch.

October 2, 1912, the complete tear of the perineum was successfully repaired so that control of the feces and gas resulted. However, there was so much scar tissue in the vagina that the patient was advised in case of another pregnancy to be delivered by Cesarean section. On July 4, 1916, she was delivered by abdominal Cesarean section of a male infant weighing 7 pounds and 10 ounces. Both mother and child made good recoveries.

This patient was again delivered by abdominal Cesarcan section November 29, 1918, of a female infant weighing 7 pounds and 12 ounces. Both she and her husband requested that she be sterilized at the second operation as they did not desire to take any further chances. The request seemed reasonable under the circumstances and tubal sterilization was performed by wedgeshaped cornual incisions. Both mother and child made good recoveries.

Incidental sterilization it seems to me was decidedly indicated in Case V. Here was a woman with an impaired and weakened uterus due to the removal of a large fibroid nodule. The resulting cicatrix was bound to be less firm than that resulting from a clean cut and properly sutured incised uterine wall. It did not seem right, considering the number of her children and their need of her, to let her be subjected to another labor with a uterus which, to say the least, would be handicapped.

In Case VI where there was a contracted outlet and a vagina almost obliterated by scar tissue, another delivery except by Cesarean section would have been not only dangerous but probably impossible. Here abdominal Cesarean section was clearly indicated, as was sterilization at the second section.

Operation of such a nature that subsequent pregnancy and labor are rendered dangerous.

Without attempting to enumerate all such operations, suffice it to say, that all abdominal or vaginal uterine fixation operations are contraindicated during the child bearing age unless accompanied by tubal sterilization. The truth of this statement has been borne out by the reports of dystocia and fatalities resulting from a neglect to sterilize, or the employment of the wrong technic with resulting pregnancy. The following is an illustrative case of incidental sterilization for operations of this type:

Case VII, No. 10,080, age 45, married, 2 children 21 and 23 years of age, was operated upon

for uterine prolapse February 1, 1919. The interposition operation was performed which consists in separating the anterior vaginal wall from the bladder and pushing the latter upward separating it from the uterus. The fundus is delivered through the anterior culdesac and tubal sterilization performed by cornual resection. The fundus is stitched to the resected vaginal walls thus holding the bladder upward supported on the posterior uterine surface. The operation is completed by an extensive flap splitting perineorrhaphy by which the levator ani muscles are brought together in the median line,

The patient returned home with her prolapse cured and in no danger of becoming pregnant,

In the large majority of these marked cases of prolapse, the women are beyond the menopause. Where they are not and desire more children another type of operation must be utilized.

SUMMARY.

- Fetal life should not be destroyed or conception prevented except on the grounds that the mother's life is endangered by the continuance of the pregnancy or by the advent of future pregnancy.
- There are two kinds of artificial sterilization of women: 1. Primary artificial sterilization.
 Incidental artificial sterilization.
- In primary artificial sterilization, the end in view is solely to prevent future conception.
- 4. Incidental artificial sterilization means the sterilization of the woman during the course of another operation in the belief that the patient's life or well being would be seriously impaired by future pregnancies.
- Primary artificial sterilization will be comparatively infrequent, since the organic discase which calls for the operation at the same time renders it hazardous.
- In the uncertainty of the woman with organic disease requiring sterilization, the physician will hesitate to advise this procedure when the uterus can be emptied with less danger in case pregnancy supervenes.
- In incidental sterilization, the woman can be rendered sterile by a simple additional operative technic the dangers of which are practically nil.
- All operations devised for temporary artificial sterilization are based upon wrong premises, since the indications calling for sterilization are bound to grow worse, never better.
- As a rule a woman should never be sterilized without her consent and that of her husband, and of her family or other physician.
- Careful study of the history of the patient, especially her puerperal history, her past

and present condition, will enable the physician to decide for or against primary and incidental artificial sterilization in:

- Pulmonary tuberculosis.
- Other forms of tuberculosis.
- Disease of the kidneys.
- Diseases of the heart.
- Mental diseases.
- Pelvic contraction.
- Defects in the reproductive organs due to previous labors or operations.
- Operations of such nature that subsequent pregnancy and labor are rendered dangerous.

BIBLIOGRAPHY.

Cramer (H.) Ueber prophylaktische Sterilisierung der Frau. Muenchen. med. Wehnschr., 1904. LI, pt. 1, 605.

Editorial New York Med. J., 1899, LXIX, 127.

Hauch (E.) Avortement et stérilisation combinés et simultanés, Arch. mens, d'obst., 1916, VIII, 267.

Hedges (E. W.) Physical conditions in women warranting sterilization. Am. J. Obst., 1917, LXXVI, 745.

Heineherg (A.) Tubal sterilization. Pregnancy following blisteral salpingectomy. A report of two cases and a complete review of the literature. New York Med. J., 1916, CIV. 107-11.

Huebl (Hugo) Ueber kuenstliche Sterilisierung des Welbes. Monatschr. f. Geburtsh. u. Gynaek., 1902, XVI. 82; 237,

Kehrer (F. A.) Sterilisation mittels Tubendurchschneidung nach vorderem Scheidenschnitt, Centralbl. f. Gynsek., 1897, XXI, 961-965.

Kehrer (F. A.) Ueber tubare Sterilisation. Beitr. z. Geburtsh.

u. Gynack., 1501, V. 188. Leonard (V. N.) The difficulty of producing sterility by operations on the Fallopian tubes. Am. J. Obst., 1913, LXVII,

Offergeld (H.) Ueber die tubare Sterilisation der Frau. Arch. f. Gynnek., 1910, XCI, 1,

Poink (J. O.) Sterilization in Cesarcan section. Tr. Am. Gynec. Sec., 1909, XXXIV, 73.

Rose (H.) Sterilisierung mit Erhaltung der Menstruation. Centraibl. f. Gynnek., 1898, XXII, 689.

Sullivan (Robert Y.) The indications for and advisability of artificial sterilization, Am, J. Obst., 1916, LXXIV, 458-466.

DISCUSSION.

DR. J. H. CARSTENS, Detroit: It seems to me there is nothing to discuss. The paper so thoroughly covers the ground In every direction that I cannot find anything really to discuss. Some of the little details we may have different views on, but the one general principle laid down is the most valuable of all, and that is, that each case must be considered individually. They are all different, and you cannot lay down any absolute rule. If we start with that, we will probably all agree.

In pulmonary tuberculosis I think it is a good rule that women should be sterilized. In cardiac trouble I do not think it is needed. Those women have children and get along fine, In kidney trouble I think it is more serious again.

As to the woman's consent, the woman's opinion is not a great thing. I do not care much what a woman tells me about what she wants or what she does not want. I know what is good and I'm the best judge of that job. Perhaps a woman comes to me and says, "I want to be sterilized, will you do this operation and make me sterile?" That woman does not know what I know, I can see into the future. She may have two children, but I have seen those children die and she would give anything in the world to have another child. Or 1 have seen this woman's husband die and she would marry again, or would be in a position to marry again if it were not for the fact that she was sterile. I have seen many of these cases. In the woman who has three or five or six children and is about the age where she will cease to have children, I think you are more justified in sterilizing that woman,

In the cases of insanity the Doctor talked of, I believe I am little inclined the other way. I believe in eugenics and I think where anybody with those defects, where the tendency is toward insanity, and where the woman has had trooble w the first child or the second child, it would be a good idea f that kind of people not to survive. I think we have enough of them to take care of. To support them is the "white man's burden," and I think we are better off without them.

In tuberculous peritonitis I object to removing the womb, the tubes and ovaries. Why? Because they are always young women and you sterilize them and ruin them for their lives, You operate for tubercular peritonitis and you core them, and those women can be married and have children and have no future trouble. To remove the tubes and sterilize those women because there are a few tubercles on the tubes, I think is bad practice. Recause there are thousands and thousands of tubercles around on the peritoneum everywhere you can put your finger, but those tubercles are going to be absorbed and disappear, and those on the tubes will disappear too. There is no doubt at all. We think the tubercles can come up through the uterus and infect the tubes, but they do not come up in that way at all. They come through the lymph channels. Nobody here has ever seen such a case. I have seen only one and I have probably seen more cases than any of the rest of you. I saw one case where there was a tubercle in the uterus, but they have no bearing at all as a rule. If the tube is destroyed. you have to remove the tube just as if she had no tubercular peritonitis, but there is no use to remove the tube because there are tubercles around on the tube the same as on the peritoneum otherwise.

The point about bringing on a premature labor in these cases I think is perfectly right in certain cases, but still I am the last one who does it. I do not like to interrupt pregnancy. but once in a while I have to do it to save a woman's life. Here comes the question of Caesarean section. A way back when we made abdominal section and it was a dangerous operation, cases away back in the days when no single case recovered, when for a hundred years in Vienna they did the Caesarean section and never a case recovered, an Italian said to take out the whole uterus and thus avoid infection. So we did the Perro operation and I did some of those. One case was a young woman and the child afterward died, and for years afterward that woman cried every time she met me and said, "Oh! If only you had not removed my womb, I could have mother child." and that was a lesson to me and never after that did I do such an operation unless some other complication made it absolutely necessary. One patient I operated on four or five times by Chesarean section and after the third I suggested that she ought to be sterilized, but she was a good Catbolic and wanted to keep on having children by Caesarean

So far as the consent of the woman's husband and family is concerned, that is a matter of fact. We must have a thorough understanding and they must understand the case. I think we ought to try and prevent pregnancy in those cases. The great thing is we talk a lot about pregnancy, but we do not know absolutely how to prevent it. There are all kinds of means employed and they are all more or less successful, and In those cases of the women who ought not to have children we ought to find a means to prevent pregnancy and then if they do become pregnant, we can interrupt the pregnancy and thus avoid the dire consequences of the continuation of the

DR. JOSEPH E, KING, Detroit: I would like to know what the opinion would be about the use of radium to effect sterilization in those individuals who are afflicted with nephritis, or for the purpose of producing temporary sterilization in the cases of women who may recover and eventually have children,

DR. JOHN N. BELL, Detroit: Mr. Chairman: I recall a case seen several years ago, a good Catholic woman with four or five children, and she and her husband requested sterilization, The operation was done and she afterwards was, I presume, chastized by the priest for having this done, and she becametemporarily unbalanced from worry over the sin she had committed. However, later on she was restored to a normal condition by forgiveness and assurance that she had been forgiven for the act. It was a well-defined mental condition due entirely, I believe, to worry because of having the sterilization-I think we ought to be very careful about sterilizing a woman without good reason.