

## THE INDICATIONS FOR STERILIZATION\*

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STERILIZATION with its indications is a subject which is constantly being brought to the attention of the busy general practitioner and the obstetrician connected with an active clinic. In spite of this there are very few references to the subject in the Obstetrical Literature, the standard textbooks dismissing the indications with a very few lines, and devoting but little more space to the various methods. DeLee says, in effect, that any disease which is a contraindication to pregnancy is an indication for sterilization, and allows the matter to rest there. A search of independent literature is almost as barren, the most notable exception being Williams' most valuable article in the *Journal of the American Medical Association* in 1928.

The subject is one which is very much to the fore at the present time, and the only way any unanimity of opinion may ever be reached is for everyone to be perfectly frank about his own opinions and his work. In this way there will at least be a basis for argument and something from which those with more limited experience may draw conclusions.

In the past eleven years at the University Hospital, sterilization has been considered necessary or advisable in 55 instances. Since 10 of these were Porro sections, in which infection was the indication in 6 cases, obstructive tumors in 2, and abruptio placentae and cervical carcinoma (really a panhysterectomy) in 1 each; the operation was intentional 45 times. There occurred in the clinic over this same period 20,458 deliveries, giving a sterilization incidence of 1 in 454 deliveries.

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have become pregnant at all. Pregnancy having occurred, however, it did not seem that anything was to be gained by interruption, and indeed, all of these women went through their pregnancies remarkably well, requiring very little treatment. Rest was insisted upon, and occasionally digitalis was given. Local anesthesia was used 5 times and avertin once.

The low mentality cases were all seen by consultants of the psychiatric department, they were all multiparae, and all had mentally defective children. The sterilization was not only recommended but urged by the consultants in all of these cases.

There were 3 cases of epilepsy, 2 of them primiparae, and the third a para ii, with one child, a hopeless idiot. Operation in all of these cases was also done only after psychiatric consultation.

The 2 patients with placenta previa who were sterilized were both multiparae (para xi or xii), on whom cesarean section was done because of central placenta previa, and the sterilization was more or less incidental.

One of the cases of pulmonary tuberculosis was a para ii, the first labor nine years before having been terminated by cesarean for maternal exhaustion. She had had one kidney removed two years before this for tuberculosis and after delivery her chest condition became active and she was in a sanatorium for several years, from which she was finally discharged as an arrested case. She was seen early in this pregnancy and was referred to 3 competent internists. Their consensus of opinion was that she was quiescent and that the pregnancy should be allowed to continue. Section and sterilization under local anesthesia were done at term, with very pleasing results for both mother and child. The other was a para viii with a healed tubercular lesion who was sectioned for placenta previa and sterilized at the same time. The 2 cases of chorea also exhibited a very low mentality and were obviously unfit for motherhood.

#### METHODS OF STERILIZATION

Unless there seemed a pathologic indication to do so, none of our cases were sterilized by hysterectomy. In 18 cases the tubes were resected and the ends buried and in 27 Madlener's technic, kinking, crushing and tying of tube, was followed. There was at first considerable criticism of this method by our own clinic members, but it has gradually subsided to a low murmur and with one exception we are now all in accord that it is simple and as safe as any in which a removal of uterus, tubes and ovaries is not resorted to.

In this connection it is interesting to note the change in attitude of one of the outstanding obstetric authorities of our country. In 1926 he stated that it might be used when time was an important element, but that he did not fully trust it. In 1927 he had begun to use it but was not ready to report upon it. In 1929 it was declared to be "almost as positive as tubal excision, if not its equal." In 1930, "one of the surest, easiest, and safest of methods." This method has the added advantage that the tube may later be reunited if desired. It readily lends itself to local anesthe-

sia, and is not complicated by any bleeding at all. We have had no failures from this method and in the literature there are remarkably few (1 in 545 cases, and 2 more without any statement as to the number of cases) so few indeed that when they do occur, an error in technic, as simple as it is, may be suspected. Of the cases sterilized by resection of the tubes, 18 in number, one later became pregnant and returned to us. She was one of the contracted pelvis series, was again sectioned and *resterilized*. The entire group of 55 offered nothing else of interest either in mortality or morbidity.

#### DISCUSSION

What, then, are the indications for sterilization? The list is a long one and many of the indications must, of necessity, be very elastic. The number of children already born, the desire for children, the general condition of the mother in addition to the specific indication, and many other things will all have to be considered before a decision may be reached.

When the question arises in our own clinic, we have been in the habit of referring the patient to the necessary consultants, and then when all of their opinions are at hand the case is brought up for discussion before as many members of the obstetric group as can be present. Everyone feels free to voice his opinion and after a full discussion, the question is decided.

Parenthetically it is interesting to note that since we have been doing more sterilizations, the question of the interruption of pregnancy arises less and less frequently. The case of epilepsy with one child, an idiot, was sent us for interruption. We allowed her to go to term and two years later the psychiatrists reported that the baby was apparently of normal mentality.

The kidney and heart cases have already been discussed, and need no additional comment. In tuberculosis, the internist must be listened to very closely and his advice should bear great weight. In contracted pelvis, if the mother is in otherwise good condition, the procedure need not be considered until the third delivery, or under special conditions, the fourth or fifth. Cesarean section on selected cases, properly prepared and done as an operation of choice should give excellent results in competent hands.

Low mentality has given us the most concern of all the indications we have met. Many of our patients had given indications of being unfit for motherhood, and others were already the mothers of mentally defective children, and would apparently continue to bring such children into the world if nothing were done. Any contraceptive advice is of course useless in these cases, and sterilization is the only means of controlling them. Psychiatric consultation is always requested when a question of mentality arises, and the department has given us most whole-hearted cooperation, as indeed have all the other consultants we have called upon.

Only a few of the more outstanding indications have been considered



here, but I am sure that with other contributions to this subject the list will rapidly grow.

In the preparation of this paper I have carefully reviewed the cases in the series, and with the exception of the Porro sections, the most of which would have laparotrachelotomies today, I found none which in retrospect offered a weaker indication that it did at the time of operation.

If a cesarean section seems too drastic a procedure, it is a perfectly simple matter to allow labor to proceed in the usual manner and to open the abdomen during the puerperium. The sterilization may then be done by any method desired.

MEDICAL ARTS BUILDING.