CONSERVATISM IN PELVIC SURGERY.[1]

BY

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A THOUGHTFUL conservatism in operative procedures, when dealing with pathological conditions of the female organs of generation has fortunately become the rule in the majority of surgical clinics. And more particularly is this likely to be the practice where the surgeon in charge has kept in touch with the progress that has been made from this standpoint and from his own experience and that of others has learned to appreciate the advantages of conservative procedures in the treatment of pelvic inflammatory disease. There still remain, however, operators who believe it to be their duty to resort to extreme measures when dealing with the pathological conditions of the tubes and ovaries, although the same men often favor more conservative procedures when they encounter general surgical abnormalities. Now, with few exceptions, the so-called cystic or cirrhotic ovary is still capable of performing its functions and when the organ is bound down by adhesions, the symptoms are apt to be mainly due to their presence. Hence, in the restricted sense of the term, the condition of such organs is not pathological, and when they have been removed under these circumstances they seldom, if

[1]Read before the Ohio State Medical Society at Cleveland, May 18th, 1904.

ever, show any evidences of inflammation even upon microscopical examination.

But even when the ovaries or tubes have undergone actual inflammatory changes, or where they are occupied by tumor formations, or are bound down by adhesions so that their functions are interfered with and the necessity for operative procedures becomes imperative, we still have to decide how far we ought to go and how we can get the best results for the patient not only immediately but later on. After an experience of more than five years in the application of conservative measures in various forms of pelvic abnormalities, we have been able to thoroughly convince ourselves of the great advantages that may be obtained by preserving as far as possible the integrity of the pelvic organs. It is true that in a small percentage of cases, after such a line of treatment has been followed, the patient will still have to undergo a second operation before she can be completely relieved of her discomfort, and it is also possible that in a few instances, by the introduction of infection under these circumstances, her condition may be rendered even worse. Such cases are exceptional, however, in our experience.

Before choosing the more conservative operative procedure, we always make it the rule to carefully explain to the patient, or to her friends, that such measures will be carried out if in our judgment at the time of the operation they seem to be advisable. But we further state that even though we remove what seems to be the inflammatory area, it may later become necessary to institute a second operation, before relief is obtained. In the great majority of instances, the patients are perfectly willing to take a good many chances if there is a reasonable prospect that the conservation of the pelvic organs will be compatible with future health and comfort, and from actual observation we have found that it does not become necessary to perform a second operation in more than from three to five per cent. of all such cases. If an ovary or a portion of an ovary can be saved, before the normal menopause has begun, or even during the time in which the patient is experiencing these changes, we have found that not only the immediate convalescence, but also the subsequent condition of the patient is in every way more satisfactory.

Anyone that has cared for patients that have had their ovaries removed (even though diseased) can testify to the fact that many of them suffer more or less acutely for varying periods of time,

following the operation, in some instances as long as five years. And unfortunately during this time the morphine or some other drug habit may be formed in endeavors to relieve their distress. The prevention of the artificial menopause is the most important reason for leaving the patient her ovaries whenever this is possible, the question of possible pregnancy following conservative measures being in our opinion only of secondary importance, as in the majority of these cases, the patients are in an unhealthy condition for the bringing of a child into the world. This criticism, of course, does not usually apply to those cases in which a tumor is present, implicating only one ovary. Where the question of pregnancy is to be considered, one has to deal with the condition of the Fallopian tubes, as well as that of the ovaries.

The various methods to be employed in these conservative operative measures when dealing with the tubes and ovaries are well known to everyone and a description of them would prove to be merely a tiresome repetition. I would say, however, that in the light of our experience it is a wiser procedure to remove the Fallopian tube whenever a pyosalpinx exists, *i.e.*, where there are macroscopical evidences of pus. When, however, the ovary is involved in an abscess formation, the same radical treatment is not always indicated, as the abscess in most instances does not involve all of the ovarian stroma. Moreover, microscopical examination of many of these ovaries will show that the abscess is walled off, and the ovarian stroma beneath is frequently invaded only to a slight extent. In such instances the abscess may be excised and the line of incision be brought together with a fine silk or catgut suture.

I shall now give a brief analysis of the work in this line carried out in the Gynecological Department of the Lakeside Hospital during the past five years. I wish to acknowledge the valuable assistance of Dr. Howard Dittrick, the Resident Gynecologist, and Dr. Wm. T. Abbott, the First Assistant Gynecological Interne to the Lakeside Hospital, in the preparation of the analytical tables. In all the cases considered the lateral structures showed macroscopically marked evidences of inflammatory disease, and there were adhesions which bound down the structures. We have only included in this analysis those cases in which we were able to carry out conservative measures, and not those in which we were obliged, on account of the technical difficulties of the operation, to leave the lateral structures in on one or both sides, although removal was indicated.

ANALYSIS OF CASES.

Total number, 237. Age: The oldest patient was 52; the youngest 17 years of age. Average age, 28-12 years. Five were 17; six were 18; nine were 19; eight were 20; twelve were 21; thirteen were 22; twenty were 23; nineteen were 24; fourteen were 25; nine were 26; eight were 27; eighteen were 28; eight were 29; fourteen were 30; four were 31; six were 32; ten were 33; four were 34; seven were 35; three were 36; three were 37; six were 38; four were 39; five were 40; four were 41; three were 42; two were 44; one was 45; three were 46; two were 47; two were 48; one was 49; one was 50; two were 52. The majority of the patients were between 17 and 30 years of age.

Menstrual History.—The menstrual history was abnormal in 169, and normal in 68 cases. The menopause had taken place in one. The symptoms presented in the abnormal cases in most instances were those of dysmenorrhea, menorrhagia, prolonged and irregular flow.

Leucorrhea.—One hundred and seventy-six patients gave a history of a leucorrheal discharge. Of these patients, 124 were married, 38 were single, and 14 widowed.

Married Life.—165 were married; 53 were single; 20 were widows. Longest time married, 28 years; shortest time married, three months. Of the 165 married, 115 had borne children. The total number of children borne by the 115 patients was 271, the average being 1.12 per cent. The greatest number of children borne by one patient was 11. The next greatest number was 9. Still-born children, 2. Twins, 1. Women having borne one child, 51; 2 children, 21; 3 children, 12; 4 children, 13; 5 children, 4; 6 children, 5; 7 children, 2; 9 children, 2; 11 children, 1.

A history of infection following labor was recorded in 40 cases. Instrumental delivery was followed by infection in 13 cases. The total number in which there was a history of infection following labor, 53.

Miscarriages.—Number of patients having had miscarriages, 103; number of miscarriages, 172; married, 83; single, 10; widowed, 10. Abortions or miscarriages had been induced in 52 cases; in the married patients, 34; in single patients, 10; in widows, 8; patients having had one miscarriage, 65; two miscarriages, 22; three miscarriages, 13; four miscarriages, 1; five miscarriages, 1; six miscarriages, 1; seven miscarriages, 1. Infection following a miscarriage had occurred in 42.

Gonorrheal Infection.—In 51 patients there was a history of gonorrheal infection; positive in 32; probable in 19. Of these 28 were married; 19 single, and four widowed.

Among the married the history was positive in 16, probable in 12, and in one was complicated with syphilis.

Among the single the history was positive in 15, and probable in 4 cases. Among the widows, positive in one case, and probable in three.

A positive history of a specific infection is generally difficult to obtain, and unless the infection can be surely proven, we are not justified in making positive deductions from this standpoint. It will be seen from a study of the cases of labors and miscarriages, that infection in these instances plays a very important part in the causation of inflammatory diseases of the tubes and ovaries. Thus, there were 53 cases of infection following labor and 42 following miscarriage—in all 95 cases.

Bowels.—In 73 cases there was a history of constipation. Forty-seven of the patients were married; 14 were single; 12 widowed.

Micturition.—There was some complaint with this function in 124 cases. Ninety of the patients being married, 23 single; 11 widowed.

The general condition was good in 138 cases; in 82 fair; and poor in 17.

The uterus was adherent in 121 cases. Eighty-six of the patients were married; 29 single; 6 widowed.

The bowels were adherent in 165 cases. One hundred and ten of the patients were married; 42 were single; 13 were widowed.

The vermiform appendix was removed in 113 cases. Married, 80; single, 23; widows, 10. In 56 married patients it was adherent; in 14 reflexed; in one occluded; in 9 hypertrophied. Single: adherent, 18; flexed, 3; occluded, 1; hypertrophied, 1. Widows: adherent, 8; occluded, 1; hypertrophied, 1.

It was adherent and not removed in two cases on account of an extreme condition of shock after removal of the pelvic structures. One of the patients was married, the other single.

The appendix was			adherent in.....	82 cases
"	"	"	flexed in	17 "
"	"	"	occluded in	3 "
"	"	"	hypertrophied in	11 "
				113

STRUCTURES SAVED.

Ovaries:

Right	93
Left	76
Both (47 times or)	94
Right (partial)	17
Left (partial)	17
Both (partial)	3
Both ovaries with tubes 17 times or	34
	334

This number was saved in 237 cases, a little over one ovary and a third to each patient.

Tubes:

Right	17	
Left	25	
Both 25 times	50	
Right (partial)	15	
Left (partial)	11	
Both (partial) 5 times or	10	
Total	128	in 237 cases, or a little more than one tube to each patient.

STRUCTURES SAVED IN THE PUS CASES.

Pus was met with in 64 cases out of 237, or in 26.62 per cent. They were divided as follows:

Married	36
Single	22
Widow	6
	64

The pus was found as follows:

Double pyosalpinx:

Married	22
Single	5
Widow	3
	30

Single pyosalpinx:

Married	7
Single	5
Widow	1
	13

Tubo-ovarian abscess with pyosalpinx (single):

Married	6
Single	1
Widow	0
	7

Tubo-ovarian abscess (double):

Married	0
Single	8
Widow	0
	8

Tubo-ovarian abscess (single):

Married	1
Single	2
Widow	1
	4

Ovarian abscess (double):

Married	0
Single	1
Widow	1
	2

STRUCTURES SAVED IN PUS CASES.

Ovaries.		*Tubes.*	
Right	27	Right	5
Left	15	Left	2
Both 12 times, or	24	Right (partial)	2
Right (partial)	4	Both (partial)	2
Left (partial)	2		
	72		11

Thus 72 ovaries were saved in 64 pus cases, or about one and a fifth ovary to each patient. In 12 cases both ovaries were saved. Eleven tubes were saved, or 1 to about every five and a half patients. In these cases the following organisms were found:

	Times.	
Gonococcus	6	
Streptococcus pyogenes	4	(1 doubtful)
Staphy. pyog. aureus	3	
Staphy. pyog. albus	2	
B. coli communis	2	
B. mucosus capsulatus	1	
Cocci (no growths)	3	
	21	in all or ⅓ of the cases.

In the pus cases the abdominal wound became infected 4 times, or 6.34 per cent. From the infected abdominal wounds in the pus cases the following micro-organisms were isolated:

	Times
Streptococci	1
B. coli communis	1
Staph. pyog. aureus	1
Staph. pyog. albus	1
B. mucosus capsulatus	1
	5

Micro-organisms found in abdominal wounds other than pus cases:

	Times.
B. coli communis	2
Staphy. pyog. albus	2
Cocci and bacilli on coverslip, no growth	1
	5

The leucocyte count in the pus cases:

Highest	36,000
Lowest	10,000
Average count	21,615

Drainage was employed in the pus cases as follows:

Abdominal alone	none
Vaginal	13 times
Abdomino-vaginal	2 "

Fifteen times, or in 23.42 per cent. of all pus cases.

Drainage was carried out 21 times in 237 cases, or in 8.86 per cent of the total number of cases. Once by the abdomen alone; twice by the abdomen and vagina combined; eighteen times by the vagina alone.

The convalescence was interrupted by the following conditions: Bronchitis in four cases; pneumonia in one case; pleurisy in three cases; phlebitis in one case; abdominal fecal fistula in one; post-operative mania in one; suppuration of abdominal wound twenty times. Total number interrupted, thirty-one.

In those cases interrupted by infection of the abdominal wound (eight of which were in the pus cases), nineteen of the infections were slight and one marked. Total number of abdominal wounds infected, 8.43 per cent. Number of cases requiring a secondary abdominal operation for the relief of symptoms, seven. Number of cases under observation on account of pelvic discomfort, eight In seven of these cases the symptoms of which the patients complained disappeared after a year's time; one is still complaining. Deaths in the pus cases two, or 3.1 per cent. Deaths in the whole number of cases (237) four, or 1.68 per cent.

CASE I.—Among the pus cases the diplococcus pneumoniæ was found in the secretions in the peritoneal cavity, together with B. mucosus capsulatus and B. coli communis.

CASE II.—The patient also died from the effects of a pelvic peritonitis; autopsy not allowed.

The two remaining cases were in the non-suppurating class.

In one there was an ectopic gestation which has involved the right tube. On the eleventh day following the operation she developed an acute obstruction of the bowels. The temperature and pulse were practically normal. The abdomen was reopened and the obstruction relieved, but she succumbed from shock one

hour following the operation. In the second case the disease of the lateral structures was complicated by an adherent, much thickened and contracted gall-bladder, which contained three good-sized gall-stones. The opening made into the gall-bladder was difficult to close. The patient developed a localized peritonitis, which resulted fatally five days after the operation.

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