

## VAGINAL HYSTERECTOMY

A DESCRIPTION OF ITS ADVANTAGES, TECHNIC AND REVIEW OF 129 CASES

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NUMEROUS articles have appeared in the literature during the past ten to fifteen years indicating the great margin of safety which vaginal hysterectomy offers the patient. This method permits a decrease in operating time, shock, blood loss, postoperative infection, thrombophlebitis, embolism,<sup>1</sup> postoperative pneumonia and cardiac upsets. Numerous surveys have been made of cases collected from the literature and disclose a mortality rate of 0.18 per cent<sup>2</sup> to 0.31 per cent<sup>3</sup> for this operation. These figures in all likelihood are the lowest rate for any type of major surgery.

Vaginal hysterectomy can be performed alone or accompanied by any group of other gynecologic procedures. By this method the uterus and cervix are removed at once. The tubes and ovaries may also be removed when indicated. Vaginal repair may be added and a urethrocele, cystocele, rectocele and enterocele can all be corrected at the same time. Thus operation through the vaginal route is complete and leaves nothing undone. Partial operation such as a cervical amputation with repair leaves the fundus and adnexae. A rectocele repair and an abdominal panhysterectomy usually leaves an uncorrected cystocele. These conditions may require more surgery at a later date. Figures need not be quoted to indicate the large number of patients in whom tumors in the retained fundus develop. It is well to point out however that cancer develops in the retained cervical stump in about 5 per cent of cases.

The literature<sup>4</sup> abounds with references to the diabetic, cardiac, cardiorenal and debilitated patients who have received the benefits of this operation. Not as much can be said for the abdominal approach. It is certain that many patients with such medical complaints have not had the benefit of surgery because of the strain and shock<sup>5</sup> of the abdominal operation.

The method of vaginal panhysterectomy can generally be used whenever the abdominal approach would have been employed.<sup>6-14</sup> There are certain exceptions.

It is better to use the abdominal approach if the uterus is larger than a three months' pregnancy. There are some<sup>15,16</sup> who recommend morcellation of such a uterus prior to its removal through the vagina. This practice, obviously, is carried out by those surgeons well experienced in the vaginal approach.

The majority of gynecologists agree that carcinoma of the fundus should be treated abdominally. They also believe that cases of pelvic endometriosis or chronic pelvic inflammation can not be handled well vaginally. Previous suspension cases also fall into this category, unless the ligaments have become stretched and a certain amount of prolapse exists. Otherwise there seem to be no contraindications to this method.

The gynecologist faced with a decision as to the method to be employed in the correction of the various types of vaginal hernias, with or without prolapse, may choose any one of at least a dozen procedures.<sup>17</sup> When one considers vaginal hysterectomy and repair, it is apparent that an extensive combination of these procedures are employed at one time. There must be large numbers of women<sup>18</sup> throughout this country who have uncorrected severe lacerations of the vagina, accompanied with prolapse or procidentia of the uterus, enterocele and eversion of the vagina. I am convinced that vaginal hysterectomy and repair would reduce markedly the chronic pelvic complaints and the incidence of carcinoma if this method were employed more frequently.

It is not intended by any of the preceding remarks to recommend vaginal hysterectomy to the exclusion of the abdominal approach. It has already been pointed out when this method is preferable.

## PREOPERATIVE INVESTIGATION

As in preparation for all other surgery the patient upon whom a vaginal hysterectomy is to be performed should be investigated preoperatively, since a large number of these operations are performed in the aged and on many others with chronic medical conditions.

In addition it is my custom for the patient with the "bald head" cystocele to be examined by the urologist. He evaluates the condition of the bladder, the presence of cystitis and by adequate washes and treatment will clear the infected urine from the bladder. He may not always accomplish this completely, but surgery is not performed until maximum improvement is obtained and his decision rendered. The importance of this type of treatment is that it reduces the incidence of cystitis postoperatively. It is a well known fact that a cystocele often contains a puddle of infected urine and that manipulation during repair will spread this into the rest of the bladder and thus cause severe postoperative cystitis.

In the series of cases reported in this article, two patients with severe mental depression were operated upon. Both had received electrical shock treatment during the year prior to operation. Each had a third degree prolapse or procidentia, accompanied with an extremely large cystocele and rectocele. In each instance the cystocele contained an abundance of urine and was so thick with pus that the urologist reported the urine as "resembling milk." These patients were treated by him for about three weeks preoperatively. Both patients were operated upon in the hope that correction of the organic disability and the removal of chronic infection would be of value to them. Each one showed improvement mentally immediately after the operation and continued to improve over a two-year follow-up period.

The infected vagina and cervix are treated preoperatively for at least three weeks. This treatment is carried on chiefly by the patient who is instructed to take 4-quart douches twice a day. The type of douche recommended is usually on an alternating basis. A douche, alkaline in nature, is taken in the morning and an acid douche at night. This method is employed as suggested in order to "buffalo the bug." In other words the environment is changed so frequently that the pathogenic

bacteria present do not have the opportunity of accommodating themselves to it. This treatment is also carried out with the intention of irrigating the vagina, since in the face of infection it is considered "an abscess cavity." Reduction of the inflammatory congestion in the cervix and surrounding tissues improves these, with the result that the cervix does not bleed so readily when handled with instruments, nor will the catgut sutures necrose as quickly as they would in the presence of infection. Thus the hazard of sloughing of sutures and possible bleeding is reduced.

## OPERATION

The method of performing vaginal hysterectomy has been well described by many writers.<sup>12,16,19</sup> Therefore, only some practical points seldom found in the literature will be discussed. The encircling incision made about the cervix is usually begun in the posterior portion and then carried around to the anterior aspect. The uterosacral ligaments often will present readily through the posterior incision. It is possible to clamp and suture tie them immediately without the interference of a bloody field, which otherwise would result from an anterior incision and the blood flowing downward. After the encircling incision has been completed, the bladder is freed from its attachments to the uterus and is dissected upward. If there is a question regarding the extent to which the prolapsed bladder is attached to the uterus, a catheter may be introduced into the cystocele and the position of it palpated over the surface of the uterus. Clamps are then applied to the bases of the cardinal ligaments and cut close to the uterus on each side. If the ligaments are well relaxed, then Kelly clamps are applied in short bites, continuing up one side to the level of the bladder reflection and the ligaments are cut close to the uterus. When the ligaments are not too well stretched, the clamps may be applied in short bites on each side, stepladder fashion, cutting between the uterus and the clamp. The Kelly clamp is used because a small bite can be taken with it and not too much tissue crushed. Ochsner clamps are never used because of the point in the tip of the clamp which may readily perforate vessels and cause bleeding. The bladder reflection is incised transversely when reached. Following the incision of this leaf of the peritoneum, the

uterus may be brought forward or tipped backward, depending on the easiest course. This in general will depend on the size of the uterus and the ease with which it can be delivered under the pubic arch. It may be easier at times to deliver the fundus directly through the vagina without tipping it or changing its direction at all. The clamps are removed from the cut edges of the ligament on each side after sutures have been applied and the various vessels tied. After removal of the uterus a pack is introduced into the pelvic cavity and the patient placed in deeper Trendelenburg position in order to keep the bowel away from the field of operation. The uterosacral ligaments are pulled forward with clamps held by the assistant. This permits the operator to palpate the ligaments on each side as far back as possible and under direct vision approximate both uterosacral ligaments by four or five interrupted sutures. The suture includes a portion of the posterior pelvic peritoneum, deep in the posterior cul-de-sac. If an enterocele is present, the hernia sac is pulled upward by a clamp applied in the "dimple" of the sac and two or three encircling sutures are placed across the neck to obliterate it completely. The neck of the sac is also included in the sutures which are used to approximate the uterosacral ligaments. This having been accomplished the anterior peritoneal bladder reflection is located. It is pulled down with clamps. This helps visualize the entire portion of the bladder making up the cystocele. The hernia is now freed from the posterior aspect of the anterior vaginal mucosa, separating the bladder from the mucous membrane and stretched fascia. The protruding bladder is reduced by means of one or two encircling purse-string sutures and thus returned as an abdominal organ. Interrupted sutures are used occasionally to reduce the mound of the cystocele and the fascia is frequently approximated by interrupted stitches.

After the bladder has been reduced and returned into the abdomen, the urethra is completely freed from its various adhesions to the pubic rami. Such adhesions may pull the urethra either to the right or left, or cause a shortening and bulging of the urethra and therefore must be separated. The urethra is completely exposed for its full length and almost for two-thirds of its circumference, leaving it attached only in the apex between

the pubic rami. This dissection is exceedingly important, especially in cases of stress incontinence. It is the one step which appears to be common to the various operations which have been devised for stress incontinence. An examination of the description of such operative procedures shows that each operator who claims great success for his operation, whether his approach is abdominal or vaginal, actually does a very extensive dissection and breaking up of adhesions about the urethra.

The next step is the correction of the abnormal descent and abnormal movement forward of the urethra by placing sutures which will decrease the circumference of it. Plicating stitches are used and include as much of the urethral wall itself as possible. Following this, four or five sutures are placed so as to approximate the suburethral tissues. The suture picks up the tissue underneath one pubic ramus and is passed to the other side. These sutures when tied elevate the urethra. The caliber of the bladder neck is reduced by several sutures placed below it. The type of suturing described will produce a thick splint which in turn will help correct the stress incontinence, because of the elevation of the urethra.

Next the sponge is removed from the pelvic cavity and the count taken. The anterior and posterior pelvic peritoneal leaves are now approximated and peritonization is thus completely accomplished. The sutures originally placed through the stumps of the uterosacral ligaments having been left long purposely are now threaded on a needle and are sutured into the stumps of the lateral sets of ligaments. When these long sutures are tied, the stumps of the various ligaments are approximated to each other and to the uterosacral ligaments. Perforation of blood vessels is avoided since a needle does not have to be passed again through the uterosacral ligaments which were sutured together earlier in the operation. The mucous membrane is removed next from the anterior vaginal wall. The redundant portions are removed in the shape of a triangle. A "safety" stitch is introduced through the mucous membrane just behind the urethra and tied. This prevents tearing of the mucous membrane by unexpected pull. Interrupted sutures are then placed to approximate the cut edges of the mucous membrane. These begin just behind the urethra and are carried upward to that point which will become the apex of

the vagina. Here the cut edges of the anterior and posterior vaginal mucosa are approximated transversely in the same manner as in an abdominal panhysterectomy. The rectocele present is next repaired.

At the completion of the operation a pack is introduced into the vagina to produce pressure on superficial bleeders. This pack is permitted to remain in place for twenty-four to forty-eight hours, depending on the extent of the dissection carried out on the vaginal walls. At the termination of all procedures a catheter is introduced, generally of the Foley type, using a 3 or 5 cc. retaining bag. This is left open for constant drainage.

*Criteria for a Good Result.* The criteria for a good result are met if the patient has good urinary control, no discomfort during intercourse, good vaginal wall support with a vaginal apex pulled up high. Criticism has been leveled at vaginal hysterectomy because of the possible development of enterocele at a later time. When this occurs, it probably is always due to the fact that an enterocele was not recognized and repaired at the time of operation.

#### POSTOPERATIVE CARE

Postoperative care following vaginal hysterectomy usually is simple. The average patient is permitted out of bed by the fourth day, at which time she is instructed to sit in a chair only. This type of limited activity is continued until the sixth postoperative day at which time she is permitted about and is discharged on the seventh or eighth day. Instructions are issued at that time for her to continue at rest for at least a total of two weeks more. During the stay in the hospital and beginning as soon as possible after operation, the patient is on a full house diet and fluids are not limited in quantity. The self-retaining catheter is usually left in place for about three or four days at the end of which time it is removed. The average patient will void readily, but those who do not may require catheterization once or twice more and then will void satisfactorily. A few will still be unable to perform this function and if three catheterizations at six-hour intervals are required, then the catheter is replaced for twenty-four hours longer. Only a rare case will require the replacing of the catheter for a second time. The difficulty in voiding seems to be due to two reasons. It has

been pointed out<sup>20</sup> that the fresh incision in the region of the urethra is almost always associated with spasm of the musculature, especially in sensitive individuals, and that in such individuals an inability to use the muscles of the pelvic floor develops post-operatively. The other reason seems to be that the bladder has learned how to function in its cystocele position and that after it is returned into the abdominal cavity it requires "education." This nerve muscle mechanism seems to vary in degree and seems unrelated to the amount of surgery performed. Explanation of this phenomenon will reassure the patient and make the waiting period easier for her.

The nerve muscle mechanism may be stimulated while the catheter is in place by clamping it shut for two hours and releasing it for the same period of time. The patient is instructed how to do this and continues this procedure for twenty-four to thirty-six hours prior to its removal. This procedure is effective in many cases.

There are some patients however who will still require assistance. In this group various medications and methods have been employed. Some have benefited from the introduction of 5 cc. 10 per cent argyrol solution or sterile mineral oil into the bladder. Either solution seems to overcome the dysuria and permits the patient to void without difficulty. In others intramuscular injections of doryl,\* urecholine\* or pituitary extract† will be beneficial. Considerable relief is obtained by some after sandalwood oil‡ 10 minims is given in capsule form at about four-hour intervals. True cystitis is proved by bacteriologic examinations and treated by daily irrigations and the various antibiotic or sulfa drugs, depending on the organism found.

Postoperative bleeding has offered no difficulty in the group of cases to be discussed later. In two cases only bleeding occurred on the eleventh day and was readily controlled by an oxycel pack placed into the apex of the vagina and held in this position by another

\* Merck & Company: Doryl® (carbachol U.S.P.); urecholine® chloride (urethane of  $\beta$ -methylcholine chloride).

† Upjohn Company: pituitary extract (double strength U.S.P.).

‡ Eli Lilly & Company: santal oil® (elastic-filled capsules East Indian); solution 'negatan' (negatol, Lilly)®.

pack. This postoperative complication is usually avoided by meticulous tying of the major blood vessels and veins with varicose enlargement and the insertion of a vaginal pack immediately after the operation. The pack produces pressure for twenty-four hours and this seems to be long enough to prevent oozing.

Vaginal discharge will develop in most of the patients about the seventh or eighth day. This is probably due to the quantity of suture material used and is readily controlled by douches.

Prior to discharge from the hospital patients are instructed to avoid spicy foods for several weeks. This seems valuable advice for all cases having had a catheter in the bladder. The patient is also instructed to avoid heavy lifting or prolonged standing for the first six weeks. This instruction is consistent with that given for all types of hernia operations.

The first examination following the convalescent period is performed about eight weeks after the operation. At this time residual catgut is removed and proliferating granulation areas are cauterized with negatan solution.\* The patient is next seen about six weeks later. If at this time a piece of granulation tissue is found in the apex of the vagina, it is removed with a curet and the resultant raw surface is either cauterized with negatan solution or fulgurated. These procedures are painless.

#### GENERAL REVIEW OF 129 CASES

The following comprises a review of 129 vaginal hysterectomies of a much larger group. This number was taken because an adequate follow-up was obtained.

*Symptoms.* The symptoms presented by this group of patients were variable and gave no clue to the extent of the vaginal displacement. Some with lesser symptoms had the largest amount of vaginal disorder. For instance one patient who stated "that something hangs out of the vagina for the past twenty years" had a mass which measured eight inches from the urethra to the exposed cervical os and was  $16\frac{1}{2}$  inches in circumference. She stated that she had no other symptoms. This case was one of pelvic eversion. At operation it was found to contain the bladder, about 10 inches of rectum and

\*Eli Lilly & Company: santal oil® (elastic-filled capsules—East Indian); solution 'negatan' (negatol, Lilly)®.

sigmoid, the uterus and about 8 feet of small intestine.

Very few of the patients suffered pain and those who did usually translated it into a "bearing down" feeling or "pressure sensation." Obstruction to efforts in voiding was not accompanied by pain. In some women this function was accomplished after the cystocele was pushed back into the vagina.

Of this group there were two who had worn pessaries for two years, three for four years, one for nine years, one for ten years and one for nearly twenty-five consecutive years. In none of these did carcinoma of the cervix develop in spite of the use of a foreign body over such long periods of time.

Loss of urine curiously enough was complained of more often by patients who had a first degree prolapse. In this series there were thirty patients with second degree prolapse and thirty-seven with complete procidentia. Many of the latter did not complain of or suffer urinary loss on stress. This was probably due to the "knuckle"<sup>21</sup> formed in the urethra by the vaginal eversion and was sufficient to prevent such a symptom.

Not many patients complained of low abdominal pain in the group in whom enterocele was found. One might suspect that the reverse would have been true.

Vaginal bleeding at irregular intervals occurred only in forty-eight patients, most of whom had uterine fibroids.

Sixty-seven patients stated that the cervix frequently rubbed on their undergarments and yet there were no evidences of carcinoma of the cervix in any of these in spite of the fact that this condition had been present for many years.

*Physical Examination.* In addition to the usual physical examination if an enterocele was suspected, the patient was permitted to walk about and immediately re-examined. If a bulging mass was noted in the upper portion of the vagina, behind the cervix, enterocele was considered. Whenever possible, attempts were made to reduce the enterocele by introducing one finger in the rectum and one in the vagina and "milking" the mass upward. If the mass disappeared upward, a diagnosis of enterocele was made.

*Statistical Facts.* Table 1 outlines the ages and weights of patients upon whom vaginal hysterectomy was performed. It is significant



that over half of the patients were beyond fifty years of age. Five of this group were within the range of seventy-three years. Thirty-one patients weighed between 160 to 200 pounds and one was 230 pounds.

TABLE I  
VAGINAL HYSTERECTOMY SURVEY OF 129 CASES

Age	No.	Weight (lb.)	No.
29-39	25	90-99	1
40-49	42	100-119	11
	Total: 67	120-139	35
50-59	44	140-159	50
60-69	13	160-179	20
70-73	5	180-199	11
	Total: 62	200-219	0
	Total: 129	220-239	1
			Total: 129

Included in this group were two patients who had suffered coronary disease, one who had had rheumatic heart disease and three who had active diabetes. Two others were suffering from active mental depression and both had had electrical shock treatment within recent months

TABLE II  
OPERATIONS PRIOR TO VAGINAL HYSTERECTOMY

Procedure	No.
Vaginal operations (total 7)	
Vaginal plastic	4
Vaginal plastic and cervical amputation	1
Dilatation and curettage	2
Abdominal operations (total 32)	
Ovarian surgery	6
Cesarean operation	1
Cholecystectomy (and appendectomy in 3 cases)	10
Appendectomy	12
Hysterotomy for hydatiform mole	1
Uterine suspension	1
Myomectomy	1
Miscellaneous operations (total 5)	
Nephrectomy	1
Thyroidectomy	1
Saphenous vein ligation	1
Tumor of spine	1
Tumor of breast	1
Previous operations—total:	44

prior to the operation. Both of these cases had exceptionally large cystoceles with severe infection due to cystitis.

Spinal anesthesia was used in all cases discussed herein and transfusions were given only when indicated.

Table II demonstrates the fact that forty-

four or about one-third of these patients had had previous surgery. Seven of these had vaginal operations and thirty-two abdominal surgery. Patients falling into the latter group readily acquiesced to operation when they were

TABLE III  
PROCEDURES PERFORMED IN ADDITION TO VAGINAL HYSTERECTOMY AND REPAIR OF VAGINAL WALLS

Procedure	No.
Bilateral vulvectomy	1
Excision of bartholin cyst	1
Rectovaginal fistula	1
Inclusion cyst of vagina	1
Diverticulum of urethra	2
Suture of bladder (entered during operation)	1
Enterocoele repair	8
Left salpingo-oophorectomy	2
Bilateral salpingo-oophorectomy	1
Incision ovarian cyst	2
Resection of ovary	9
Oophorectomy	2
Removal of parovarian cysts	3
Pelvic eventration (with extensive hernia sac)	1

informed that the abdominal approach would not be necessary.

Table III indicates the surgery performed in addition to vaginal hysterectomy. Abnormal ovaries were removed without difficulty. The largest cystic ovary removed was nearly the size of a grapefruit. It was eased out of the pelvic cavity without rupture. The bladder was

TABLE IV  
SPECIFIC PATHOLOGY

Pathology	No.
Vagina	
Leukoplakia	1
Cervix	
Chronic cervicitis	Nearly all
Endocervical and endometrial polypi	23
Carcinoma <i>in situ</i> (cervix)	2
Leukoplakia of cervix	3
Keratoses of cervix	2
Hypertrophy of cervix	3
Fundus	
Atrophy or fibrosis uteri	27
Leiomyomas	48
Endometriosis or adenomyosis	12
Adenocarcinoma of fundus	1
Ovary	
Large simple cysts	5
Serous papillary cystadenoma	1
Adenocystoma	1

entered once in spite of cautious dissection. This was immediately recognized and repaired, and it offered no difficulty in healing. Eight enteroceles were repaired.

Table IV tabulates the pathologic disorder found at operation. It is interesting to note that in spite of long-standing severe cervicitis, wearing of pessaries and years of rubbing on

undergarments there were no external cancers of the cervix.<sup>22</sup> Two patients in whom carcinoma *in situ* was found are well two years after operation and one with unsuspected adenocarcinoma of the fundus is alive and well nine years after operation.

TABLE V  
PATHOLOGIST'S REPORT

No. of Cases	Approximate Size of Uterus* (cm.)
3	10 × 8 × 4
2	11 × 7 × 5
6	12 × 6 × 5
5	13 × 8 × 5
1	14 × 8 × 7
1	16 × 8 × 6
1	17 × 10 × 8
1	19 × 10 × 12

\* Normal size (average) is 8 cm. long by 5 cm. wide by 3 cm. deep; most cases about 8 by 5 by 3.5 cm.

Table v shows the pathologist's measurements of the largest uteri in this series. Leiomyomas were found in forty-eight cases. The largest uterus of all was involved with adenomyosis. It is worth while stating that none of these enlarged uteri required morcellation and were readily delivered by application in stepladder fashion of clamps to the ligaments with traction applied to the cervix until delivery was accomplished.

*Immediate Postoperative Problems.* In this series a small pelvic abscess developed in one case. It drained spontaneously on the thirteenth postoperative day and was completely cleared six days later. Twenty-one patients required further care before voiding satisfactorily after the catheter was removed. Seventeen patients suffered cystitis, ten of whom had had badly infected bladders prior to operation. Five patients remained in the hospital longer than ten days and were troubled with cystitis. One of these patients was not discharged until the twenty-first postoperative day. Two patients had some bleeding on the eleventh postoperative day which was readily controlled by means of an oxycel pack introduced into the vaginal apex. In thirty-two cases granulation tissue was removed from the vaginal apex as late as four months postoperatively.

*Later Postoperative Problems.* One patient, eighth in the series, required an enterocele repair operation approximately one year after vaginal hysterectomy. I believe that the enterocele was missed at the original operation,

although it may have developed later. Ten days after the operation this patient went to work in a grocery store where she carried heavy loads and was on her feet fourteen to sixteen hours a day.

Large ovarian cysts developed in one patient and four years after vaginal hysterectomy she was operated upon for acute intra-abdominal bleeding from a ruptured large hemorrhagic lutein cyst. This patient was thirty-six years old at the time of the original operation.

*Follow-up.* The 129 cases discussed in the statistical tables were chosen from a larger group, because it was possible to obtain a satisfactory follow-up of these individuals. Two patients had died of medical causes many years after the operation but enough time had elapsed between the time of operation and last vaginal examination to indicate satisfactory results; 119 were personally examined; six replied by letter or telephone; and two patients last examined several years ago could not be located during this survey.

During the hospital stay or at any other time phlebitis or embolism did not develop in any of the patients and none suffered peritonitis, paralytic ileus or distention. Cardiac and diabetic patients were not disturbed by the operation and, as in the younger group, the aged withstood the operation without shock or difficulty.

The recent review disclosed the fact that the criteria for good results were met by this group and furthermore showed that many patients referred friends with similar trouble for care. In other words it may be assumed that as far as the patient is concerned the vaginal approach and results are most satisfactory.

#### SUMMARY

1. Vaginal hysterectomy is an operation which should be used more frequently than at present because the following can be accomplished at one time: complete removal of the uterus and cervix; cystocele, rectocele and enterocele repair; and if necessary the adnexae likewise can be removed.

2. It is not recommended that vaginal hysterectomy completely replace the abdominal approach. There are definite occasions when the latter must be used. To indicate the attitude of the author, the following figures are presented. During the period covered by the survey 265 total and 347 subtotal hyster-

ectomies were performed. In 461 of these cases some type of vaginal procedure was also performed at the time of the abdominal operation. The 129 vaginal hysterectomies reported herein and the number not surveyed were also performed during this same period. These figures are presented to indicate that the method is carefully chosen to suit the case.

3. Vaginal hysterectomy with or without vaginal plastic is an operation practically free of thrombosis, embolism, abdominal peritonitis or paralytic ileus.

#### CONCLUSION

As a result of this survey and the recommendations of others versed in vaginal hysterectomy the author believes that this operation should be employed oftener than it has been in the past. The chief reason being that by means of one operation complete gynecologic surgery is accomplished with a mortality rate from 0.18 per cent to 0.31 per cent. This probably represents the lowest mortality rate in any type of major surgery.

The current literature well demonstrates the fact that the vaginal approach to pelvic pathologic disorder has increased tremendously during the past ten years and that the criticism leveled at this operation is unjustified and usually comes from those not well acquainted with the procedure.

The method of vaginal hysterectomy and repair should be added to the armamentarium of the gynecologist because better results are obtained in the treatment of uterine prolapse and vaginal relaxations than by the abdominal route, accompanied by vaginal repair.

It is further recommended that efficiency in the vaginal approach for hysterectomy be as well developed as the abdominal approach so that the patient may receive the best results from modern surgery.

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