Should Supra-vaginal Hysterectomy be Discarded ?*

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Gynæcological surgeons, so far as the operation of hysterectomy is concerned, are divided into two classes—those who prefer and usually perform supra-vaginal hysterectomy and those who are convinced, because of the risk of carcinoma developing in the cervix at a later date, that panhysterectomy should always be performed when the uterus has to be removed.

The difference between the two groups is not so great as at first appears, for the gynæcologist who performs the supra-vaginal operation and makes it the operation of choice, nevertheless performs the complete operation when the uterus has a badly-lacerated or diseased cervix, the frequent precursor of malignant disease.

In a consecutive series of 296 hysterectomies I find 67 (or 22.7 per cent.) were panhysterectomies—a much higher percentage than I expected until I looked up the figures.

By training, tradition and experience I have always preferred the supra-vaginal hysterectomy, and until recently have never seen a case in which malignant disease of the cervix has followed the operation nor, so far as I am aware, have any of my colleagues. Unfortunately, however, I have recently had three cases in a period of 18 months, and it is the occurrence of these which has made me very seriously reconsider my position.

Case 1. Mrs. D., 3-para, 47 years of age, consulted me in February 1917 on account of menorrhagia and pain in her left side. I found she had an enlarged, subinvoluted uterus with a cystic swelling on the left side; there was some hæmorrhage, but no friability of the cervix. On Feb. 26, 1917, I opened the abdomen, and found she had a large tubo-ovarian abscess on the left side and a matted adherent Fallopian tube and ovary on the right. As the cervix was lacerated I intended to do a panhysterectomy,

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but the patient was so fat I found this extremely difficult, and decided it would be less shock for the patient to perform a supra-vaginal hysterectomy.

In September 1921, four and a half years after the operation, the patient consulted me for vaginal hæmorrhage which had been present for twelve months, and on examination I found she had an extensive malignant growth of the cervix extending on to the vaginal walls. I thought the case was just operable, but the patient refused to submit to this, so I had it treated with radium. For a time she improved, but eventually died from the growth.

This case does not materially affect my original position. She had a badly lacerated cervix, and in the ordinary course of events I would have done a panhysterectomy, but refrained because of the mechanical difficulties due to the large deposit of fat in the abdomen.

Case 2. Mrs. W., 41 years of age, 2-para, consulted me in May, 1921, because of acute retention of urine, due to a uterine fibroid impacted in the pelvis. There was no excessive hæmorrhage, and the cervix was not lacerated and did not bleed after examination. Five days later I did a supra-vaginal hysterectomy. This is one of the very few cases I have seen when a supra-vaginal hysterectomy has been followed by prolapse, for which condition the patient consulted me about two years later, January 1923. I intended to do a colporrhaphy, but when doing the operation found the cervix suspiciously friable, so removed it as widely as possible. Microscopical examination showed carcinoma of the cervix.

The cervix of this patient was not lacerated, and I should not have considered its removal necessary unless I made a general rule of removing every multiparous cervix.

Case 3. Mrs. H., 36 years of age, one miscarriage 12 years previously, consulted me in July, 1922, because of recurrent attacks of abdominal pain since the miscarriage, and a month previous to my seeing her she was brought to the Manchester Royal Infirmary with an acute attack of abdominal pain and a temperature of 102°F. The acute symptoms subsided, and in July, 1922, I opened the abdomen, found double tubo-ovarian abscesses, and so did a supra-vaginal hysterectomy and removed both Fallopian tubes and ovaries. There was no excessive or irregular hæmorrhage before the operation and no friability of the cervix on examination, but nine months later she was again admitted for excessive irregular hæmorrhage, and I found a large friable malignant growth of the cervix, the uterus fixed to the left side of the pelvis, and inoperable. She was treated with radium.

This is the most striking case of all. This patient had one early miscarriage, but no other pregnancies, and the cervix, to all intents and purposes, was that of a nulliparous woman. The operation was performed for pelvic adhesions, and if this type of cervix is found to be frequently followed by malignant disease I agree it would be necessary to do a panhysterectomy in every case.

These three cases certainly make one pause and seriously reconsider the position. At first sight they seem an unanswerable argument in favour of panhysterectomy, but there is something to be said on the other side.

All three cases occurred within a period of 18 months, and, if I merely take the number of hysterectomies I performed during this period, show an enormous percentage of malignant growths in the cervices after supra-vaginal hysterectomy, but, in reality, they are the only cases I have ever seen; so, to get the true percentage of recurrence, it would be necessary to take all the hysterectomies I have performed in 15 years of practice. Moreover, I believe they are the only cases of malignant disease which have occurred in such circumstances in St. Mary's Hospital during this period.

My reason for bringing this subject before this society is to learn if any member has had any similar cases. If so, then it is further evidence in favour of panhysterectomy; if not, it would seem I have had a run of bad luck, and I must not be too greatly influenced by its occurrence and must give due weight to the other factors.

The reasons why many of us prefer supra-vaginal hysterectomy are these:—

1. Ease of operation.
2. The vagina is a potentially septic cavity, and when it is opened there is greater risk of the convalescence not being normal.
3. After panhysterectomy the vagina may be shortened and give rise to dyspareunia.

1. *Ease of operation.*

There is no doubt supra-vaginal hysterectomy is the easier operation, especially in a stout patient, as the dissection is not so deep and there is not so much troublesome bleeding from the anastomotic arteries about the vagina. Ease of operation is an advantage and must be given due weight, not for the sake of the operator, but because it is quicker and so gives less shock to the patient.

It is very difficult to obtain figures to prove this contention one way or the other. At first sight the mortality percentage would seem to give definite proof, but then so much depends on the type

of case operated upon, especially when a comparatively small number of cases are analyzed. In the consecutive series I have analyzed I find I have a mortality of 3.05 per cent. among 229 supra-vaginal hysterectomies, and 5.9 per cent. in 67 panhysterectomies. The total percentage is high compared with some operators, but much depends upon the nature of the cases chosen; if desperate cases, whose only chance is an operation, are given this one chance, some are bound to end fatally and raise the mortality percentage above those who consider such a case not worth the risk.

The difference between these two types of operation, 3.05 per cent. and 5.9 per cent., is very greatly in favour of supra-vaginal hysterectomy, but I doubt if these figures are quite a reliable guide as three of the four deaths amongst the panhysterectomies were in exceptionally severe cases, and I do not think the less severe operation would have made any difference to the result; still these figures are against panhysterectomy and in favour of the less severe operation.

2. *Abnormal convalescence.*

Again, it is very difficult to obtain figures which accurately define the difference in the convalescence of these two classes of cases.

Dr. Hunter, the Resident Surgical Officer at St. Mary's Hospital, has kindly examined the notes of the after-histories of 28 panhysterectomies and 81 supra-vaginal hysterectomies. He took a rigid and severe test of morbidity, a rise of temperature to 100° on any occasion after the first 24 hours, and found 42.8 per cent. of the panhysterectomies had a morbid convalescence, against 29.9 per cent. of the supra-vaginal hysterectomies.

This conforms to my own impression in watching the convalescence among my private cases, and while the figures of morbidity are high, because of this severe test, and many of these cases could hardly be said to have an abnormal convalescence, it is just as severe on one group as on the other, and confirm my impression that, on the whole, convalescence is not so smooth after panhysterectomy as after supra-vaginal hysterectomy.

3. *Dyspareunia.*

I have seen several patients after panhysterectomy who complained of dyspareunia, and an examination revealed a shortened vagina due to the adhesion of the upper part of the vaginal walls. To investigate this point further I wrote to all the panhysterectomy patients in this list, but none of those who answered made any complaint, so, in all probability, the total number is not so great as I have thought, but even a few cases with trouble of this kind

influence an operator against this operation, though they would have little weight if it were found to save any considerable risk from the later occurrence of cancer.

The reason for advocating the sole employment of panhysterectomy is to prevent the possibility of leucorrhœa and of the later occurrence of cancer of the cervix. Both these conditions chiefly occur in a damaged cervix, and the gynæcologist who prefers supra-vaginal hysterectomy nevertheless usually performs the complete operation when the cervix is in this condition.

After careful consideration, unless the members of this Society bring forward any weighty evidence of the occurrence of cancer in the cervix left after the incomplete operation, I am still of opinion that there is a distinct place for supra-vaginal hysterectomy, and would perform it in nulliparous uteri and in multiparous uteri in which there is no damage to the cervix, but would perform the complete operation more frequently than previously and always when there is any tear in the cervix or chronic cervicitis.

As malignant disease of the cervix may occur many years after the performance of supra-vaginal hysterectomy there is a strong possibility of the patient coming under the care of a different surgeon on the second occasion, but the members of this Society serve a large tract of country with a huge population, so it is likely that the patient at the second operation would come under the care of some member of this Society. At the meeting only three other similar cases were discovered, and if we take the total number of supra-vaginal hysterectomies performed by the whole of the members present, the incidence of carcinoma in the retained stump of the cervix must be very low.