

THE TREATMENT OF FIBROIDS.

BY

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The treatment of fibromyoma of the uterus has become more or less well systematised. It had repercussions from various aspects, as progress was being made in medicinal, operative, radiological and hormone therapy. If the history of fibroid surgery is traced in brief, one is surprised to find that the mistaken diagnosis of ovarian cyst was responsible for earlier laparotomies. As the surgeons gained success and acquired confidence in ovariectomies, they gradually ventured to remove the uterus which was a seat of fibromyoma, though for a number of years, the abdomen was closed by many a surgeon when he got an unpleasant surprise of the presence of fibroids instead of an ovarian cyst. The mortality of attempted hysterectomy in those days was appallingly high, and hence it is no wonder that fibroids were treated with Bromide of Potassium and Syrup Ferri Iodidi. Gaillard Thomas, as late as 1868, gave the treatment of fibroids per vaginum as: sloughing, absorption, excision, ecrasement, enucleation and only as a last resort by gastrotomy, i.e. by laparotomy.

The surgery for fibroids can be divided into six distinct periods, three during the last century and three

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during this century. First, upto 1843, the diagnosis was determined by opening the abdomen and then the abdomen was closed without any surgery. Second, from 1843 to 1865, they tried to remove the uterus with total fatality. Third, after 1865 till the end of the last century, when real progress was made in fibroid surgery as a result of invention of ligature technique and antiseptic and aseptic surgery. In 1863, T. Spencer Wells did the first enucleation, and in 1874 O. Singelberg and in 1893 Martin of Berlin had performed 141 myomectomies. Since the mortality of both the subtotal hysterectomy and myometomy was still very high, Lawson Tait introduced bilateral ovarian removal as a treatment for uterine fibroid. Aseptic surgery and improved methods of abdominal subtotal hysterectomy, by isolation and ligature of uterine arteries, favoured a great advance in fibroid surgery; and the introduction of Bonney's myomectomy clamp and Martin's method of rubber tourniquet, and suturing of the incised uterine wall with silk and catgut, showed to the gynaecologists that multiple incisions on the uterus for the removal of a large number of fibroids was not a dangerous procedure; this made them bold to undertake myomectomies more readily. Still the compli-

cations of myomectomies, viz. shock, haemorrhage, infection of the uterine wound and intestinal adhesions ending in acute intestinal obstruction kept up the mortality in the region of 2 to 6%, while the morbidity was present in over 31 to 40% of the cases. The use of radium and deep x-ray in gynaecological practice had also its full trial, especially as it was not associated with initial fatality. But the recent introduction of antibiotics, blood transfusion, thorough preoperative preparation of the patient, on the basis of physiological research in biochemistry of blood, and safe anaesthesia, etc. have changed the aspect of surgical procedure so as to compel us to pause and reconsider the usefulness of knife against the rays in fibroids of the uterus. Thus the treatment of uterine fibroids may be divided into three different eras in the present century: first, upto 1920, with hysterectomy and myomectomy; second, upto 1940, the operative procedure competing with radium and deep x-ray therapy; and third, from 1940 onwards, the era of sulfa, penicillin and streptomycin, and abdominal surgery is once again in fair competition with the radiation therapy. During recent years, under the regime of these new drugs, the problem of sterility has also changed the aspect so that the pelvic infections which used to take the predominant role in its causation, have been superseded by maldevelopment and benign tumours of the uterus; and hence there is added importance to surgery of benign tumours of the uterus.

The two aspects of this tumour which deserve consideration are, the

importance of treatment in a sterile patient and the management of fibroid in a pregnant woman. As regards the latter there has been very little alteration in the line of treatment, and conservation still holds the field, myomectomy being postponed during pregnancy and during labour at the time of caesarean section. Further, red degeneration, a septic complication, can be controlled by penicillin and streptomycin and active interference is seldom required.

The problem is not so simple and straightforward in sterile patients with symptomless fibroids. If the patient is found to have anovular type of menstruation, as confirmed by proper endometrial biopsy, supported by basal temperature chart and biochemical study of urine, and even if the tubes are found patent by insufflation test, it is really doubtful how far the operation of myomectomy will be useful. This rule does not, however, apply to the cervical fibroids which must be removed in the presence of sterility whether they are symptomless or not. In the presence of blocked tubes there is a definite indication for clearing of appendages when an opportunity can be taken to remove fibroids as well. But the indication for myomectomy in a symptomless fibroid depends to a great extent on the age of the patient and the degree of eagerness in her for conception.

There is no difference of opinion as regards the usefulness of the operation for the fibroid with symptoms. But I may like to make a reference to the fact that the mere presence of fibroids in the wall of the uterus may not be solely responsible for associated

menstrual excess and hence that symptom may persist inspite of myomectomy, as the latter procedure does not affect the hormone production in the body. This rule, however, does not apply to the submucous tumour.

The importance of removal of uterus, with fibroids producing menopausal or post-menopausal bleeding, is now well realised by the profession,

cal advice at the first appearance of blood stained discharge. I encountered it only twice so far in over 500 subtotal hysterectomies. One of them was dealt with by vaginal removal of the stump and the other by implana-tion of radium. In passing, I may like to make a few remarks about myomectomy as personal observa-tions. The following table gives the results of my operated cases.

TABLE I
Result in Author's 243 private cases (1939-1949 December)

	Total No. of cases.	Mortality	%
Abdominal total hysterectomy ..	14	nil	—
Abdominal subtotal hysterectomy ..	118	nil	—
Vaginal total hysterectomy ..	25	nil	—
Vaginal subtotal hysterectomy ..	1	nil	—
Abdominal myomectomy ..	85	2	2.35

and the removal of the whole uterus is indicated without unnecessary waste of time for further diagnosis or preliminary unjustifiable trial with radium or x-ray.

The question of total or subtotal hysterectomy and vaginal or abdominal approach can only be best decided by the condition of the patient, existing complications in the pelvis, and the operator's skill, etc., and no amount of discussion based on statistical figures derived from some other operators is useful to any operator who is going to deal with the case. Each case requires its own method of approach, each operator has his own technique.

The danger of cervical stump cancer is unnecessarily exaggerated in the literature and I personally feel that such a lesion when it develops is always detected in early stages, as the patient once operated is likely to seek medi-

Even though I had occasion to perform 85 myomectomies with 2% mortality, and 158 hysterectomies for uterine fibroids without a single mortality in my private practice, I do not feel so enthusiastic about the myomectomy operation as before, in spite of the help of biotics and in spite of the fact that good many of my myomectomies have been benefitted by conception following it. The associated morbidity cannot be appreciably reduced in spite of all attempts at leaving the bed of the fibroids dry by extra catgut sutures, avoidance of silk mattress sutures to avoid tissue necrosis, routine plication of round ligaments, the use of male hormone following the operation to favour involution in the hypertrophied uterus, and the use of absorbable gelatine sponge on the suture line of the uterine wall. When the diagnosis of fibroids had to be revised for endometrioma of the uterus on opening the abdomen, re-

section of part of the uterus or fundectomy with the implantation of both the tubes has saved the situation in sterile patients.

Ninety-four cases of fibroids were treated at four different hospitals in Bombay, viz. K.E.M. Hospital, Cama Hospital, Petit Hospital and Nair Hospital. Two cases received x-ray treatment by castration dose while

carried out in 27% and vaginal myomectomy in 15.2%. The removal of the uterus was resorted to in over 56% of the cases, the majority being removed per abdomen (91%).

Morbidity.

Morbidity was present in 22% of the operated cases. The following table gives the incidence of morbidity in different types of operations.

TABLE II
Morbidity Percentage in Different Operations.

	Total No. of cases	Morbidity	%
Vaginal total hysterectomy ..	4	3	75
Vaginal subtotal hysterectomy ..	nil	nil	—
Vaginal myomectomy ..	14	nil	—
Abdominal total hysterectomy ..	11	6	54.5%
Abdominal subtotal hysterectomy ..	37	6	16.2%
Abdominal myomectomy ..	25	6	24.0%
Exploratory laparotomy ..	1	nil	—

the rest (92) were submitted to one of the following operative procedures:

1. Vaginal total hysterectomy 4 4.3 %
2. Vaginal subtotal hysterectomy nil nil
3. Vaginal myomectomy 14 15.2 %
4. Abdominal total hysterectomy 11 12.0 %
5. Abdominal subtotal hysterectomy 37 40.2 %
6. Abdominal myomectomy 25 27.2 %
7. Exploratory laparotomy 1 1.1 %

The abdominal route was selected in nearly 80% of the cases while the vaginal procedure was carried out in the remaining 20%. The conservative operation of the nature of myomectomy was reported on in over 40% of the cases. Out of the 94 cases, abdominal myomectomy was

It will be evident from the table that morbidity was the least in vaginal myomectomy, in 1/6th of the cases in abdominal subtotal hysterectomies, in 1/4th of the cases in abdominal myomectomies and vaginal hysterectomies, and in nearly 50% of the cases in abdominal total hysterectomies. The favourable results in vaginal myomectomy were mainly due to some of the cases having had simple operative procedure as twisting of a pedunculated fibromyoma per vaginum. The cervix of a myomatous uterus is often in a healthy condition because of nulliparity in the patient and hence the abdominal subtotal hysterectomy becomes a most suitable operation for body fibroids. The removal of the whole of the uterus was resorted to in cases of unhealthy cervix and when the vaginal route was selected for the removal of the uterus.

Mortality.

There were two deaths among the 92 cases subjected to operation, the mortality being 2.2%. The mortality in different operative procedures is given in the following table.

the post partum period as the patient had developed a red degeneration of the fibroid and had a premature delivery during that attack and subsequent to the delivery developed obstructive symptoms by

TABLE III
Mortality Percentage in Different Operations

	Total No. of cases	Mortality	%
Vaginal total hysterectomy ..	4	nil	—
Vaginal subtotal hysterectomy ..	nil	nil	—
Vaginal myomectomy ..	14	nil	—
Abdominal total hysterectomy ..	11	nil	—
Abdominal subtotal hysterectomy ..	37	1	2.7%
Abdominal myomectomy ..	25	1	4.0%
Exploratory laparotomy ..	1	nil	—

Mortality was noted only in two types of operations, viz. abdominal myomectomy and abdominal subtotal hysterectomy, the incidence being 4.1% and 2.7% respectively. It is really an interesting fact to note that there was no death in both the vaginal and abdominal total hysterectomies. In the whole series of 92 operations there were only two deaths, one following myomectomy and the other following abdominal subtotal hysterectomy. The myomectomy was carried out in

the impaction of the tumour in the pelvis. The patient was markedly anaemic and had developed severe toxic symptoms. Myomectomy was resorted to as she was a young person and was keen on having conception. The patient who died after abdominal subtotal hysterectomy had a post operative pneumonia and peripheral failure.

The following table indicates the type of operations resorted to in relation to the age of the patient.

TABLE IV
Age of the Patient in Relation to Type of Operation.

Age Group	V.T.H.	V.St.H.	V.My.	A.T.H.	A.St.H.	A.My.	E.Lap.
16-20	—	—	—	—	—	1	—
21-25	—	—	1	—	—	1	—
26-30	—	—	—	1	—	4	—
31-35	—	—	4	1	6	9	—
36-40	1	—	3	3	10	2	—
41-45	1	—	3	3	5	1	—
46-50	1	—	1	1	3	—	—
51-55	—	—	—	—	—	—	—
56-60	—	—	—	—	—	1	1
Age not mentioned	1	—	2	2	13	6	—

V-Vaginal, T-Total, H-Hysterectomy, St-Subtotal, My-Myomectomy, A-Abnormal, E. Lap-Exploratory Laparotomy.

The following table indicates the type of operation in relation to the number of fibroids.

TABLE V
The Type of operation in relation to the number of Fibroids.

No. of Fibroids	V.T.H.	V.St.H.	V.My.	A.T.H.	A.St.H.	A.My.	E.Lap.
Body fibroids							
1	4	—	6	1	23	14	—
2	—	—	—	1	4	6	—
3	—	—	—	1	1	—	1
4	—	—	—	—	1	2	—
5	—	—	—	2	1	—	—
6	—	—	—	—	—	1	—
7	—	—	—	2	—	—	—
8	—	—	—	—	—	—	—
12-15	—	—	—	—	1	1	—
Multiple cervical fibroids	—	—	—	1	5	—	—
1	—	—	6	3	2	1	—
2	—	—	1	—	1	—	—
No. of fibroids	—	—	—	2	1	—	—

Conclusions.

1. Conservative operation of myomectomy was resorted to in over 42% of the cases, with abdominal procedure in 27% and vaginal in the remaining Uterus was removed in 56% of cases.
2. Morbidity in abdominal myo-

- mectomy was 24%; for subtotal hysterectomy it was 16%, and for abdominal total hysterectomy it was 54%.
3. Mortality of abdominal myomectomy was in the region of 4%; for abdominal subtotal hysterectomy it was 2.7%; and for abdominal total hysterectomy it was nil.