

## EVALUATION OF INDICATIONS OF ABDOMINAL HYSTERECTOMY PERFORMED IN CHITTAGONG MEDICAL COLLEGE HOSPITAL

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### Abstract

The objective of the study was to evaluate the appropriateness of recommendations for hysterectomies done for non emergency conditions and to find out the rate of inappropriately recommended hysterectomies. Indications of 100 randomly selected cases of abdominal hysterectomy performed in Chittagong Medical College Hospital during the period from July 1998 to June 1999 were critically evaluated. Textbooks and journals were used as standard references for comparison. Recommendations for 22% of hysterectomies were considered inappropriate because of lack of adequate preoperative diagnostic evaluation and failure to try alternative treatment. The most common indications of hysterectomy were leiomyoma (28%), dysfunctional uterine bleeding (21%) and pelvic inflammatory disease (20%). 22% of hysterectomies were judged to be recommended inappropriately because proper diagnostic evaluation was not done and more conservative approaches were not tried. Hysterectomy is often done without having proper diagnostic evaluation of indications or before trying safer and less expensive alternatives. Effective approach to modern conservative treatment may reduce the incidence of hysterectomy operations.

### Introduction

Hysterectomy is the removal of uterus with or without cervix. When it is done through an abdominal incision it is called abdominal hysterectomy. Abdominal hysterectomy is the second most frequently performed major surgical procedure on women following caesarean section. For many years women did not have any choice when it came to the management of fibroid uterus, dysfunctional uterine bleeding or other gynaecological problems. Hysterectomy was the treatment of choice, particularly if the woman was not interested in future pregnancies. There are now

several surgical or nonsurgical options available to women besides hysterectomy.

Uterus is not an organ to be discarded lightly, even for the women who does not wish to have more children. Uterus is strongly associated with femininity: some women say they feel a sense of loss after hysterectomy. For a woman who desires children, alternatives to hysterectomy is always appealing. The indication of hysterectomy in any case must therefore be clearly defined and should be one for which more conservative treatment is not likely to be efficacious.

Studies<sup>1,2,3</sup> have revealed that hysterectomies are often recommended for inappropriate indications. The most common reasons recommendations for hysterectomies considered inappropriate are lack of adequate diagnostic evaluation and failure to try alternative treatment before hysterectomy.

100 cases of abdominal hysterectomy had been studied and critically evaluated the indications of abdominal hysterectomy on the basis of published guidelines in obstetrics and gynaecology textbooks and journals.

### Materials and methods

A retrospective observational study was done in the Department of Gynaecology and Obstetrics, Chittagong Medical College Hospital from July 1998 to June 1999. During this period 442 abdominal hysterectomies were performed. Of these 100 cases were randomly selected for the study. Patients having gynaecological diseases were included. Patients having abdominal hysterectomy for emergency conditions e.g. obstetric haemorrhage or sepsis were excluded. All of the patients were admitted in non paying beds of general ward. Apparently with low and middle class socioeconomic backgrounds, none of them had higher education. Preoperative diagnoses as indications were made mainly from history and clinical examinations. Investigation as diagnostic aid were done when dimmed necessary. The most frequent diagnostic aid was ultrasonogram which was restricted to cases of obvious abdominal or pelvic lump and any confusion in clinical diagnosis.

The case sheets of the patients were marked out

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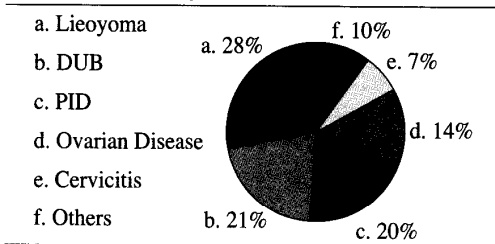
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separately and they were advised do come for follow up at 6 weeks and at 3 months. Information were gathered from the case-sheets and from the patients on follow up. The apparent situation in which abdominal hysterectomy was recommended and performed they were critically appraised in view of guidelines published in contemporary editions of textbooks and journals. No attempt was made at judging the clinical acumen behind suggesting hysterectomy for the patients. Instead the probable options other than hysterectomy that could be offered to the patients were highlighted.

**Observations**

Lieomyoma uterus was found to be the major indication followed by dysfunctional uterine bleeding and pelvic inflammatory disease (Figure 1).

**Fig 1 :** Indication of abdominal hysterectomy in the present study



There were six cases of abnormal uterine bleeding at the age between 35-40 years who were suspected of having lieomyoma or PID preoperatively but actually had no abnormal finding at operation. None of them had an ultrasonogram or a previous drug therapy for abnormal utrine bleeding (Table I).

**Table I :** Cases where preoperative diagnosis did not match with operative findings

Age (Years)	Parity	Symptoms	Preoperative Diagnosis	Operative Findings
35	4+0	Polymenorrhagia	Lieomyoma	Ut Normal sized DUB
39	7+0	Menorrhagia	Lieomyoma	Ut normal size DUB
32	6+0	Polymenorrhagia	PID	Ut normal size DUB
32	4+0	Polymenorrhagia Pelvic pain	PID	Ut just bulky DUB No adhesion
35	6+0	Polymenorrhagia	PID	Ut normal size DUB No adhesion
40	4+0	Menorrhagia	PID	Ut normal size DUB No adhesion

There were seven cases of dysfunctional uterine bleeding in the age range 32-40 years who had no drug therapy or diagnostic curettage prior to hysterectomy operation. Two of the cases were only 32 years of age (Table II).

**Table II :** Cases of DUB having hysterectomy without prior medication or curettage

Age (Years)	Parity	Preoperative Symptoms	Preoperative Diagnosis	Operative Findings
32	6+0	Polymenorrhagia	DUB	Normal
32	4+0	Menorrhagia	DUB	Normal
35	8+0	Polymenorrhagia	DUB	Normal
36	3+0	Polymenorrhagia	DUB	Normal
36	3+0	Menorrhagia	DUB	Bulky uterus
40	4+0	Menorrhagia	DUB	Bulky uterus
40	4+0	Polymenorrhagia	DUB	Bulky uterus

Two cases, aged 30 and 35 years were preoperatively diagnosed as PID on the basis of chronic pelvic pain. But they had no significant pathology at laparotomy. Their symptoms of chronic pelvic pain persisted after operation (Table III).

**Table III :** Preoperative diagnosis of PID not matched with operative findings : symptoms persisted after operation

Age (Years)	Parity	Preoperaive Symptoms	Preoperative Diagnosis	Opearative Findings
30	3+3	Pelvic pain h/o salpingectomy	PID	Adhesion at the siteof salpingectomy
35	2+0	Pelvic pain cholelithiasis	PID	normal

Four patients (32-35 years) had hysterectomy for unhealthy cervix. No investigations like pap smear or colposcopy was done. No minor surgery like electrocauterisation was tried before hysterectomy in these cases (Table IV).

**Table IV :** Cases of chronic cervicitis where no paps smear or minor surgery was done

Age	Parity	Preoprative Symptoms And Signs	Preoperative Diagnosis	Postoperative Findings
35	5+0	White vaginal discharge, unhealthy cervix	Chronic cervicitis	Chronic cervicitis otherwise normal
35	2+6	White vaginal discharge, unhealthy cervix	Chronic cervicitis	Chronic cervicitis otherwise normal

32	3+0	White vaginal discharge, unhealthy cervix	Chronic cervicitis	Chronic cervicitis otherwise normal
35	5+0	White vaginal discharge, unhealthy cervix	Chronic cervicitis	Chronic cervicitis otherwise normal

Two cases had hysterectomy for trophoblastic diseases. One was a 32 year old para 4 who had vaginal bleeding following M/R and a previous history of hydatidiform mole. Another was a 38 year old para 4 who had evacuation of hydatidiform mole. One patient, age 40 years had hysterectomy for cervical polyp without having any pap smear or attempt at polypectomy and biopsy (Table V).

**Table V :** Cases of hydatidiform mole and cervical polyp having hysterectomy

Age (Year)	Parity	Preoperative Symptoms	Operative Findings	Postoperative Diagnosis
32	4+1	Past history of hydatidiform mole, vaginal bleeding following MR	Uterus bulky and soft	No trophoblastic disease at histopathology
38	4+0	Evacuation of hydatidiform mole (20 wks size)	Uterus bulky and soft	Hydatidiform mole
40	3+1	Irregular vaginal bleeding	Cervical polyp	Cervical polyp

So indications seemed to be strictly justified under present circumstances in 78 cases, conditions where the symptoms could not be relieved by anything less than hysterectomy, though preoperative diagnosis in some cases were changed at operation.

**Discussion**

Hysterectomy is the second most frequently performed operation for women, topped only by caesarean section. With advancement in medical and conservative surgical therapy of gynecological conditions the need for hysterectomy has declined. More women now wish to avoid major surgery if equally effective alternatives exist. Regulatory boards of gynaecologists now support the use of hysterectomy as treatment for conditions refractory to more conservative management.

When perimenopausal women presents with dysfunctional uterine bleeding, dilatation and curettage may help in controlling the bleeding as well as in excluding any pathology. Administration of NSAID, antifibrinolytic agents, progestin or oral contraceptive pills, danazol or GnRH analogues for 3-6 cycles may reduce bleeding for a period long enough to go into menopause or complete recovery. It applies even when abnormal uterine bleeding is associated with small fibroids. Thermal balloon therapy and endometrial ablation by hysteroscope are the other modern choices for treatment of DUB. If the response is not adequate then hysterectomy is the treatment.<sup>4,5</sup> Seven such cases of perimenopausal women (age around 40 year) patients in the study could have therapeutic trial with the drugs mentioned and hysterectomy may have been avoided in them. Young and premenopausal women presenting with menorrhagia should have drug therapy with or without endometrial biopsy before resorting to hysterectomy. Two multiparous patients with menorrhagia had hysterectomy at 32 years without any prior conservative therapy. Drug therapy even in the form of oral contraceptive pills could have served the purpose of regulating menstruation<sup>6</sup>.

Medical treatment should be used initially for patients with chronic cervicitis during or after child bearing period. If the patient is not improved after 2-3 months, minor surgical therapy (electrosurgery or cryosurgery) is indicated. If the patient remains symptomatic with extensive chronic cervicitis and she has completed family, total hysterectomy may be the best method of choice<sup>7</sup>. In the four cases of unhealthy cervix no investigations like paps smear or colposcopy was done and no minor surgery was undertaken before admitting the patient for hysterectomy. No paps smear or colposcopic examination were done in their cases.

There were at least two cases where hysterectomy was done because PID was diagnosed on the basis of chronic pelvic pain only whereas no significant pathological conditions was diagnosed at operation. The patient did not benefit at all from hysterectomy, because the symptoms persisted after operation.

Chronic pelvic pain may be due to pelvic adhesions resulting from infections and surgery. Laparoscopic adhesiolysis has been a recognised procedure for its management though no benefit follows adhesiolysis when adhesions are few and flimsy. Again in

absence of laparoscopically evident pathology eg endometriosis or PID the cause may be occult non gynecologic somatopathology or non somatic psychogenic disorders. Women with chronic pelvic pain with no pathology are psychologically disturbed, neurotic and have abnormal attitude. So laparoscopy is a valuable test and most informative in all cases of chronic pelvic pain. Only reassurance may be sufficient in most cases of normal laparoscopic findings. Hysterectomy with removal of ovaries is to be undertaken in older women with severe grades of endometriosis and adhesions.<sup>7</sup> Hysterectomy could have been avoided in two case with chronic pelvic pain by careful history taking and examination to reach adequate preoperative diagnosis or even assurance and psychotherapy.

The role of hysterectomy in the management of molar pregnancy is in debate. It is still been advocated in those patients considered to be at high risk of malignancy such as those over 40 years of age and grand multipara. None of the patients having hysterectomy for gestational trophoblastic disease strictly fits to this category. In the first patient who had hydatidiform mole 8 years back, there was increased risk of malignancy with recurrence of mole in subsequent pregnancy. Hysterectomy was performed even without confirming the recurrence of gestational trophoblastic disease. Recurrence could easily be confirmed or excluded by estimation of beta hCG or at least a pregnancy test. In the second case patient's age (nearly 40) and parity (4) put her at higher risk of malignancy. As hysterectomy did not reduce the need to follow the patient up for detecting any recurrence and if detected it is almost 100% curable with chemotherapy, the justification of hysterectomy is reduced.<sup>9</sup>

Simple excision is adequate for benign cervical polyp but if carcinoma or sarcoma are discovered, hysterectomy should be performed. Hysterectomy is the indication in a premenopausal women when there is persistence of uterine bleeding after removal of polyp.<sup>7</sup> In the case of small cervical polyp the patient was not given any option for polypectomy and curettage prior to hysterectomy.

The rate of inappropriately recommended hysterectomies in our study was 22%, comparable to that in other studies. The study<sup>1</sup> done at Health Maintenance Organisation, Quality of Care

Consortium (USA) says that sixteen percent of all hysterectomies were inappropriate with 25% of hysterectomies in younger women and 50% of hysterectomies in older women deemed unnecessary. The study<sup>3</sup> in Taiwan says 74.2% hysterectomies are appropriate while 5.6% done for uncertain reasons and 20.2% for inappropriate indications. Another study in USA<sup>2</sup> had much higher rate of inappropriate hysterectomies : 70% according to the criteria set by an expert panel and 76% according to the criteria set by ACOG.

All the cases of hysterectomy included in the study were decided and carried out only after the surgeons were convinced of their indications. Some of them were indicated in broader spectrums like the need for sterilization or the fear of inadequate and unreliable follow up. Many hysterectomies were carried out in presumption of lack of consciousness and economic inability on the part of the patients to have repeated conservative procedures and follow up visits. On the other hand our women with regard to education and empowerment were in a lesser position to participate in any decision making process. They were not expected to differ from the opinion of their doctors on their own or to afford and seek additional medical opinions.

Hysterectomy Surveillance-United States (1980-1993)<sup>10</sup> states that the number and rate of hysterectomy for benign gynecological disorders decreased over the years. Factors attributed to the decrease include practices related to health care reform in USA i.e. quality assurance, peer review and second opinion programs and increasingly available alternatives to hysterectomy including medical treatments and endoscopic procedures. These factors could also apply to our situation to reduce hysterectomy rates.

#### **Limitations and recommendations**

The study was done with certain limitations such as small sample size, failure to validate indications by postoperative histopathology in all cases and failure to report postoperative satisfactory level in all cases. Further studies should be done to see if hysterectomies are performed as a treatment of last resort only after proper diagnostic evaluation has been done to confirm the underlying condition and less expensive and safer conservative alternatives have been tried and exhausted.

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