

Medical Versus Surgical Method of 1st Trimester Pregnancy Termination



Medical Science

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ABSTRACT

AIMS & OBJECTIVES: The aim of this study is to compare the efficacy and complications associated with early medical and surgical pregnancy termination.

METHOD & MATERIALS:

The study population comprised 150 consecutive women undergoing pregnancy terminations. Each group has same 50 no. of patients and Patients' groups were based upon the method of termination.

RESULTS: Medical method is more effective in early gestational age up to 9 weeks & surgical method in later weeks of gestation. In surgical group perforation occurred in 3% & fever in 20%, while in medical group there was no perforation noted & fever in 10%. Medical method is more economic compared to surgical method. In surgical method associated permanent sterilization procedure is done in 47% cases which are not possible in medical method.

CONCLUSION: Each method has distinct advantages and disadvantages. Therefore decision to prefer one procedure over the other necessarily carries trade-offs.

INTRODUCTION

Abortion is the termination of pregnancy by the removal or expulsion from the uterus of a foetus or embryo prior to viability. An abortion can occur spontaneously, in which case it is usually called a miscarriage, or it can be purposely induced. The term abortion most commonly refers to the induced abortion of a human pregnancy.

Induced abortion is performed worldwide since ancient time. It is estimated about 46 million induced abortions are performed each year. It is estimated that about 20 million of these abortion are performed under unsafe condition leading to 13% of all maternal deaths. The majority of these deaths occur in developing country where pregnancy termination is not easily accessible. Morbidity due to safe surgical abortion with sufficiently skilled practitioner depends on gestational age, the method of termination, age, parity.

Being an obstetrician our responsibility is increased many folds and it becomes necessary to make the procedure of termination as safe as possible.

There are many methods for termination of pregnancy and plenty of research work is going on and various methods of termination are being found out. no method is hundred percent safe, but it has become our duty to carry out termination of pregnancy continuously and making it almost hundred percent safe.

Unsafe abortion is a public health problem worldwide. one way of reducing the number of unsafe procedure is to increase safe choices for pregnancy termination.

AIMS AND OBJECTIVES

The aim of this study is to compare efficacy and complications of medical method with surgical method in management of the first trimester termination of pregnancy to improve practice of pregnancy termination during 1st trimester which helps in decreasing maternal morbidity and mortality due to prevention of septic abortion and haemorrhage which are the major complications.

To compare available methods for 1st trimester abortion with respect to efficacy, side effects and acceptability.

To find out cost-effective method for 1st trimester pregnancy termination in respect to need of woman and community.

METHOD AND MATERIALS

The study was carried out in a recognized institution for comparison of medical versus surgical method in 1st trimester termination of pregnancy. I studied 150 cases for this comparative study.

All the 150 patients were randomized into 3 groups A, B and C. Each group has same 50 no. of patients. Patients' groups were based upon the method of termination.

Group A - Manual vacuum aspiration.

Group B -Dilatation and evacuation.

Group C -Medical abortion.

These patients were given Tab. Mifepristone (200 mg) on day 1 and Tab. Misoprostol (400 mcg) orally on day 3 if duration of pregnancy up to 49 days. And Tab. Mifepristone (200 mg) on day 1 orally and Tab. Misoprostol (800 mcg) sublingually on day 3 if duration of pregnancy from 49 to 63 days.

Patients from group C was managed on the outdoor bases while those from other two groups admitted to hospital.

Patients were briefed regarding method of termination, its hazards and the method of contraception that could be adopted subsequently. Patients and/or husband or guardian in cases of minor was obtained in main case paper sheet.

Detailed history was taken regarding duration of pregnancy, obstetric history, menstrual history, and past history of any major illness or operation. All patients undergo general, systemic and local examination and routine blood investigation with ultrasonography. All details are recorded in the special proforma..

In some cases whenever needed blood sugar, blood urea, x-ray and electrocardiogram or specific investigations done.

Depending upon the method used and associated surgery the hospital stay of the patients varied from 48 hours

to 8 day. During the hospital stay patients were carefully watched. Records of pulse, temperature, blood pressure, respiration, cardiovascular system examination, per abdomen examination and amount of bleeding were kept. Routine antibiotic were given to all patients.

On discharge clinical examination is done. They are explained about follow up visit after 15 days. At that time thorough pelvic examination was carried out. Any late complications or discomfort noted in follow up cases. Careful per vaginal and per speculum examination performed, position of cu-T confirmed and signs of pelvic inflammation looked for.

RESULTS AND DISCUSSION

In this study I have included total 150 patients. They were randomized into 3 groups A, B and C. Each group has same 50 no. of patients. Patients' groups were based upon the method of termination.

Group A- Manual vacuum aspiration (MVA)

Group B- Dilatation and evacuation (D&E)

Group C- They are given MTP kit (medical method)

TABLE 1: GESTATIONAL AGE

Gestational age	SURGICAL METHOD		MEDICAL METHOD
	MVA	D & E	
Up to 7 weeks	13(26%)	10(20%)	32(64%)
7-9 weeks	25(50%)	22(44%)	18(36%)
>9 weeks	12(24%)	18(36%)	0(0%)
Total	50	50	50

In this study 26% and 20% of the patients from MVA and D & E group respectively are upto 7 weeks, 50% and 44% patients from MVA and D & E group respectively are from 7-9 weeks and 24% and 18% patients from MVA and D & E group respectively are >9 weeks. While in medical group 64% patients are up to 7 weeks and 36% patients are 7-9 weeks.

This indicates that medical method is more useful in pregnancy up to 7 week and may be used up to 9 week. While from 9 to 12 week surgical method are preferred.

TABLE 2: EFFICACY OF METHOD

	SURGICAL METHOD		MEDICAL METHOD
	MVA	D & E	
Incomplete abortion	4(8%)	3(6%)	10(20%)
Complete abortion	46(92%)	47(94%)	40(80%)
Total	50	50	50

In this study, from MVA group total 4 patients (8%) experience incomplete abortion out of which 3 patients (6%) managed by oral/per vaginal Misoprostol conservatively while 1 patient (2%) require D & E for retained product.

From D & E group total 3 patients (6%) experience incomplete abortion all of them are managed by oral/per vaginal Misoprostol conservatively.

From Medical group total 10 patients (20%) experience incomplete abortion out of which 7 patients (14%) managed by oral/per vaginal Misoprostol conservatively while 3 patients (6%) require D & E.

TABLE 3: COMPLICATIONS

Complication	SURGICAL		MEDICAL METHOD
	METHOD	D & E	
Perforation	1(2%)	2(4%)	0(0%)
Fever	8(16%)	12(24%)	5(10%)
Vomiting	2(4%)	5(10%)	12(24%)
Diarrhea	1(2%)	2(4%)	4(8%)
Total	12	21	21

In this study, uterine perforation occurred in 1 patient (2%) in MVA group for which laparotomy done and 2 patients (4%) in D & E group out of which 1 patient managed conservatively and 1 patient required laparotomy while no perforation noted in medical abortion.

Fever was associated with 16% and 24% of patients in MVA and D & E group respectively while 10% of patients in medical group. All of them are managed by antipyretic medication either orally or injectable.

Vomiting was associated with 4% and 10 % of patients in MVA and D & E group respectively while 24% of patient in medical group. All of them are managed by antiemetic medication and IV fluids.

Diarrhea was associated with 2% and 4% of patients in MVA and D & E group respectively while 8% of patient in medical group. All of them are managed by IV fluids.

TABLE 4: HOSPITAL STAY AND ECONOMICAL ASPECT OF MTP

Stay in hospital	SURGICAL METHOD		MEDICAL METHOD
	MVA	D & E	
0 days	0(0%)	0(0%)	41(82%)
1-2 days	34(68%)	38(76%)	6(12%)
>3 days	16(32%)	12(24%)	3(6%)
Total	50	50	50

In this study all the patients from both surgical groups require hospital stay at least for 1-2 days while 82% patients of medical group do not require hospitalization at all.

32% and 24% of patients from MVA and D & E group respectively require hospitalization for > 3 days because of concurrent abdominal TL or associated with complain of bleeding p/v, vomiting or fever.

In medical group 12% require hospital stay for 1-2 days due to bleeding p/v(6%), diarrhoea(2%), vomiting(2%) or fever(2%) and 6% require hospitalization for 3 or more days due to incomplete abortion require D & E.

TABLE 5: MTP and Contraception

Contraception	SURGICAL METHOD		MEDICAL METHOD
	MVA	D&E	
TL	31(62%)	16(32%)	0(0%)
Copper-T	6(12%)	3(6%)	0(0%)
COC pills	5(10%)	19(38%)	27(54%)
Not Willing	8(16%)	12(24%)	23(46%)
Total	50	50	50

In this study, From MVA group 62% patient undergo permanent sterilization either laparoscopic or abdominal, 12% patient opt for cu-t insertion, 10% willing for taking coc pills and 16% refuses for contraception after proper counselling.

From D & E group 32% patient undergo permanent sterilization either laparoscopic or abdominal, 6% patient opt for

cut insertion, 38% willing for taking coc pills and 24% refuses for contraception after proper counselling.

From Medical group 54% were willing for taking coc pills & 46% were not willing for any contraception out of them 36% wanted to conceive in future while 10 refused for contraception after proper counselling.

CONCLUSION

Medical and surgical method of pregnancy termination has distinct advantages and disadvantages. Therefore decision to prefer one procedure over the other necessarily carries trade-offs.

It may be stated that MTPs performed by trained personnel in a well-equipped centre, after proper evaluation of patient will go a long way in ensuring safety of this procedure, reducing its attendant morbidity and boosting up the National Family Welfare Programme.

Medical methods for first trimester abortion have been demonstrated to be both safe and effective. Among surgical method MVA is newer method which has lower complication rate and higher acceptability but needs wider application and availability over traditional dilatation and evacuation.

It is critical to be able to offer safe and quality services closest to communities to increase utilization. There is need to train more skilled provider for offering safe and legal abortion service.

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