Induced Abortion and its Complications

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Induced abortion with its complications is an important cause of maternal morbidity and mortality. Retrospective analysis of the record of 89 females with induced abortion, showed the commonest reason to seek abortion was unplanned pregnancy. The majority of patients were not using any contraceptive methods. 72(80.9%) had pregnancy termination in early weeks of gestation (within 12 weeks). Most abortions were induced by LHV, Dais in septic conditions by dilatation and curettage. The commonest mode of presentation was post abortion sepsis (79.7%) followed by haemorrhage (30%) and gut injury (11.2%). The conservative management with minor surgical intervention was the mainstay of therapy (79%). However 26% of cases required exploratory laparotomy to deal with uterine and gut injuries. The post treatment results are very encouraging with overall mortality of 3.3%. This study highlights the need for proper family planning counseling and services.

Key words: Abortion, sepsis, complications

Worldwide some 20 million unsafe abortions take place each year and accounts for approximately 13% of all maternal mortality and serious complication associated with it, such as sepsis, haemorrhage, uterine perforation, gut and other visceral injury and acute renal failure. In contrast to this dismal picture death from unsafe abortion, are almost unknown (0.4/100,000) in countries where abortion is available on request[2].

Pakistan is no way different from other developing countries as far as maternal mortality from unsafe abortion is concerned. The situation may be even more alarming here as there is lack of proper documentation of this type of mortality because of our socio-religious reasons. What we see at tertiary care level is just the tip of an ice-burg. The aim of present study is to find out determinants of induced abortion, presentation and management of its complications and possibly to evolve some preventive measures.

Patients and methods

This is a retrospective study of all patients admitted in Gynae Unit I with history of induced abortion and patients presenting in emergency of Surgical Unit III from July 1999 to June 2000 were included in this study. Their medical records were scrutinized in detail, including history, findings of physical examination, investigations and daily progress notes.

A Performa was designed to note down various variables i.e. age marital status, parity, duration of gestation, reasons of induced abortion, method of abortion and whether the abortion was carried out by a doctor, LHV or Dai.

The results of various biochemical investigations like blood complete examination, urea, creatinine, electrolytes and other test were evaluated. The findings of plain x-ray abdomen and ultrasonography was reviewed. The conservative management with intravenous fluid therapy, antibiotic (triple regimen mainly but in selected cases other antibiotics were used where indicated) with minor surgical intervention like D & C and posterior colpotomy was used. However a good number of cases had major surgical intervention. Patients were discharged on their complete recovery with appropriate family planning advice.

Results

A total of 89 females age ranged from 17 to 46 years with the mean age of 31 years were treated in one calendar year. According to declaration all were married except for patients who presented in surgical emergency with peritonitis, denied any history of pregnancy or intervention but on postoperative findings they admitted about illegitimate pregnancy and induced abortion. 67(75.3%) patients were multipara, having more than 4 children. 10(11.2%) patients had previous history of induced abortion. Only 29(32.6%) patients were using contraceptive mainly withdrawal or barrier methods. Majority of patients 72(80.9%) had pregnancy termination in early week of gestation (with in 12 weeks). Most of the patients were induced by LHV or Dai in unhygienic condition and only few by a doctor. The common method used for abortion was dilatation and curettage. The main reasons for seeking abortion are given in Table I.

Table I. Reasons for abortion

Reasons	No.	%age
Enough children before	67	75.3%
Socio-economic reason	06	6.7%
Previous baby is too small	05	5.6%
Illegitimate pregnancy	04	4.5%
Children are grown up (embarrassing)	03	3.3%
Working lady	02	2.2%

The commonest mode of presentation was post-abortion sepsis (lower abdominal pain, nausea and vomiting, abdominal distensions, lower abdominal tenderness, pyrexia and foul smelling vaginal discharge). Other modes of presentations were haemorrhage, peritonitis, prolapse of gut through vagina and acute renal failure. Their relative incidences are shown in table 2. 82% of patients were anaemic but only 40% had severe anaemia requiring blood transfusion. Ultrasonography was very useful for detection of retained products of conception, foreign body in uterus, pelvic abscess and adenexal masses. Plain x-ray abdomen showed air under diaphram in six cases.

The conservative management with minor surgical intervention was successful in 66(74%) of patients but 23(26%) of patients required a major surgical procedure. The various surgical procedure performed are shown in Table No. III

Table II. Mode of presentation

Reasons	n.	%age
Sepsis	71	79.9%
Haemorrhage	27	30%
Peritonitis	06	6.7%
Prolapse of gut through vagina	04	4.5%
Acute renal failure	01	1.1%

Table III. Surgical procedure

Procedures	n.	%age
Minor		
D & C	57	64%
Posterior colpotomy	04	8.9%
U/S guided aspiration of pus	03	3.3%
Major		
Repair of uterus	19	21.3%
Repair of intestinal perforation	08	8.9%
Resection anastamosis of intestine	04	4.5%
Subtotal colectomy with ileorectal anastamosis	01	1.1%
Sigmoid colostomy	01	1.1%

The post treatment results were very encouraging. The most common complication was wound infection in 5(22%) cases of exploratory laparotomies and chest infection in few cases. The overall mortality was 3(3.3%), due to uncontrolled septicemia leading to ARDS and multi organ failure. Two cases died during conservative therapy and one was postoperative case. There is no available record of long term complications like infertility, low birth weight baby and genital tract infection following septic abortion.

Discussion

According to an Asian Development Bank report of 1997, About 30,000 women die each year due to pregnancy related complications[3]. Out of them almost 3,300(11%) deaths are due to abortion[4]. Maternal mortality from complications of unsafe abortion constitutes a serious problem in developing countries. Most of these abortions are carried out by LHV, Dais in a very poor and unhygienic conditions[5]. Sepsis is the main cause of morbidity and mortality following abortion which can range from minor genital tract infection to life threatening septicemia and septic shock[6]. Certain specific infections like tetanus has been recorded following septic abortion, although this was not encountered in present study.[7]

The uterine perforation and gut injuries are the other major complications of induced abortion. Due to our social and religious factors there is criminal delay in suffering such patients, which further complicates the situation and leads to irreversible septic shock and multi organ failure.[8] The main reason of these complications are routine use of sharp curettage for uterine evacuation which is not the standard method practiced for elective abortion. [5,9]

The key to reduce the mortality of complications of induced abortion is early recognition and prompt treatment.[10] The main aim is to present septic shock i.e. acute circulatory failure with sepsis, which accounts for most maternal deaths. The moderate to severe infection can be treated by appropriate antibiotic and resuscitation measures. If woman is not immunized against tetanus, tetanus antitoxins are to be given with tetanus toxiod. The majority of patients require minor surgical interventions like D & C, posterior colpotomy or ultrasound guided drainage of pus. A good fraction of patients needs major surgical intervention, early recognition of gut and other visceral injuries and their surgical therapy is vital[11].

The unplanned pregnancy is the most common reason to seek abortion. At the same time it is interesting to note that it is contraceptive service lack or failure is number one cause of unplanned pregnancies rather than illegitimate pregnancy. This highlights the need for proper family planning services. If contraceptive use becomes wide spread, abortion rate tends to fall[12]. Further more it is proven fact that all contraceptive methods like IUCDs, oral contraceptive pills and sterilization procedures are many times safer than illegal abortion or even childbirth and puerperal sepsis.

The implications of these possible measures like improving literacy level, The moral standards, family life education and free access to contraception services with clear information on their benefits, safety and side effects. Probably this is the only way to reduce the risk of unintended pregnancies and through this the risk of septic abortions because the other options are not advisable in an Islamic country. Abortion rates are lowest in societies where couples use contraceptive methods[13].

Conclusion

The unplanned pregnancy is the main reason to seek abortion which highlight the need for proper family planning services. Early recognition of complication and referral to hospital can reduce the mortality significantly.

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