

**ORIGINAL ARTICLE** 

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# Evaluation of septic abortions over past six years in a teaching hospital

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**OBJECTIVE(S) :** To evaluate the natural history of septic abortions and resulting maternal morbidity and mortality in a teaching hospital, and determine indirectly the utilisation of National Health Services for voluntary termination of pregnancy (MTP).

- **METHOD(S):** A retrospective study of 48 cases admitted in our department over the last 6 years (Jan 2000 to December 2005) with septic abortion was undertaken.
- **RESULTS :** The termination of pregnancy was done by untrained persons in 95.83% of cases. The presenting symptoms were foul smelling vaginal discharge (100%), fever (91.67%) and abdominal pain (95.83%). Septic abortions were more common in grandmultiparas (62.5%). The most common complication was generalized peritonitis (62.5%). Septic shock was seen in 33.33%. Surgical treatment was opted in 50% cases which included evacuation and laparotomies combined with different procedures. Eight patients (16.6%) died. Fisher's test was used for statistical analysis.
- **CONCLUSION(S) :** Voluntary termination of pregnancy (MTP) should be performed in authorized centers only. Education of masses about easy availability and accessibility of MTP services is needed.

Key words : septic abortion, maternal morbidity, maternal mortality

## Introduction

Inspite of liberalization of voluntary abortion by the Medical termination of pregnancy (MTP) Act, 1971<sup>1</sup> illegal abortions are frequently performed by untrained persons like traditional birth attendants or dais with disastrous results. Two major factors contribute to the development of septic abortion. One is introduction of infection into the uterus and second is uterine perforation with associated complications.

## Methods

A retrospective study of 48 women admitted in our department for septic abortion over a period of 6 years from January 2000 to December 2005 was carried out. They had their abortions performed outside. Data collected from the records of these patients were analyzed.

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## Results

As shown in Table 1 the parity of patients ranged from zero to eight. Period of gestation at the time of termination ranged from 6 to 12 weeks in 70.83% of cases and  $\geq$  13 weeks in 29.16% of cases. 93.75% belonged to rural background (Table 1). Mode of termination was instrumentation in majority of cases (83.6%).

Untrained persons performed termination in 95.83% cases while in 4.16% it was performed by registered doctors. Indication for termination of pregnancy was unwanted pregnancy in all cases.

Table 2 gives the clinical features. Foul smelling vaginal discharge was the commonest finding (100%) followed by pain in abdomen (95.83%), fever (91.67%), and generalized peritonitis (62.5%). Culture reports of high vaginal and endocervical swabs showed the following organisms – E. coli in 21 cases, ? hemolytic steptococci in nine cases, staphylococci in 10 cases, bacteriods in three cases, and gonococci, chlamydia, C perfringes, Mycoplasma hominis and Hemophillus influanzae in one

case each. Two antibiotics based on sensitivity tests were used in every case.

#### Table 1. Patient profile.

Characteristics	Number	Percentage
Background		
Rural	45	93.75
Urban	3	6.25
Parity		
0	2	4.16
1-4	16	33.33
<u>≥</u> 5	30	62.5
Age (years)		
<20 years	6	12.5
21-35 years	39	81.25
$\geq$ 35 years	3	6.25
Period of gestation (weeks)		
6 - 12 wks	34	70.83
<u>&gt; 13 wks</u>	14	29.16
Abortion performed by		
Untrained dais	46	95.83
>Registered Doctors	2	4.16

The complications are shown in Table 3. Generalized peritonitis was the most common complication seen in 62.5% cases, followed by septic shock (33.33%), acute renal failure (14.58%), and coagulation failure (2.08%).

#### Table 2. Presenting clinical features.

Signs and symptoms	No. of Patients	Percentage
Foul smelling vaginal discharge	48	100.00
Fever	44	91.67
Pain in abdomen	46	95.83
Pelvic peritonitis	17	35.42
Generalized peritonitis	30	62.5
Oliguria/anuria	7	14.58

#### Table 3. Complications.

Complication	No. of Patients	Percentage
Acute renal failure	7	14.58
Septic shock	16	33.33
Generalized peritonitis	30	62.5
Coagulation failure	1	2.08

Surgical treatment was required in half the cases (Table 4). Of the 24 who needed surgery 14 required laparotomy. The

surgical problems were retained infected products of conception, abscesses and bowel injuries.

#### Table 4. Surgical treatment needed (n=24).

	Number	Percentage
Evacuation of uterus	7	14.58
Laparotomy with drainage of pus	6	12.5
Laparotomy with hysterectomy	2	4.16
Colpotomy	3	6.25
Laparotomy with resection anastomosis of bowe	1 5	10.42
Laparotomy with colostomy	1	2.08

#### Table 5. Mortality.

Author	Septic abortion (Number)	Deaths (Number)	Mortality (Percent)
Meenakshi et al (1995)	15	2	13.3
Kambo et al (1998)	590	99	16.8
Sinha and Bara (2001)	24	8	33.3
Present study (2006)	48	8	16.6

Unfortunately inspite of our best efforts we could not save eight patients. Three patients died due to acute renal failure, four due to septicemia and one due to disseminated intravascular coagulation.

#### Discussion

From times immemorial, termination of unwanted pregnancy is practiced throughout the world, with or without legal or social sanction. MTP, a safe and easy operation in trained hands becomes life threatening when performed by untrained persons in unhygienic conditions. Studies by Meenakshi et al <sup>2</sup> and Sinha and Mishra <sup>3</sup> have shown that septic abortions are found mostly in married women between 21-30 years of age. Bacteria causing septic abortion include E. Coli, group B ??hemolytic streptococci, staphylococci, bacteroides, Gonococci trachomatis, Clostridia hominis and influenza. Effective antibiotics based on culture and sensitivity report of vaginal discharge are the essense of treatment.

Properly timed surgery for evacuation of septic products and or pus and for repairing damaged bowels is equally important.

Colpotomy for drainage of pelvic abscess was done in 6.25% (3/48) of our patients. Sharma et al <sup>4</sup> performed colpotomy in 17.36% of their cases. Renal failure is an important sequala of septic abortion and was seen in 14.58% (7/48) of our

cases. Sinha and Misra <sup>3</sup> faced renal failure in 4.8% cases of septic abortion. Generalised peritonitis was seen in 62.5% (30/48) of our cases compared to 43.47% reported by Sharma et al <sup>4</sup>. Our mortality rate was 16.66% (8/48) though Sinha and Bara <sup>6</sup> have reported 33.3% mortality (Table 5). It is estimated by WHO (1994) <sup>7</sup> that in Indian subcontinent 15-24 unsafe abortions take place in 1000 women aged 15-49 years. It also states that in India 70-89 women per 100,000 live births die from unsafe abortions, the risk of death being 1 in 250 procedures. There is nonavailability of qualified doctors in peripheral and rural areas of India and women find locally available dais easily accessible and affordable.

The perception that MTP is too simple a procedure to warrant formal training is not supported by facts. Many of the general practitioners or Primary Health Center (PHC) doctors are unable to provide MTP services either because of lack of skill to perform MTP or lack of required physical facilities. A crash training program, especially for medical officers working at Block level PHC, in MTP should be implemented with the grants from the Ministry of Health and Family Welfare, Government of India (1990) <sup>8</sup>.

## Conclusion

There is a need to popularize the government health care

setups as providers of free, quick and quality abortion (MTP) services. These should be readily accessible to our vast rural population. After MTP contraception should be emphasized.

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