

Original Research Paper

Study of Septic Abortion Cases at a Tertiary Centre of Uttarakhand

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Abstract

Aim of this study was to evaluate the incidence, maternal morbidity & mortality, clinical features, management in cases of septic abortion in a tertiary centre. This study included 37 cases of septic abortion admitted during 5 years from January 2007 to January 2012 in the Department of obstetrics & Gynaecology in Government Medical College, Haldwani. All patients were evaluated with special reference to incidence, etiological factors, clinical features, surgery & maternal morbidity & mortality. The incidence of septic abortion was 1.08%. Common age group was between 26-30 years. Most of the cases were from lower socioeconomic status. Septic abortion following spontaneous abortion was present in 5 cases. Unwanted pregnancy was the indication for termination of pregnancy in 32 cases. 4 women were admitted in state of septic shock. 12 cases required laparotomy for drainage of pus, 3 had hysterectomy, 3 had resection anastomosis & uterus repair was done in 4 cases. Overall maternal mortality was 5 (13.5%). The incidence of illegal and septic abortion can be reduced by increasing awareness about family planning services and making legal abortion services easily available to the women and that too at a cheaper cost.

Key Words: Septic Abortion, Maternal Mortality, Morbidity, Unwanted pregnancy, Septic shock

Introduction:

In India each year about 1, 25,000 women die from pregnancy related causes. [1, 2] At least 1/5th of these deaths are caused by induced abortion, sepsis being one of the causes. In the majority of cases the infection occurs following illegal induced abortion but can occur even after spontaneous abortion. Abortion was legalized in our country through MTP act in 1971, still the incidence of septic abortion ranges from 2 – 10%. [3, 4]

Septic abortion is the major life threatening complication that could be tackled significantly through good quality health care. The common cause is abortion by untrained personnel, dais and quacks. Poverty, ignorance and non availability of trained personal contribute to high incidence of septic abortion. These cases are mostly referred to hospitals very late after occurrence of complications leading to high maternal morbidity and mortality

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Material & Methods:

The present study comprised of 37 cases of septic abortion over a period of 5 years from January 2007 to January 2011 admitted in the Department of obstetrics and gynecology in Government Medical College, Haldwani. This is the only referral centre of the Kumaon region of Uttarakhand. All cases were analyzed with respect to various demographic factors, clinical features, management, complications, maternal morbidity and mortality and surgical intervention.

Result:

During the period of the study there were 3411 abortions of which 37 women had septic abortions giving an incidence of 1.08%. Majority of the patients were between the age of 26 -30 years. There were 4 primigravida and 33 multi-gravida cases. (Table 1) Most of the cases (29) belonged to lower class, 6 were from lower middle class and 2 from upper middle class. (Table 2) 27 patients came from rural areas and 10 were from urban areas. 30 were referred cases.

The period of gestation at the time of abortion was between 7–12 weeks in maximum no. of cases (24). (Table 3)

Out of total 37 cases 5 patients had sepsis after spontaneous abortion and the remaining 32 it followed instrumental termination of pregnancy. Untrained persons like quacks or

ANMs performed termination in 34 cases and in 3 it was performed by doctor. The indication for termination of pregnancy was unwanted pregnancy in 32 cases. 5 patients had spontaneous incomplete abortion at home and came later on to the hospital with features of sepsis. The common symptoms seen in these patients were pain in abdomen, fever, distension of abdomen, foul smelling vaginal discharge. (Table 4) Examination showed tenderness of abdomen with distension and fever in majority of cases. On USG retained products were present in 15 cases, fluid in abdomen and pelvis was present in 19 and both in 3 cases.

Clinically the patients are categorized in 3 grades-

- Grade I – infection localized in the uterus.
- Grade II – infection spreads beyond the uterus to the parametrium, tubes and ovaries or pelvic peritoneum.
- Grade III – Generalized peritonitis and / or endotoxic shock or jaundice or acute renal failure.

Grade I is the commonest and is usually associated with spontaneous abortion. Grade III is almost always associated with illegal induced abortion. Grade I, II, III consisted of 9, 5, and 23 patients out of which 2 developed varying degree of renal failure while 1 developed disseminated intravascular coagulation.

Intensive management, broad spectrum antibiotics, dopamine infusion, blood and blood components transfusion, dialysis and ventilator support was required. Evacuation of uterus was done in 15 (Table 5), colpotomy in 4, laparotomy with drainage of pus in 12, uterus repair in 4, hysterectomy in 3 and resection anastomosis of bowel in 3 patients (Table 6)

Out of 37 patients, 5 died (13.5%), 2 left against medical advice and one had a relaparotomy. Septic shock, renal failure and disseminated intravascular coagulation contributed to maternal mortality. 30 patients had complete recovery.

Discussion:

Although abortion services were liberalized in India more than 4 decades ago, access to safe services remain limited for the vast majority of women. Majority of women seeking abortion still turn to uncertified providers for abortion services because of barriers to legal abortion. Women with access to fewer resources, for example low income, rural women, adolescents are among those most likely to turn to unsafe abortions and have complications.

A septic abortion is a form of abortion that is associated with a serious uterine infection. The infection carries risk of spreading infection to other parts of the body and causing septicemia, a grave risk to life of a woman. Septic shock may lead to kidney failure [6, 7], bleeding diatheses and DIC. Intestinal organs may also become infected, potentially causing scar tissue with chronic pain, intestinal blockage and infertility. If not treated quickly and effectively the woman may die so early referral of septic cases is important. Once the patient progresses to septicemia complication rate becomes very high. Complications like fever, wound infection and wound dehiscence, pelvic thrombophlebitis are seen in post operative period. [3- 5]

Besides intensive management, broad spectrum antibiotics, dopamine, blood transfusion and early surgical intervention can significantly improve the outcome. Surgery in the form of evacuation, laparotomy, hysterectomy was done to remove the source of infection as early as possible. Role of early surgery is controversial but studies by Singhal et al and Rivlin and Hunt [8, 9] have shown that early surgical intervention can significantly improve the outcome. Our study also showed similar results. A similar study by Shailesh Kore, et al [10] showed that mortality was 100% in conservative group as compared to 20% in the surgery group.

Although abortion has been greatly liberalized, the annual number of legal abortions are about 0.6 million, which contribute hardly 10% of the abortions done in the country. In other words, illegal abortions are still rife although it is now more than 40 years since the MTP Act has been promulgated. Experts opine that facilities for safe, legal abortion should be made universally available. [8-10]

Septic abortion, a complication mainly due to illiteracy and unawareness can be prevented by increasing education and awareness about availability of family planning services and MTP services free of cost in the government hospitals. To reduce mortality and morbidity from unsafe abortion several broad activities require strengthening, decreasing unwanted pregnancies, increasing access to safe abortion services and increasing the quality of abortion care including post abortion care.

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Table 1: Age and Gravida

Age (yrs)	Primigravida	Multigravida
20-25	2(5.4)	4(10.8)
26-31	1(2.7)	19(51.3)
31-35	1(2.7)	9(24.3)
36-40	0	1(2.7)

Table 2: Socioeconomic Status

Socioeconomic Status	Cases	Percentage
Lower Class	29	78.4
Lower Middle	6	16.2
Upper Middle	2	5.4

Table 3: Period of Gestation at Abortion

Period of Gestation (wks.)	Cases	Percentage
<6	11	29.7
7-12	24	64.8
13-18	2	5.4

Table 4: Clinical Features at the Time of Admission

Clinical Features	Cases	Percentage
Pain in abdomen	32	86.4
Fever	18	48.6
Distension of abdomen	12	32.4
Foul smelling vaginal discharge	6	16.2
Something coming out of vagina	3	8.8

Table 5: Medical Treatment

Medical Treatment	Cases	Percentage
Broad spectrum Antibiotic	37	100
Dopamine Infusion	4	10.8
Blood Transfusion	22	59.4
Dialysis	2	5.4
Ventilator Support	2	5.4

Table 6: Surgical Treatment

Surgical Treatment	Cases	Percentage
Evacuation	15	40.5
Colpotomy	4	10.8
Laprotomy with drainage of pus	12	32.4
Laprotomy with repair of uterus	4	10.8
Laprotomy with hysterectomy	3	8.8
Laprotomy with resection anastomosis	3	8.8