

# A REVIEW OF SEPTIC INDUCED ABORTION CASES IN ONE YEAR AT KHYBER TEACHING HOSPITAL, PESHAWAR

Jamila M. Naib, Muhammad Ilyas Siddiqui, Bilqis Afridi

Department of Gynae/Obst, Khyber Teaching Hospital, Peshawar

**Background:** Working in a tertiary level hospital we get complicated cases as a result of termination or attempts at termination of unwanted pregnancies. Most of the patients that we get are complicated and need expensive treatments including surgery. This study was conducted to assess the out come of septic induced abortion cases in a year. **Methods:** It was conducted at the Department of Obstetrics and Gynaecology, unit B, Khyber Teaching Hospital, Peshawar, from 1.7.01 to 30.6.02. The data of a total of 28 patients admitted as emergency cases with septic induced abortion in above period were collected. History, management given, post operative care, complications and associated morbidity and mortality were taken into account and result compiled. **Results:** 78.5% patients with unsafe abortions were multi gravida. Termination was attempted at home or other small centers. 57% had history of surgical interference, 28.5% had used a mechanical device. 78.5% patients needed evacuation and curettage, 42% had laparotomy for visceral injuries. 15% patients had a subtotal hysterectomy. 57% patients had associated complications. 7.5% patients who came with septicemic shock died. **Conclusion:** Septic induced abortion is an important contributor to maternal morbidity and mortality, increasing the burden on not only the patients but health workers and their resources. However, it is preventable, and we suggest commitment to health education, family planning promotion and bringing down the rates of unsafe abortions as solutions to the problems.

**Key words:** Septic induced abortion, Methods of termination, Complications, Outcome.

## INTRODUCTION

In developing countries where sepsis ranks high among contributors to maternal morbidity and mortality<sup>1</sup> and where risks for illegal abortions is super added by religious probations on abortions, they are done by untrained personnel in unhygienic conditions. In our unit we get cases complicated as a result of unsafe abortions, mostly needing both surgical and expensive medical treatment, thus increasing economic burden and work load.

Although septic abortion<sup>2,3</sup> has become an uncommon problem in developed countries and where legal abortion is allowed, it continues to be a major problem in the third world countries where abortion is not legalized. Termination is mostly done by traditional birth attendant or quacks who are available in vicinity. Once complicated, they are referred to Government hospitals as no one accepts a moribund patient. Once interference is done infection starts as endometritis involving endometrium and any retained products of conception.<sup>4-6</sup> If not treated, infection spreads further into myometrium and parametrium. Parametritis progresses to peritonitis. The patient then may develop bacteremia and sepsis at any stage of septic abortion. Pelvic inflammatory disease is the most common complication of septic abortion and may progress to septiciemia<sup>7</sup> along with disseminated intravascular coagulation that may prove fatal. The aim of the study was to evaluate cases of septic abortion admitted to a teaching hospital, in a year, evaluate factors like age, parity and methods used for termination and outcome in terms of morbidity and mortality.

## MATERIAL AND METHODS

This was a descriptive study of patients who were admitted and diagnosed as septic induced abortions in one year's time period between 1.7.01–30.6.02 in gynae B Unit, Khyber Teaching Hospital, Peshawar.

A total of 28 patients were admitted as emergency cases with signs and symptoms of septic induced abortion i.e. history of an unwanted pregnancy and attempts at its termination by untrained personnel resulting in pelvic and systemic sepsis and its consequences.

In our unit complete record is kept of all admitted cases. After a thorough history, general physical examination was done to detect signs of anemia, pyrexia, hypotension or shock. Per abdominal and bimanual pelvic examination was performed to detect local signs of incomplete abortion, pelvic sepsis.

All patients were fully investigated e.g. base line investigations, coagulation profile, fibrinogen degradation products and renal function tests were done where indicated. All patients had abdominal and pelvic ultrasound done.

Patients were treated to achieve hemodynamic stability, correct anemia, antibiotic, cover for control of infection, usually a broad spectrum antibiotic in combination with metronidazole. Strict vital signs monitoring was done during this period. Evacuation of uterus was done under general anaesthesia. In severely complicated cases with injury to genital tract, laparotomy was performed and repair or hysterectomy done as needed. Post operative care was given and patients watched closely. Complications like anemia, respiratory tract infections, urinary tract infections, renal shut down, disseminated intravascular coagulations and irreversible shock. Two out of 28 patients, who came in a serious state and established septicemic shock, succumbed despite all efforts. Patients were followed up for one month initially and then after 2 months.

## RESULTS

In the above mentioned period the total number of admissions was above 7,500 out of which 4,151 were gynaecological admissions. The frequency of septic induced abortion thus comes to 3.7/1000 gynaecological admissions.

The ages of patients covered a wide range (table-1). Parity as related to the presentation of septic induced abortion is shown in table-2 with the largest group of ladies being grand multi paras. This shows an increase in the frequency of attempts at abortion, with an increase in parity. Main presenting symptoms are shown in table-3. Almost all patients who presented with full blown picture of septic induced abortions were handled by untrained, unqualified personnel like traditional birth attendants, or lady health visitors.

Table-1: Age groups related to septic induced abortion (n=28)

Age in years	No.	%
15-25	5	17.85
26-35	8	28.57
36-45	15	53.57

Table-2: Parity related to septic induced abortion (n=28)

Parity	Nos.	%
1-5	6	21.42
5-8	8	28.57
8-10	9	32.14
10-15	5	17.85

The frequency of methods used for induction of abortion are shown in table-4.

All patients after full work up were treated for hemodynamic stability, antibiotic cover for control of infection, blood transfusions to correct anemia, strict vital signs monitoring and later evacuation of the uterus under general anaesthesia. The modes of different surgical treatments given are shown in table-5.

Table-3: Main presenting symptoms (n= 28)

Persenting symptom	Nos.	%
Haemorrhage	10	35.7
Sepsis	12	42.8
Visceral injuries	6	21.42

Table-4:Method used to induce abortion (n=28)

Method	Nos.	%
Mechanical intervention like I.U.C.D, wooden stick, laminaria tent.	8	28.57
Injections and vaginal pessaries	4	14.28
Surgical intervention e.g D&C or an attempt for surgical termination	16	57.14

Table-5: Mode of surgical intervention needed as treatment (n=28)

Mode	Nos	%
Evacuation and curttage under G.A	22	78.57
Laparotomy for suspected perforation	6	21.42
a) Repair of perforation uterine evacuation	2	
b) Subtotal abdominal hysterectomy	4	
(Bowl injury repaired in one case).		

Two out of the total of 28 patients arrived in a serious state with established septicemic shock, died despite all measures after developing irreversible shock.

In the 26 patients who survived 10(35.7%) patients had uneventful recovery. 16 (57.14%) patients showed complications in the form of anemia, infections, respiratory tract infections, urinary tract infection, disseminated intra vascular coagulation and renal shut down, and their stay in hospital was prolonged upto an average of 16 days. One patient had to be dialysed during recovery phase. Results showed that septic induced abortion is a major contributor towards morbidity and mortality in our country and the developing world.

## DISCUSSION

Septic induced abortion remains a primary cause of maternal mortality in the developing world and is a major health issue. World Health Organization <sup>8</sup> has coined a new term “unsafe abortions”, characterized by the lack or inadequacy of skills of the providers, hazardous techniques and unhygienic facilities. According to WHO<sup>9</sup> at least 20 million women undergo unsafe abortion annually and some 67,000 women die while millions suffer chronic morbidities. In Pakistan all these unsafe abortions are performed by untrained, back street abortionists and victims are mostly poor, malnourished and anaemic ladies belonging to the underprivileged classes of the society.

The frequency in this study was 3.7/1000 admissions. According to two studies reported from Karachi<sup>10,11</sup> this figure was 3.08% and 2.34% respectively.

Almost all abortions were illegally induced. This emphasizes the fact that these women relied on abortion to end an unwanted pregnancy.

Out of the total 35.7% presented with hemorrhage, 42.8% with sepsis and 21.42% with visceral injuries. The corresponding figures reported from 2 Karachi studies were 24%, 30%, 41% <sup>10</sup> and 42%, 28%, 26% <sup>11</sup> respectively.

Majority of serious complications and mortalities occurred in women who had terminations carried out by unskilled personnel and instrumentation was the method employed for the purpose. Maternal deaths attributed to abortion were found to be 9% and 13% in various studies.<sup>12,13</sup> Our percentage of 14.28% is comparable to above studies. According to WHO<sup>14</sup> abortion related complications are responsible for around 14% of about half million maternal loss that occur each years, 99% of them in developing countries.

These patients come in a moribund stage and one has to give multiple antibiotic cover to treat the infection and then resort to surgery like evacuation of the uterus, colpotomy to drain a pelvic abscess, or laparotomy to deal with visceral injuries. To improve the outcome, surgery should be done early rather than late.

Bacteria including gram positive, gram negatives, and anaerobes can be involved in the aetio-pathogenesis of septic abortion. Even tetanus and gas gangrene have been reported in patients of septic abortion. Also endocarditis has been reported after septic abortion <sup>15, 16</sup>.

The figures reported in our study show the tip of an iceberg under which lies an enormous size of patients who induce abortion in rural areas and suffer and can never make it to a hospital like ours.

From standard of the program of action of the United Nations international conference on population and development (ICRD) Cairo/Egypt September 1994, point 8.25 states that in no case should abortion be promoted as a method of family planning. All government and relevant organizations are urged to strengthen their commitment to women's health, to deal with the health impact of unsafe abortion as major public health concern, and to reduce the recourse to abortion through expanded and improved family planning services.

Prevention of unwanted pregnancies must always be given the highest priority and every attempt be made to eliminate the need for abortion. Women who have unwanted pregnancies should have ready access to reliable information and compassionate counseling.

In all cases women should have access to quality services for the management of complications arising from abortion.<sup>17</sup>

Post abortion counseling information and family planning services should be offered promptly which will help avoid repeated abortions.

## CONCLUSION

We conclude that septic induced abortion is associated with serious complications, which need expensive treatments and surgical interference in most of the cases increasing economic burden and work load, and above all patients suffering. As it is a preventable condition we give the following recommendations.

## RECOMMENDATION

We recommend that first of all high degree of commitment of all health personnel for prevention of unsafe abortions is needed. Our people especially the elders of the family and male part of our society need to be educated as causes of unsafe abortion are rooted in a complex set of socio demographic circumstances. Family planning services should be made available to all and different counseling strategies be adapted according to circumstances. Once complications of abortions occur they should be dealt with promptly and aggressively to minimize morbidity or mortality associated with the condition.

## REFERENCES

1. Abou Zahr C, Royston E. Maternal Mortality. A global fact book. Geneva: World Health Organization.1991
2. Ashworth F. Septic abortion. In: Stabile I, Grudzinskas JG, Chard T, editors. Spontaneous abortion, diagnosis and treatment. London:Springer Verlag.1992:119-32.
3. Jewett JF. Septic induced abortion. N Engl J Med 1973;289(14):748-9.
4. Lynn WA, Cohen J.Management of septic shock. J Infect Dis 1982;145:1-3.
5. Parker MM, Pariko JE. Septic shock, hemodynamics and pathogenesis. JAMA 1983;250:332-4.
6. Back RA, Bone RC. The septic syndrome, Definition and clinical implications. J Crit Care Clin1989;5:1-2.

7. Bryan CS, Reynold SKL, Moore EE. Bacteriemia in obstetrics and gynecology. *Obstetric Gynecol* 1984;64:155-6.
8. WHO- The prevention and management of unsafe abortions Geneva. *WHO/msm/1992;5*.
9. Clinical management of abortion complications: A practical guide. Geneva. *WHO/ FHE / MSM / 1994;1*.
10. Tayyab S, Samad N. Illegally induced abortions. A Study of 37 cases *J Coll Physicians Surg Pakistan* 1996;6:104-6.
11. Zaidi S, Mastoor S, Jaffery H. Fetal deaths in induced abortions. *J Coll Physians Surg Pakistan* 1993;3:20-3.
12. Ladipo OA. Preventing and managing complications of induced abortions in third world countries. *Int J Gynecol Obstet* 1989;30:21-8.
13. Bashir A. Maternal mortality in Faisalabad city. A longitudinal study. *Gynecologist* 1993;3:14-20.
14. A tabulation of available data on the frequency and mortality of unsafe abortions Geneva, *WHO/MCH/ 90-4, 1990*
15. Cavanagh D, Knuppel RA, Shepherd JH. Septic shock and the obstetrician /gynecologist. *South Med J* 1982;75: 809-10.
16. Sharma JB, Umanaktala, Kumar A, Malhotra M. Complications and management of septic abortion, a five year study. *J Obstet Gyn (Indian issue)* 2001;6:166-9.
17. Stevenson MM, Radcliffe KW. Presenting pelvic infection after abortion. *International journal of STD and AIDS* 1995;6:305-12.

---

**Address for Correspondence:**

**Dr. Jamila M. Naib**, Senior Registrar, Gynae-B Unit, Khyber Teaching Hospital, Peshawar.