ORIGINAL ARTICLE

CLINICAL STUDY AND MANAGEMENT OF SEPTIC ABORTION

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ABSTRACT: OBJECTIVES: This study was taken up to know the incidence, causes, complications and mortality and management of septic abortions. **METHODS:** The materials for the present study comprises of 36 cases of septic abortion with symptoms of febrile reaction of 100.4° F for 24 hours, purulent vaginal discharge, lower abdominal pain, tachycardia or tachypnea were taken. A detailed history, general examination, systemic examination, local vaginal examination included. Routine investigations were done in all cases and recorded. **RESULTS:** The incidence of septic abortion was 11.25%, maximum age was 21-30 years, married 72%, 1st trimester 78%, surgical method was used in 56%, foreign body insertion was seen in 22%. 75% of patients had Hb% between 7-10 g, 72% of cases had positive cervical swab. **CONCLUSION:** The solution to prevent the septic abortion is to increase motivation, to utilize family planning services and create awareness of MTP act.
KEYWORDS: Septic abortion, MTP act, MMR.

INTRODUCTION: A woman who is blessed with the gift of motherhood has to face some special problems. But advances directed towards these problems i.e. proper sex education, as well as early and efficient antenatal care and better understanding on the part of the women have reduced these problems. So there is tremendous fall in the incidence of maternal morbidity and mortality due to obstetric causes.

However septic abortion still continues to feature predominantly as a cause of morbidity and mortality in obstetric practice in our country The tragedy of septic abortion is that the victim is often a very young girl who is unmarried or married, who has conceived an unwanted pregnancy and there by seeks an illegal aid by a non-medical person to put on an end to it widow or a victim of rape or a lady with failure of contraception, woman suffering from infection and under treatment of drugs, for the fear of delivery of monster babies or fear of religious views, becomes easy prey to the unqualified abortionist or quacks or midwives who has no knowledge of asepsis or anatomy and takes her into confidence By the time these approach medical personnel, most of the patients are critically ill and develop septic shock and ultimately end fatally.

Abortion is an important facet of the science of obstetrics. 10-25% of all Pregnancies terminate as spontaneous abortion. One of the commonest complications of abortion is sepsis and most of the criminal abortion if not treated in time ends fatally and septic abortion remains a major cause of mortality. The subject has been studied from different aspects Viz. Clinical, Therapeutic, Bacteriological.

This study was planned to study the incidence of septic abortion in our hospital, etiological factors, complications and mortality, best possible management in our set-up.

METHODS: The materials for the present study comprises of 36 cases of septic abortion from March 1994 - March 1996 admitted in Government General Hospital Gulbarga and Sangameshwer Hospital, Gulbarga.

In every case study a detailed history was taken and following criteria were taken for diagnosis of septic abortion.

1. Febrile reaction of 100.4° F for 24 hours.
2. Purulent vaginal discharge.
3. Lower abdominal pain.
4. Tachycardia or Tachypncea.

A detailed history regarding name age parity marital status, gestational period, and mode of termination of pregnancy and the person performing the abortion was elicited.
The onset of complaints, duration and progress were noted.

GENERAL EXAMINATION: Included approximate age, build nutrition, pallor, jaundice, oedma, dehydration, pulse, B.P., temperature, respiration, breast, lymph nodes were examined.

A routine examination of cardiovascular, respiratory, central nervous system was made and relevant findings were noted.

Local examination of perineum was done as a routine in all the cases. Any injury, discharge, bleeding was done and presence of any foreign body.

1. Blood for haemoglobin percentage, total count, differential count, E.S.R. peripheral smear.
2. Urine for albumin, sugar, microscopy and culture and sensitivity.
3. Cervical swab for culture and sensitivity.
4. Blood for culture and sensitivity test

DISCUSSION: The incidence of septic abortions varies from one country to another. The incidence of septic abortion in present study was 11.25% which is consistent with the study done by Gita Ganguly (1970-72 – 9%, 1973-75 – 10.6%)[1,2] and V. Kamala Jayaram (1981-86 – 10.3%).[3]

Age group	Name of the author	Incidence
<20 years	Philips	9.93%
	Gita Ganguly	18.7%
	Present study	22.2%
21-30 years	Philips	44.8%
	Gita Ganguly	60.8%
	Present study	61%
30-40 years	Philips	39.44%
	Gita Ganguly	19.9%
	Present study	17%

Table 1: Incidence according to age

In present study, the distribution of age is consistent with the study done by Gita Ganguly[2]. Maximum incidence is seen in age group between 20-30 years.

In the present study, incidence of septic abortion is more in multiparous women (58%) which is similar to study quoted by Gita Ganguly[1] (45%).

In 1963, Robert Neuwirth M.D and Immaneul Fredman M.D from Solane Hospital in New york studied the problems of septic abortion and its management. According to their observations, the incidence of septic abortions was more prevalent in Negor multiparas.

In the present study, distribution seen in married women (72%), unmarried (19%), widow (9%) which coincides with the study of Punjabi Janaki[4] married (69.44%), K.Bhaskar Rao[5] (86.3%). In the present study most of the terminations were in 1st trimester (78%) which is similar to study quoted by Robert[6] (68.8%) and K.Bhaskar Rao[5] (60.4%).

In present study sepsis following D&C (56%) was more. Similarly foreign body insertion 22%, spontaneous abortion 11%. But according to K.Bhaskar Rao[5] (52.4%) and Kamala Jayaram (69%) cases were more following foreign body insertion.

K. Bhaskar Rao from Government Errskine Hospital, Madhurai during 1964-69 showed 73% patients gave history of induction for mostly unwanted pregnancies (13%). Other reasons were poverty, ill health and extramarital conceptions. In 90% induction was done by others and 10% was self-induced. The favourite method was by insertion of a stick from the shrub calotropis gigantica. Pastes and injections were used only in 7.3%. Mortality rate was 10.7% due to septic shock but was responsible for 73% of the deaths.

Organism	Name of author	Incidence
E.coli	Haragopal	30.7%
	Niraja Zindal	50%
	Present study	36%
Klebsiella	Haragopal	2.5%
	Niraja Zindal	7.6%
	Present study	11%
Pseudomonas	Haragopal	5.1%
	Niraja Zindal	7.6%
	Present study	3%
St. aureus	Haragopal	17.9%
	Niraja Zindal	29.2%
	Present study	17%
B. haemolytic streptococci	Haragopal	-
	Niraja Zindal	2.6%
	Present study	3%

Table 2: Bacteria isolated in cervical swab

In present study, E. coli were isolated in maximum cases which is similar to study quoted by Haragopal[11] and Niraja Zindal.[6] Normal J.Buka[7] M.D., et al have studied the complications due

to septic abortion from Boston City Hospital Massachussetts in 1965. According to their observation, bacteremic shock and pulmonary embolism is the cause of death in septic abortion.

Management	Name of author	Incidence
Conservative management	Ratna Sanyal[8]	36%
	M.V. Parikh[9]	15%
	Kamala Jayaram	37.2%
	Present study	36%
Suction evacuation	Ratna Sanyal	50%
	M.V. Parikh	20.50%
	Kamala Jayaram	21.4%
	Present study	39.5%
Laparotomy	Ratna Sanyal	14%
	M.V. Parikh	64.5%
	Kamala Jayaram	12%
	Present study	60%

Table 3: Management of septic abortion

In present study, most of the cases were treated by surgical method and laparotomy was more which is similar to study of M.V. Parikh.[9]

According to present study, majority of the cases were in 20-30 year age and multiparous women which is similar to study done by Gita Ganguly[2]. According to present series' most of the cases were married women. This is also similar to Punjabi Janaki.[4] This may be due to either these women are unaware of contraception or due to socio-economic reason or illegal pregnancy undergo termination.

Roger Moritz[10] M.D. et al from the Mainey Valley Hospital, Ohio emphasized institution of massive intravenous broad spectrum antibiotic therapy for all cases, meticulous supportive care conservative afebrile evacuation of the infected uterine contents and no vasopressor or corticosteroids.

A review on usage of heparin for septic abortion and for prevention of endotoxic shock has been done by R.R. Morgulis[11] M.D., F.A. Coli et al others in 1966 stated that along with usual antibiotics fluids, corticosteroids and early evacuation of the uterus and urged the use of heparin to prevent intravascular coagulation and sequalae there from.

In the present study, prognosis was better, 72% recovered fully and 17% recovered with sequlae and 11% went against medical advice. The conditions of these patients were very bad.

RESULTS:

1. The incidence of septic abortion in government general hospital, Gulbarga is 11.25%.
2. The incidence of septic abortion by age group shown maximum age was 21-30 year i.e. 61%.
3. Incidence was high in rural patients and less in urban patients.
4. Maximum incidence was seen in married 72% unmarried 19% and widows 9%.

5. Incidence of septic abortion was maximum in 1st trimester i.e., 78% and 2nd trimester 22%.
6. Incidence of septic abortion was maximum in women with more than 2 children 31%. 27% had more than 4 children and nullipara 25%.
7. 67% of cases were following termination outside hospital.
8. 61% of the abortions were performed by unqualified personal.
9. The method used for abortion was surgical method in the form of D and C in 56% and foreign body insertion was seen in 22% of cases and oral tablets and injections in 11% cases.
10. Maximum cases of septic abortions were Grade-III 47%, Grade-I 31% and Gade-II 22%.
11. 75 % the patients had Hb% between 7-10 g, More than 10 gm were only 11% and less than 6 gm were 14%.
12. 72% of cases had positive culture of cervical swab and 28% came as negative culture.
13. Among the organisms E.Coil was seen more i.e., 36% next was staphylococcus sureus 17%, klebsiella 11%. In 27 % cases no organisms were grown.
14. Management of septic abortion cases was mainly surgical in 64% and medical management was 36%.
15. Laparotomy was done in 60.8% of cases and suction evacuation was done in 39.2% cases.
16. 100% of the cases received I.V. Metrogyl and aprobid was used in 50% of cases which was maximum compared to Taxim (IV. Augmentin.
17. 72% of the septic abortion cases recovered fully and 11% went against medical advice and 17% of cases recovered with some sequalae i.e., to mass fistula and jaundice.

CONCLUSION: In spite of liberalization of MTP act the incidence is high. The incidence of septic abortion is more in unmarried and muciparous women. This is due to socio-economic reason and unwanted pregnancy if every conception is by choice and not by chance then there will be no need for termination of pregnancy Sepsis is high in termination done outside hospital. Most of the women from rural area are unaware of MTP act and family planning methods.

The only solution for all these problems is to increase motivation about family planning and simultaneous of awareness of MTP Act. We should also make an attempt to extend the service at their door-step and at the peripheral Centers. All the Doctor should be trained in MTP Along with all these changes illiteracy should be eradicated. Then only the incidence of septic abortion will definitely decrease to the expected levels and maternal deaths will decrease.

Extending medical termination of pregnancy training programme to every basic doctor, improving clinical management of septic abortion complications i.e., large doses of broad spectrum antibiotics and timely surgical intervention can reduce the morbidity and mortality.

The positive association between abortion and contraception can be further strengthened when abortion services are provided as a part of the integrated maternal and child health and contraceptive care.

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