

Study of various treatment modalities used in septic abortion

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Abstract

Introduction: Abortion is the termination of pregnancy by any means before the fetus is sufficiently developed to survive. Any type of abortion when completed with infection it is called septic abortion. Septic abortion continued to be a major health problem in developing countries where abortion is not legalized. **Aims and objectives:** to study of various treatment modalities used in septic abortion according to various laboratory findings and associated complications. **Materials and method:** The present study was conducted in department of obstetrics and gynecology at Government General Hospital and Sangameshwer Hospital, Gulbarga. All the cases of septic abortion were enrolled in the study. Cases of septic abortion were studied in detail. After stabilization of patients' detailed history regarding name, age, parity, marital status and gestational period were inquired and record. Complete clinical examination was done in all the patients. Cervical swab was collected in all the patients for culture and sensitivity. Treatment modality used in each patient was noted and recorded. **Results:** The incidence of Grade III septic abortion cases 47.22%. The commonest organism isolated on culture was E.Coil (36.11%) followed by Staphylococcus Aureus (16.67%).36.11% patients were managed conservatively whereas in 63.89% were managed by surgical method. Among the surgically managed patients laporotomy was done in 14 cases (38.89%). peritonitis was diagnosed in 47.22% cases as complication of septic abortion. **Conclusion:** Majority of the cases of septic abortion were caused by E coli and Staphylococcus Aureus. And laprotomy was the best surgical method to manage the patients of septic abortion. **Key words:** septic abortion, laprotomy, Conservative Medical Management.

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INTRODUCTION

Abortion is the termination of pregnancy by any means before the fetus is sufficiently developed to survive. Any type of abortion when completed with infection it is called septic abortion¹. Septic abortion continued to be a major health problem in developing countries where abortion is not legalized². Septic abortion 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.³ The infection can result from factors like attempted abortion using infectious tools, lack of proper antiseptic and asepsis, incomplete evacuation, inadvertent injury to the genital organs and adjacent structures particularly gut.⁴ The patient may develop bacteremia and sepsis at any stage of septic abortion. Pelvic inflammatory disease is the most common complication of septic abortion and delayed treatment permits the infection to progress to bacteremia, generalized peritonitis, pelvic abscess, disseminated intravascular coagulopathy, adult respiratory distress syndrome, septic shock, renal failure and death^{4,5,6}.

AIMS AND OBJECTIVES

To study of various treatment modalities used in septic abortion according to various laboratory findings and associated complications.

MATERIALS AND METHOD

The present study was conducted in department of obstetrics and gynecology at Government General Hospital and Sangameshwer Hospital, Gulbarga. All the cases of abortion reported during March 1994 to March 1996 were enrolled in the study.

Cases of septic abortion were diagnosed by using following criteria.

History of abortion with

- Febrile reaction of 100.40 0 F for 24 hours
- Purulent vaginal discharge
- Lower abdominal pain
- Tachycardia or Tachypnea

Thus total 36 patients of septic abortion were diagnosed in the study duration. All the patients were initially stabilized by collecting brief information. Then detailed history regarding name, age, parity, marital status and gestational period were inquired and record. Mode of termination of pregnancy and the person performing the abortion was elicited. The onset of complaints, duration and progress were noted. History of foul smelling discharge per vagina, pain in lower abdomen, vomiting, fever, diarrhea, frequency, dysuria and oliguria were also enquired. A detail general examination including build, nutrition, pallor, jaundice, edema, dehydration, pulse, B P, temperature, respiration, breast, lymph nodes were examined and the relevant findings were recorded. A routine examination of cardiovascular, respiratory, Central nervous system was made and relevant findings were also noted. Per virginal examination was done in all the patients. Presence of any foul smelling discharge, bleeding, laceration of the vaginal wall and cervix, foul smelling products of conception and presence of any foreign body was also looked for. Culture and sensitivity of cervical swab was done in all the cases. Antibiotics were selected according to the culture and sensitivity report. The method of treatment was selected according to the condition of patients and relevant findings.

RESULTS

Table 1: Distribution according to the method leading to septic abortion

Method used	No. of cases	Percentage
Oral Tablet or injection	4	11.11
Insertion of foreign body stick, Foley's catheter etc.	8	22.22
Surgical Method (DandC)	20	55.56
Spontaneous	4	11.11

In the present study surgical method like D and C was used in 55.56% patients for abortion. Foreign body was inserted in 22.22% cases and in 11.11% cases oral tablet and injection were used. Most of the surgical procedures were done by unqualified persons

Table 2: Distribution according to various investigations and clinical findings

Investigations	No. of cases	Percentage
Grading of Abortion	Grade I	11 30.56
	Grade II	8 22.22
	Grade III	17 47.22

Hb %	Less than 6 gm	5	13.89
	7-10 gm	27	75.00
	More than 10 gm	4	11.11
Cervical Swab culture	Positive culture	26	72.22
	Negative culture	10	27.78
	E col,	13	36.11
Bacteria*	Klebsiella	4	11.11
	Pseudomonas	1	2.78
	Staphylococcus Aureus	6	16.67
	B-haemolytic st. cocci	1	2.78
	No growth	11	30.56

*Multiple responses were recorded.

The incidence of Grade III septic abortion cases 47.22% followed by grade I (30.56%) and grade II (22.22%). It was observed that severe anemia was present in 13.89% women whereas moderate anemia was present in 75% women. Cervical swab culture was positive in 72.22% cases. The commonest organism isolated on culture was E.Coil (36.11%) followed by Staphylococcus Aureus (16.67%) and Klebsiella (11.11%) were observed. No organisms were grown in 30.56% of cases.

Table 3: Distribution according to type of management

Type of Management	No. of cases	Percentage	
Conservative Medical Management	13	36.11	
Surgical Management	Suction and Evacuation	9	25.00
	Calpotomy	3	8.33
	Laparotomy	14	38.89

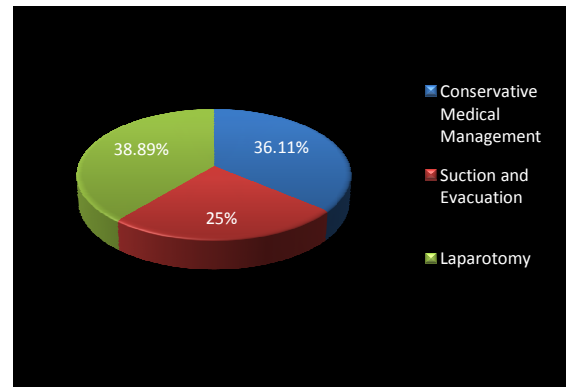


Figure 1: Distribution according to type of management

It was observed that 36.11% patients were managed conservatively whereas in 63.89% were managed by surgical method. Among the surgically managed patients laporotomy was done in 14 cases (38.89%). suction evacuation was done in 25% patients. Calpotomy was done in 3 cases. Ultimately laparotomy was done in patients who had already undergone calpotomy

Table 4: Distribution according to complication

Complication	No of patients	%
Peritonitis	17	47.22
Hypovolumic shock	2	5.56
Tubo ovarian mass	3	8.33
Abdomino vesical fistula	1	2.78
Jaundice	2	5.56

In the present study it was observed peritonitis was diagnosed in 47.22% cases as complication of septic abortion. Tubo ovarian mass was diagnosed in 8.33% patients. Hypovolumic shock and jaundice was diagnosed in 5.56% patients each.

DISCUSSION

The present study was conducted to study the various treatment modalities used in treating septic abortion. It was observed that sepsis after surgical method like D and C was present in 55.56% patients. Foreign body was inserted in 22.22% cases and in 11.11% cases oral tablet and injection were used. But according to K Bhaskar Rao *et al*⁷ and Kamala Jayaram *et al*⁸ sepsis cases were more following foreign body insertion. In present study Grade III cases (47.22%) were maximum. But as compared to study done by Roger *et al*³⁰ and K.Bhasker Rao *et al*⁷ Grade I and Grade II cases were more. The difference in the study was mainly due to reference of complicated cases from periphery to district hospital, thus the incidence of Grade III cases was more in the present study. Severe anemia was present in 13.89% women whereas moderate anemia was present in 75% women. Cervical swab culture was positive in 72.22% cases. No organisms were grown in 30.56% of cases. The commonest organism isolated on culture was E.Coil (36.11%) followed by Staphylococcus Aureus (16.67%) and Klebsiella (11.11%) were observed. According to the study conducted by Hargopal *et al*¹⁰ and Niraja Zindal *et al*¹¹ E. coli were present in 30.7% and 40% cases, which was comparable with the present study. In the present study majority of the patients were managed surgically (63.89%). Laprotomy (38.89%) was the most commonly used surgical method in the study. M.V Parikh *et al*¹² (64.5%) also observed laprotomy as the treatment of choice in their study. 25% were managed by Suction and Evacuation. It was observed that 36.11% patients were managed conservatively. Similar findings were also reported by Ratna Sanyal *et al*¹³ and Kamala Jayaram *et al*⁸. While measuring the complication it was observed that peritonitis was diagnosed in 47.22% cases. Tubo ovarian mass was diagnosed in 8.33% patients. Hypovolumic shock and jaundice was diagnosed in 5.56% patients each. Aggressive management in the form of laparotomy can definitely reduce the mortality and morbidity in septic abortion. In spite of liberalization of

MTP act the incidence is high, The incidence of septic abortion is more in unmarried and multiparous 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 doctors 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.

CONCLUSION

Thus from the above discussion we conclude that in majority of the cases of septic abortion were caused by E coli and Staphylococcus Aureus. And laprotomy was the best surgical method to manage the patients of septic abortion.

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