PLACE OF SURGERY IN SEPTIC ABORTION

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SUMMARY

Maternal morbidity and mortality has dropped tremendously now a days, due to, efficient antenatal and intranatal management. But still, septic abortion continues an important cause of maternal mortality, even though MTP act has come into effect in India since April 1972. Management of septic abortion is controversial subject. The need for surgical intervention and the extent of the surgical procedure are the questions to be answered. This study is carried out with an intention to find out the place for surgical intervention to find out the place for surgical intervention in the management of septic abortions.

The incidence of septic abortion was 10%. Of them 42.10% had some interference for induction of abortion in the form of introduction of rose-stick in the uterine cavity, putting crushed bhilawa in the vagina. 5.55% patients developed sepsis after MTP. Of all the cases 74.61% cases were treated by surgical intervention in the form of evacuation, colpotomy or laparotomy. Mortality and morbidity was much less in the patients who were treated by timely surgical intervention. Judicial selective conservatism has got its own place, but it should not be stretched to such an extent that surgical intervention later would be futile.

Introduction

A woman who is blessed with the gift of motherhood has to face many problems of pregnancy and labour.

Now a days with efficient antenatal and intranatal management there is tremendous drop in the mortality and morbidity. Even though MTP act has come into effect in India from April 1972 septic abortion still continues an important cause of maternal mortality. Management of septic abortion is controversial subject. The need for surgical intervention and the extent of the surgical procedure are the questions to be answered.

This study is an attempt to find out the place for surgical intervention in the treatment of septic abortion.

Material and Methods

This study was carried out from June

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1981 to May 1984. Out of 1260 patients of abortion, 126 were of septic abortion. Incidence was 10%. Cases were grouped according to the grade of infection.

Grade I—Infection localised within uterine cavity only

Grade II—Infection spreading upto the parametrium and adnexa

Grade III—Infection becoming generalised in the form of peritonitis or septicaemia or endotoxic shock with or without oliguria.

These patients were treated in 6 different units according to units own policy. Thus some of the cases received only conservative line of treatment while similar such patients were treated by surgical intervention in some of the units.

Observation

Majority of the patients were between the age group 21 to 30 and were from low socio-economic group.

Incidence of septic abortion was more in married women.

TABLE I
Marital Status

Marital status	No. of cases	Percentage
Unmarried	22	17.46
Married	81	64.27
Widow	11	8.75
Divorcee	12	9.52
Total	126	100

Of the total abortions, 63.38% were from rural side and 36.62% were from urban side. Incidence of spontaneous abortion in rural and urban area was more or less same. But the rate of induced abortion by quack was maximum in rural patients.

52.35% were admitted between 5th to 8th day of abortion.

32.54% got admitted within 4 days and 15.11 got admitted more than 8 days of abortion. In this group only 6 patients died.

TABLE II
Rural and Urban Distribution with Type of Abortion

Place	Spontaneous abortion	Positive history of interference		Total
		Following	Induced by Quack	
Rural	35 (27.67)	4 (3.17)	41 (32.54)	80
Urban	31 (24.70)	3 (2.38)	12 (9.50)	46
	66 (52.32)	7 (5.55)	55 (42.08)	126

TABLE III
Abortion Admission Interval in Relation to Number of Deaths

Interval in days	No. of cases	Percentage	No. of deaths
Upto 4 days	41	32.54	
5 to 8 days	66	52.35	
More than 8 days	19	15.11	6
Total	126	100	6

TABLE IV
Type of Interference

Type of interference	No of cases	Percentage
1. History of interference — Foreign body in the ut. paste/jelly — Crushed Bhilawa in the vagina	53	42.10
2. Following M.T.P.	7	5.55
3. No History of interference	66	52.35
Total	126	100

42.10% had some interference for induction of abortion in the form of passage of rose stick in the uterine cavity, putting crushed bhilawa in vagina etc. 5.55% patients developed sepsis after MTP. In this group equal number of cases were from rural and urban area. 52.35% patients denied history of interference this could be particularly due to hesistance to disclose the same.

TABLE V
Gradewise Distribution of the Cases

Grade of infection	No. of cases	Percentage
I	86	68.27
II	22	17.46
III	18	14.27
Total	126	100

74.61% of the cases were treated by surgical intervention in the form of evacuation, colpotomy or laparotomy for the drainage of pus.

Of the 18 cases from gr. III, 2 patients died soon when the resuscitative measures were going on.

TABLE VII
Admission Intervention Interval

Time interval in hours	No. of cases	Percentage
Within 12-24 hours	04	3.17
24-96 hours	82	65.09
More than 96 hours	08	6.35
Total	94	74.61

Of the three from 1st group who died on 25th day of admission, uterine perforation with stick in situ partially protruding in the peritoneal cavity was revealed on postmortem examination. Other 2 patients died on 10th and 16th day with anuria and septicaemia respectively. Postmortem revealed perforation of ut. with pus in abdominal cavity. Patients from second group died on the same day

TABLE VI
Management According to Grading

Grade of infection	Treated with conservative line	Surgical intervention	Total
I	25 (19.84%)	67 (48.43%)	86 (68.27%)
II	5 (3.97%)	17 (13.49%)	22 (17.46%)
III		16 (12.69%)	18 (14.27%)
Total	30 (23.81%)	94 (74.61%)	126 (100)

TABLE VIII
Nature of Surgical Intervention

Grade of infection	No. of cases	No. of cases who required surgical intervention	Type of surgical procedure		
			D & E	Post colpotomy	Laparotomy
I	86	61	61	—	—
II	22	17	—	2	15
III	18	16	—	—	16
	126	94	64	2	31

TABLE IX
Mortality

No. of deaths	No. of cases	Type of management
3	30	Conservative line of treatment
1	94	Surgical intervention
4	124	

of laparotomy due to pulmonary embolism.

On follow-up it was observed that 14 patients out of 30, 27 developed T O masses and only 3 patients out of 94 had the same problem.

Discussion

Inspite of availability of MTP procedures, there is hardly any change in the incidence of septic abortions.

As shown in Table III, mortality was high in those who got admitted after 8 days. Reasons for delay in admission could be

1. Failure to recognise sepsis on part of medical attendants.
2. Reluctance on part of patients to get transferred.
3. Transport difficulties.

Majority of the patients who had gr. 2 and 3 sepsis had history of foreign body insertion in uterus. Not only that 5.55% developed sepsis after MTP. This is mainly due to incomplete removal of products which shows lack of operative experience on the part of medical attendants.

Of 126 cases, 29 were of complete abortions and 97 were of incomplete. Gr. III sepsis was seen in 0.80% of complete abortion group, in contrast to 13.41% in incomplete group.

Many authorities of Obstetrics advocated conservative treatment with the idea that during pregnancy due to physiological changes in the body person is more prone for DIC. Additionally it is known that systemic effects of endotoxins are more devastating during pregnancy. Under experimental conditions pregnant animals require half the dose of endotoxins needed in non pregnant animals for development of Schwatzmann s reaction. Thus inclination towards conservative therapy could be due to

1. Patient may not withstand surgical trauma in such critical ill health.
2. Handling of the tissues causes deportation of septic material in general circulation leading to endotoxic shock, DIC and anuria.

Modern trend is in favour of surgical intervention on

1. Surgical intervention removes the septic focus.
2. Bag of endotoxin i.e. pockets of pus

in the paracolic gutters and supphrenic space can be opened and drained.

3. It is easy to detect undiagnosed bowel injury, when to proceed for surgical intervention? Outcome of the cases mainly depend on the time interval between the insult and the sugical intervention. It should not be too early before adequate coverage with antibiotics or too late when it will be meaningless:

In present study 6.35% of the cases were taken for surgical intervention after 96 hours. In them post-operative period was very stormy and recovery period was also prolonged as compared to 3.77% who were taken for surgery within 24 hours.

Everybody agrees that surgery should be quick, purposeful, without creating complications:

In present study 61 cases underwent evacuation. In 5 posterior colpotomy was done; of them 3 patients required laparotomy for drainage of pus. Of the 31 laparotomies in 9 patients subtotal hysterectomy was done for highly septic gangrenous fundus and body of the uterus and perforation there was injury to bowel and was gangrenous thus end to end anastomosis was done with hysterectomy. In rest of the cases there was massive generalised peritonitis with loculated pus in the peritoneal cavity which made possible only to keep drains in the peritoneal cavity. Postmortem was done in all 6 cases who died. From conservative management group all revealed uterine perforation with peritonitis—Timely surgical intervention in them might have improved the salvage. 2 patients who died within 24 hours also showed presence of perforation due to stick. Early hospitalization and laparotomy was the answer for them.

Conclusions

Early detection of sepsis and timely referrel will improve the salvage

Judicious selective conservatism has got its own place.

Should be restricted to Gr. I cases.

Timely surgical intervention should be done

(A) Gr. II and III infection

(B) Suspected perforation of the uterus

Foreign body Curette

If the uterus is found to be perforated, infected the decision in favour of hysterectomy should be taken.

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