

Early Re-laparotomy after Gynaecological and Obsterical Surgery – a twelve months – Retrospective Study.

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Abstract:

Objective(s): To study the incidence of early re-laparotomy, its indications and mortality rates in a rural tertiary teaching institution.

Method(s): A retrospective descriptive study of early re- laparotomy after primary gynaecological and obstetrical surgery over a period of 12 months from 1st August 2012 to 31st July 2013 was done.

Result(s): Total incidence of re –laparotomy was 0.169%. Most common complications requiring re-laparotomy were intraperitoneal haemorrhage(36.36%) and PPH(36.36%) followed by rectus sheath haematoma(18.18%) and Burst abdomen(9.09%). Women who underwent primary surgeries for gynaecological and obstetrical condition required re-laparotomy in 0.16% & 0.17% cases respectively and mortality was 0% and 20% cases respectively.

Conclusion: Indication of primary surgery, whether gynaecological or obstetrical, patient's pre-operative general condition, surgeon's experiences and care by the intensivist may influence the outcome of re-laparotomy. Re-laparotomy should be considered as a procedure in case of near miss fatality of mother. To make it safe every effort must be adopted.

Keywords: Re-laparotomy, Intraperitoneal haemorrhage, Haematoma, Burst abdomen.

I. Introduction

Relaparotomy may be considered as a near miss maternal mortality situation. Most of the time, it is performed when the condition of the patient is too critical to withstand the risk anaesthesia and repeat surgery. So it is very difficult to take decision and requires a good clinical judgement. On one hand it is the last resort to save a mother's life ; and on other hand the mother's reproductive capability is sacrificed in most of the cases. A laparotomy rate between 0.6 to 4.7% has been reported in various studies[1,2]. Common indications for re-laparotomy were intra-abdominal haemorrhage, post-partum haemorrhage, rectus sheath haematoma, sepsis and small bowel obstruction[3-5]. Mortality following re-laparotomy was high and it varied from nil to 61.5% in different studies[5-6]. The aim of the study was to know the incidence of early re- laparotomy its indication and mortality rates in a rural tertiary teaching institution.

II. Methods

It was a retrospective descriptive study done in a obstetric and gynaecology department of B.S. medical College and Hospital, Bankura over a period of 12 months from 1st August, 2012 to 31st July 2013. The study subjects (women) were taken from both gynaecology and obstetric ward, who underwent primary surgery in this institution. During this period total number of operations were 6497 and among them re-laparotomy was done in 11 cases within 7 days of primary surgery (majority within 48 hours). The incidence indications and mortality of those women were analyzed.

Table No. – 1

No. of Primary operation	No. of re- laparotomy	Percentage (%)
6497	11	0.169

Table No. – 2

Indication	Number	Percentage (%)
1. Intra Peritoneal Haemorrhage	4	36.36%
2. Rectus sheath Haematoma	2	18.18%
3. Burst abdomen	1	9.09%
4. Post partum Haemorrhage	4	36.36%

Table No. – 3
Outcome of operation

Primary Surgery (n=6497)	Re- laparotomy (n=11)	Death (n= 2)	Percentage (%)
1. Obstetrics (n=5863)	10 (0.17%)	2	20%
2. Gynaecology (n = 634)	1 (0.16%)	0	0%

III. Results

Total number of operations performed were 6497 and among them re- laparotomy was done in 11 cases, giving an incidence of 0.169% (Table – 1). Most common complication requiring re-laparotomy were intra peritoneal haemorrhage (36.36%) and PPH (36.36%) followed by rectus sheath haematoma (18.18%) and Burst abdomen (9.09%) (Table – 2). Out of 6497 primary operations 634 were done for gynaecological condition of which one woman require re-laparotomy (0.16%) and the patient survive. For obstetric conditions 5863 operations were performed of which 10 women required re- laparotomy (0.17%) among them two women died (20%) (Table – 3). Total mortality was 18.18% (2/11) among the cases of re-laparotomy.

IV. Discussion

Factors modifying the outcome of re- laparotomy are concurrent diseases type of primary operations, pre-operative general condition of the patient, time interval between primary surgery and re-laparotomy, assistance of an experienced colleague, blood bank facility and prevention of sepsis.

In the current study intra-peritoneal haemorrhage was found in 36.36% cases of re- laparotomy and also PPH was found in 36.36% of re- laparotomy. Abdominal hysterectomy was required in 4 cases (36.36%) and bilateral internal iliac artery ligation was needed in 2 cases (18.18%). Stump of infundibulopelvic ligament resutured and haemostasis secured in one cases (9.09%). Tubal stump in cases of tubaligation was resutured and haemostasis secured in one case (9.09%). Other re-operative surgeries included drainage of rectus sheath haematoma and repair of burst abdomen.

Haemorrhage was frequent and a leading cause where early re- laparotomy were required as reported by different studies[1,3,7].

Mortality among the re- laparotomy was 18.18% (2/11) in the current study. Mortality in obstetric re-operation was 20% (2/10) whereas in gynaecological re-operation there was no mortality in current strategy. This mortality in high mortality in obstetrical re- laparotomy may be due to pregnancy associated haemodynamic changes and more operations done on emergency basis.

Causes of maternal death in the current study were :-

1. Renal failure in a case of pre-eclampsia with intra peritoneal haemorrhage
2. DIC in a case of post-partum haemorrhage.

V. Conclusion

Indication of primary surgery, whether gynaecological or obstetrical, patient's pre-operative general condition, surgeon's experiences and care by the intensivist may influence the outcome of re- laparotomy. Re laparotomy should be considered as a procedure in case of near miss fatality of mother. To make it safe every effort must be adopted.

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