ORIGINAL ARTICLE

Frequency of Gut Injuries in Unsafe Abortion

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ABSTRACT

Background: Unsafe abortion adopted unfortunately in various part of our country is the major cause of death in pregnant woman. It is associated with number of surgical complications like uterine perforations, gut trauma, peritonitis, sepsis, hemorrhage

Aim: To find out the frequency of gut injuries in women after unsafe abortion.

Methods: This Cross sectional surveyof 50 patients who had undergone unsafe abortion and presented with acute abdomen was conducted in department of surgery, mayo hospital, Lahore in one year duration from January 2013 to December 2013. The non-probability purposive sampling technique was used in this study. Detailed history was obtained from the patient, from the attendants and from the emergency services personals when the patient is unable to speak. The patient information on age, parity and method used for pregnancy termination was recorded at the time of admission. Written consent was obtained. Immediately, treatment was initiated to stabilize the patients taking care to note the vitals of the patient at presentation. During operation intra-operative findings were recorded (gut injury was noted and repair or stoma formation was done accordingly). Other variables as abortion induced by trained/untrained practitioner were also noted.Mean and standard deviation was calculated for age.

Results: The mean age of the patients was 25.9±6.8 years. There were 27(54%) patients married and 23(46%) patients unmarried. There were 23(46%) patients who had zero Para, 11(22%) patients had 1-3 Para and 16(32%) patients more than 3 Para. In the distribution of patients by frequency of gut injury, there were 15(30%) pts had frequency of gut injury and 35(70%) patients not having gut injury.

Conclusion: It is concluded from this study that frequency of gut injury is more in women after unsafe abortion presenting with acute abdomen to a tertiary care hospital, undergoing laparotomy.

Keywords*:* Unsafe abortion, frequency, guts injury, parity, laparotomy.

INTRODUCTION

Unsafe abortion remains one of the major causes of death[1]. It is associated with number of surgical complications like uterine perforations, gut trauma, peritonitis, sepsis, hemorrhage. Incidence of uterine perforation varies from 0.4 to 15 per 1000 abortions as reported by different studies, although most uterine perforations at the time of curettage go unrecognized and untreated serious complication do occur. Operative management involved for these complications include exploratory laparotomy, repair of uterine defects, resection and end to end anastomosis of gut, ileostomy, colostomy and repair of rectum followed by drainage and lavage, hysterectomy, adnexectomy, adhesioysis[2,3,4,5].

The World Health Organization (WHO) estimates that nineteen out of twenty unsafe abortions take place in the less developed region of the wolrd[2]. Bowel injury is a common consequence of uterine perforation, either with pointed instruments or grasping forceps. The distal ileum appears to be most vulnerable to injury, followed by the sigmoid. In general, any woman with abdominal pain after uterine instrumentation should be considered to have a bowel injury until proven otherwise, resulting infecal contamination and severe peritonitis. Colorectal injuries should be repaired primarily with proximal diversion colostomy followed by reversal some months later[5].

In previous studies small gut injury incidence was 20.8% and large gut injury incidence was 8.33% (total of 29.16% gut injuries were seen)[6].

In previous studies (9.1%) patients with ileal perforation, who presented late and had excessive soiling were treated by ileostomy. While among patients treated by primary repair, 13.6%developed leakage from the repair site necessitating re-exploration and exteriorization. 31.8% with large gut involvement had colostomy[7]. In case of primary repair of small gut perforation, systemic sepsis, uncorrected anemia, protracted hypotension and poor surgical technique may all predispose to anastomotic diehiscence[8].

Unsafe abortion is quite common in our country with an unfortunate women's death in a backstreet clinic making headline news occasionally because of prohibition of abortion services by the law of the land.

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The likelihood of dying as a result of abortion performed professionally under safe condition is less than 1 per 100,000 procedures, while following unsafe procedures is several hundred times higher[9].

Our aim of study is to find out frequency of gut injuries (small & large gut) in unsafe abortion with acute abdomen, so we make awareness of people about hazards of unsafe abortion and they should avoid it and prefer safe method.

METHODOLOGY

This study was conducted on 50 patients in Department of Surgery, Mayo Hospital, Lahore in one year duration from January 2013 to December 2013. It was a cross-sectional survey by design and patient selection was non probability purposive sampling. All patients in reproductive age of any parity with a history of unsafe abortion with acute abdomen presenting with temperature of more than 99°F, tachycardia of more than 100 beats/minute and uterine or abdominal tenderness were included in study. Detailed history was obtained from the patient, from the attendants, or from the emergency services personals when the patient is unable to speak.The patient information on age, parity and method used for pregnancy termination was recorded at the time of admission.Immediately, treatment was initiated to stabilize the patients taking care to note the vitals of the patient at presentation. These parameters include BP, pulse rate, respiratory rate and abdominal examination. Each patient was investigated for routine investigation, abdominopelvic ultrasound, chest x-ray and x-ray abdomen. Informed consent of the patient was taken before operation. During operation intra-operative findings recorded (gut injury was noted and repair or stoma formation was done accordingly). In post-operative period patient was carefully monitored in intensive care unit till stabilized and then was shifted to ward. All data was put in an especially designed structured proforma. Other variables as abortion induced by trained/untrained practitioner were also noted.

Statistical analysis of data was done by using the SPSS version 11.0. Demographic variables of the patients included in the study were analyzed. Mean and standard deviation was calculated for age. Frequency and percentages was calculated for parity, presence or absence of gut injury after unsafe abortion.

RESULTS

The mean age of the patients was 25.9±6.8 years. There were 10(20%) patients in the age range of upto 20 years, 17(34%) in 21-25 years, 13(26%) in 26-30 years, 6(12%) in 31-35 years and 4(8%) in 36-40 years (Table 1). On the basis of marital status, 27(54%) were married and 23(46%) unmarried (Table 2). According to parity, there were 23(46%) patients in the parity of zero, 11(22%) in the parity range of 1-3 Para and 16(32%) of 3-6 Para (Table 3). There were 15(30%) patients who had gut injury and 35(70%) with no gut injury (Table 4).

Table 1: Distribution of patients by age (n=50)

Age (Years)	n	%age
Upto 20	10	20
21-25	17	34
26-30	13	26
31-35	6	12
36-40	4	8
Total	50	100
Mean±SD	25.9±6.8	

Table 2: Distribution of patients by marital status (n=50)

Marital status	n	%age
Married	27	54
Unmarried	23	46

Table 3: Distribution of patients by parity (n=50)

Parity	n	%age
0	23	46
1-3	11	22
4-6	16	32

Table 4: Distribution of patients by frequency of gut injury (n=50)

Gut injury	n	%age
Yes	15	30
No	35	70

DISCUSSION

Unsafe abortion is one of the major health problems in developing countries and a serious concern for women in their reproductive years. It is estimated that globally about 20 million unsafe abortions take place each year, which is one in ten pregnancies[10]. Around 13% of maternal deaths globally are due to abortion, 95% of these occur in developing countries[11].

In Pakistan complications of miscarriages/ abortion account for 10-12% of maternal deaths[12]. These include spontaneous and induced abortion. The number of women seeking abortions for unwanted pregnancies is also high as evidenced in the survey by Population Council. An estimated 890,000 induced abortions occur annually, which means that 1 out of 6 pregnancies are terminated by induction of abortion mostly in an unsafe manner. Moreover about 197,000 women are treated each year for complications resulting from unsafe induced abortions[13]. In previous studies small gut injury

incidence was 20.8% and large gut injury incidence was 8.33% (total of 29.16% gut injuries were seen)[6].

In our study the mean age of the patients was 25.9±6.8 years. As compared with the study of Siddiqet al[14] the mean age of the patients was 30.76 years, which is comparable with our study.

In our study 54% women were married and 46% women were unmarried. As compared with the study of Siddiqet al[14] there were 76% women married and 24% unmarried, which is comparable with our study.

In our study 46% patients had zero para, 22% patients had 1-3 para and 32% patients had more than 3 para. As compared with the study of Nazet al[6] 14.7% patients had zero para, 28.4% patients had 1-3 para and 66.7% patients had more than 3 para, which is comparable with our study.

In our study the frequency of gut injury after unsafe abortion presenting with acute abdomen was found in 30% patients' whereas in the study of Nazet al[6] the frequency of gut injury after unsafe abortion was found in 29.16% patients and in Siddiq et al[14], it was found in 44.2% patients, which is comparable with our study. Therefore for our population, it is suggested that abortion should be induced by trained practitioner to reduce the incidence of unsafe abortion resulting in complications.

CONCLUSION

It is concluded from this study that frequency of gut injury is more after unsafe abortion presenting with acute abdomen to a tertiary care hospital, undergoing laparotomy. So proper measures can reduce the devastating complications earned by this malpractice.

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