

## Gynaecological Conditions Presenting to General Surgeon as Acute Abdomen

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**Objectives:** To study the pattern of gynaecological emergencies presenting to general surgeons and to highlight problems in their management and to suggest solutions.

**Study Design:** It is a descriptive cross sectional survey.

**Setting:** Surgical Unit-II of Ghurki Trust Teaching Hospital of Lahore Medical & Dental College Lahore.

**Period:** From 1<sup>st</sup> January 2007 to 31<sup>st</sup> December 2007 (one year)

**Materials & Methods:** All female patients (107) presenting in surgical emergency with acute abdomen were included. However those women with any previous gynaecological or obstetric operation who presented to surgical emergency with acute abdomen were excluded from the study. Clinical workup including a detailed physical examination and relevant investigations were carried out in all patients. These patients were managed in the surgical ward. The operative treatment, where required, was performed at the earliest possible time. The surgical procedures were employed according to the circumstances.

**Results:** The total number of female patients in this study was 107. Nineteen (17.75%) of the patients presented with gynaecological emergencies acute abdomen. Age of the patient in this study ranged from 15 years to 35 years. The commonest gynaecological condition encountered was haemorrhagic functional ovarian cysts. Difficulty and errors in diagnosis occurred in these cases and erroneous diagnosis of acute appendicitis was made in seven out of nineteen patients (36.08%). **Conclusion:** Gynaecological emergencies constitute a significant problem encountered by the general surgeons. The problems of difficulty in diagnosis can be resolved by use of ultrasonography and laparoscopy. The general surgeons can contribute by enhancing knowledge of gynaecological emergencies and their clinical and therapeutic skills.

**Keywords:** Gynaecological conditions. General surgeon, Acute abdomen.

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### Introduction

The women with acute abdomen presenting to general surgeon in emergency sometimes have gynaecological conditions. These cases are admitted in general surgery because clinically they mimic general surgical diseases.<sup>1,2</sup> According to Brown et al a significant number of women, upto 13% who present to the general surgeons with acute abdomen have gynaecological problems.<sup>3</sup> Similarly about 10% of these female patients with clinical diagnosis of acute appendicitis actually have some gynaecological pathology.<sup>4</sup> These gynaecological conditions include haemorrhagic functional ovarian cysts, ectopic pregnancy, pelvic inflammatory disease, pelvic adhesions, endometriosis, fibroids and uterine perforations caused by unauthorized, non medical abortionists.

The difficulty in making a correct diagnosis in these conditions has long been a matter of concern. The present study was therefore designed to highlight the importance of this problem and to study the incidence and management of gynaecological emergencies presenting to general surgeon and to devise a strategy to better equip the general surgeon who will continue to be confronted with the problem.

### Material and Methods

This study has been carried out at Surgical Unit II of Ghurki Trust Teaching Hospital of Lahore Medical and Dental College Lahore. The period of study was one year i.e. from 1<sup>st</sup> Jan 2008 to 31<sup>st</sup> Dec 2008. All female patients who were admitted through surgical emergency with acute abdomen were included in the study. Those women who presented with acute abdomen after any previous gynaecological operation were excluded.

The clinical workup in all these patients consisted of thorough clinical history and physical examination. In all cases laboratory investigations such as blood sugar, blood urea and serum electrolytes were carried out. X-ray of chest and abdomen and ultrasound of abdomen were also performed. Regarding management all the patients were resuscitated and also operated upon (where required) under general anesthesia. The surgical procedures were tailored according to the operative findings.

### Results

In this series a total of 107 female patients presented in the emergency of surgical unit II of Ghurki Trust Teaching Hospital Lahore.

**Table 1:** Frequency distribution of various gynaecological emergencies (n = 19).

Gynaecological Conditions	No. of Patients	Percentage
Haemorrhagic functional ovarian cysts	11	57%
Pelvic inflammatory disease PID	5	26%
Torsion of ovarian cyst	2	1.6%
Uterine Perforations	1	5.2%

The period of study was one year i.e. From 1<sup>st</sup> Jan 2008 to 31 Dec 2008. Among these 107 patients, 19(17.75%) patients were having gynaecological problems. Distribution of various gynaecological conditions encountered in this series were haemorrhagic functional ovarian cysts, pelvic inflammatory disease, torsion of ovarian cyst and uterine perforation. The frequency distribution of these conditions is given in Table 1.

The commonest (57%) gynaecological problem in 11 of these patients was haemorrhagic functional ovarian cysts followed by pelvic inflammatory disease (26%). Torsion of ovarian cyst was present in 2 (10.6%) patients. There was only one (5.2%) patient with uterine perforation. The ages of the patients in this study ranged from 15 years to 35 years. There was no patient below 15 and above 35 years.

The age frequency distribution in this series is shown in Table 2. The predominant age group for gynaecological emergencies in this series was between 15 to 35 years. Conservative treatment was employed in pelvic inflammatory disease while patients with ruptured ovarian cysts, adnexal torsion and perforation of uterus required surgical intervention. See Table 3.

## Discussion

Management of gynaecological emergencies is shared by general surgeons with the gynaecological colleagues.<sup>5-8</sup> The general surgeons continue to encounter various gynaecological conditions presenting as acute abdomen. In general these conditions include ovarian cysts, pelvic inflammatory disease, ectopic pregnancy, endometriosis adnexal torsion and perforated uterus.<sup>9</sup> These conditions are treated by the general surgeon because they present as acute abdomen and some times they closely resemble general surgical diseases e.g acute appendicitis and / or peritonitis. It is in such instances that surgeons are faced with difficulty in making a correct diagnosis.<sup>5</sup>

**Table 2:** Age distribution (n=19)

Gynaecological Conditions	Age of Patients	%age of cases
Ruptured functional ovarian cysts	15 yrs to 35 yrs	57%
Pelvic inflammatory disease (PID)	25 yrs to 30 yrs	26%
Torsion of ovarian cyst	15 yrs to 25yrs	10.6%
Uterine perforation	28 yrs	5.2%

**Table 3.** Management of various gynaecological conditions.

Gynaecological Conditions	Treatment Plan		
	Operative	Conservative	Operative Procedures Performed
Ruptured functional ovarian cysts	7	4	Haemostasis (Marsupialization)
Pelvic Inflammatory Disease (PID)	2	3	Peritoneal toilet
Torsions of ovarian cysts	2	0	Salpingo- oophorectomy
Perforations of Uterus	1	-	Uterine repair and peritoneal lavage

In the present study 17.75% females presented with acute abdomen because of various gynaecological conditions. The commonest (57%) condition was ruptured functional ovarian cyst. Second common gynaecological condition (26%) was pelvic inflammatory disease (PID). These findings are comparable to other studies.<sup>10-12</sup>

The age range of women in this group of study was from 15 years to 35 years. These conditions affect young women of reproductive age.<sup>10-12</sup>

The difficulty in making a correct diagnosis was observed in this series. Errors in diagnosis were observed in cases of ruptured ovarian cysts that were misdiagnosed as acute appendicitis. The rate of error was 37% which is significant. However this is also comparable with studies by other authors.<sup>13-15</sup>

In this study it has been observed that ultrasound of abdomen helps in resolving the diagnostic dilemma. Many contemporary authors have also advocated laparoscopy to be of significant use in reducing the incidence of diagnostic error.<sup>16</sup>

## Conclusion

Gynaecological emergencies constitute a significant problem encountered by the general surgeons. The problem of difficulty in diagnosis can be resolved by use of ultrasonography and laparoscopy. The general surgeons can contri-

bute by enhancing knowledge of gynaecological emergencies and their clinical and therapeutic skills.

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