



The Study of Gynaecological Emergencies in Surgery

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Abstract

Aim & Objectives: To Study Quantum and Pattern the Gynecological problems in emergency surgery

Materials & Methods: The Study Was Conducted Over 2000 patients. Of these twenty five patients amounting to 0.7 % of emergency surgery were found to have gynecological causes for acute abdomen. It is quite apparent only 0.7% of the acute abdomen have gynecological causes which are other than intervention related gynecological emergencies viz., Septic abortion etc., All these 25 patients were studied by way of detailed history medicules, physical examination hematological investigation ultrasonographic study of abdomen and histopathological examination and the following investigation were done Which includes estimation of Hb%, Blood sugar ,Urea Serum electrolytes, Blood groping & Rh Typing, Plain X-ray abdomen .

Results: Most common gynaecological cause of acute abdomen, in this study is ovarian cyst complications, closely followed by ectopic gestation and its complications. Gynecological emergencies are commonly mistaken for other surgical emergencies. In this study, only in 12% patients the gynecological causes were thought of clinically. In great majority of the patients (88%) suffering from gynecological problems, the clinical diagnosis had been appendicitis in 52 %, peritonitis in 20%and Renal Colic in 8% of patients.

Conclusions: The quantum of gynecological acute abdomen in this study is 0.7% of all emergencies surgical operations. In other words one in about 140 patients will have gynecological acute abdomen.

INTRODUCTION

The Surgeon while performing emergency duties and exploratory laparotomy commonly encounters gynecological conditions. The commonly faced acute gynecological conditions are ectopic pregnancy, ruptured or twisted ovarian cysts with or without peritonitis, benign and malignant ovarian tumours and endometriosis. These gynecological diseases comes in the differential diagnosis of common acute surgical emergen-

cies like acute appendicitis, appendicular perforation, peritonitis due to various causes, acute intestinal obstruction and haemo peritoneum etc. ^(1,2,3) These gynecological conditions are commonly confused with these acute surgical emergencies especially in situation where investigative facilities are meagre. The surgeon while working in a small hospital without access to gynecological opinion has to accept responsibility for deciding what if any operative procedure is indicated and of mastering the techniques required.

The correct management of these gynecological condition demands thorough knowledge of female Pelvic anatomy and complete understanding of pathology of disease processes and their surgical treatment^(4,5,6)

In this study the anatomy of female generative organs, pathology of commonly occurring gynecological conditions are reviewed and their clinical presentations and the management of these conditions is discussed and analysed in detail."The surgeon will not have gone very far in his or her training or career before several conditions associated with the uterus, tubes and ovaries are encountered

MATERIALS & METHODS

The Study Was Conducted Over a period of two years during the years 2014 and 2016, 2000 patients of Acute abdomen were operated upon by the Emergency Surgery Department at the RIMS General Hospital., Srikakulam, Andhra Pradesh, India. Of these twenty five patients amounting to 0.7 % of emergency surgery were found to have gynecological causes for acute abdomen. The patients having acute abdomen after elective gynecological surgery, MTP related acute abdomen and septic abortions were excluded from study. It is quite apparent only 0.7% of the acute abdomen have gynecological causes which are other than intervention related gynecological emergencies viz., Septic abortion etc.

All these 25 patients were studied by way of detailed history medicules, physical examination hematological investigation ultrasonographic study of abdomen and histopathological examination as necessary. The present study includes detailed study of acute gynecological Conditions presented to emergency department of General Surgery which is as follows: Detailed History and thorough physical examination and the following investigation were done

Which includes Hb% is estimated by Drabkin's method ⁽⁷⁾, Blood sugar is estimated by glucose oxidase and peroxidase method⁽⁸⁾ , Urea urea is

estimated by UREASE method ⁽⁹⁾ Serum electrolytes by electrolyte analyser, Blood grouping & Rh Typing, Plain X-ray abdomen ,U.S.Abdomen, Histopathological examination

TABLE-I Spectrum of Gynaecological Pathology In This Study Based On Operative Finding

No. of Patients	Operative Pathological findings
10	Torsion of Ovarian Cyst.
2	Rupture of Ovarian Cyst.
2	Torsion of Para ovarianCyst
11	Ruptured ectopic gestation

AGE INCIDENCE

The youngest patient in this series was 10 years and oldest was of 40 years. Both of them had torsion of the Ovarian Cyst. The mean age was 23.56 years.

There were seven patients (30%) under 20 years of age and all of them had torsion of the Ovarian Cyst. None had the rupture of the ectopic gestational sac.

15 Patients (60%) were between 21-30 years of age. Of these 60% (9) of patients had a rupture of ectopic gestational sac and in rest 40% (6) the Acute abdomen were caused by the torsion and/or rupture of Ovarian Cyst.

Three patients (10%) were above 30 years of age. Two of them had rupture of ectopic gestation and last one had the tortion of the ovarian cyst.

TABLE-2 Distribution of Gynaecological Pathology According To Age

Age group	Number of Patients	Gynecological Pathology
10 -20 Years	6	Tortion of Ovarian Cyst.
	1	Torsion of broad ligament cyst
21 -30 Years	9	Ruptured ectopic gestation
	2	Ruptured Ovarian Cyst
	4	Tortion of Ovarian Cyst.
31 -40 Years	2	Ruptured Ectopic gestation.
	1	Tortion of broad ligament Cyst

For inexplicable reasons, there were no patients with endometriosis or malignant tumour as a cause of acute abdomen in this study.



Fig:1 Ruptured Ectopic gestation



Fig: 2 Twisted Ovarian Cyst

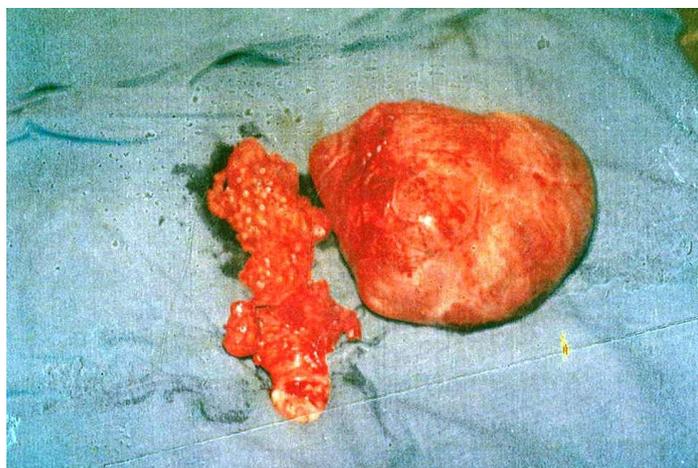


Fig: 3 Hemorrhagic Ovarian Cyst

MENSTRUAL HISTORY

Out of the 25 patients studied, 84 % i.e., 21 patients had normal menstrual cycles and regular periods. Four patients amounting to 16% had altered menstruation. Three had amenorrhea of two months duration and last one had reported of spotting at the time of last menstrual period. All

these four patients had rupture of ectopic gestational sacs. The other seven patients with rupture of ectopic pregnancies had normal menstrual cycles. In other words only 27 % of the patients with ruptured ectopic gestations had amenorrhea.

CLINICAL DIAGNOSIS

Almost all the 25 patients with Gynecological acute abdomen were referred to or presented to the emergency surgery department presumably because everybody concerned had thought of non gynecological condition as the causative underlying pathology.

Another interesting observation is that the emergency Surgeon has thought of Gynecological cause of acute abdomen only in 3 patients (12%). In 13 of these patents (52%) the Clinical diagnosis was acute appendicitis, followed by in order of frequency peritonitis (20%) Pelvic inflammatory disease (8%) and renal colic in (8%) of patients.

Initial Clinical Diagnosis in 25 Patients with Gynaecological Acute Abdomen.

Clinical diagnosis	No. of patients
Acute appendicitis	13
Peritonitis	5
Pelvic inflammatory disease	2
Renal Colic	2
Torsion of Ovarian cyst.	2
Rupture ectopic gestation	1

TUBECTOMY AND GYNAECOLOGICAL ACUTE ABDOMEN

In this series one patient who had torsion of broad ligament cyst had undergone Tubectomy in the past. Amongst the rest, no patient had tubectomy in the past. None of the eleven patients with rupture of ectopic gestation sac had had tubectomy in the past.

ULTRASOUND IN GYNAECOLOGICAL ACUTE ABDOMEN

Out of the 25 patients, ultrasonographic study was performed in 22 patients, soon after admission in the emergency surgery department by a trained Radiologist.

Of the 13 patients with Ovarian and Para ovarian cyst, Ultrasonography suggested the diagnosis of ovarian cyst in 7 patients (54%) only. In other 6 patients (46%) Ultrasonographic diagnosis varied from completely normal findings in one patient. Appendicular, abscess in two patients to free fluid in peritoneal cavity in three patients, of which one patient had ovarian cyst and two patients had ruptured ovarian cyst.

In none of the 9 patients with ruptured ectopic gestational sac, ultrasonographic study suggested the correct diagnosis. In six patients ultrasonography detected free fluid, in one patient, the ultrasonographic study suggested appendicular abscess and in the other two patients ultrasonography reported normal abdomen.

ULTRASOUND DIAGNOSIS COMPARED WITH OPERATIVE DIAGNOSIS IN 22 PATIENTS.

No. of Patient	Ultrasound Diagnosis	Operative Diagnosis
1	Normal	Cyst @. Ovary
2	Normal	Ruptured ectopic gestation
7	Ovarian cyst	Tortion of Ovarian Cyst.
2	Appendicular abscess	Tortion of Ovarian Cyst.
1	Appendicular abscess	Ruptured ectopic gestation
6	Free Fluid	Ruptured ectopic gestation
2	Free Fluid	Ruptured Ovarian Cyst.
1	Free Fluid	Large Ovarian Cyst

No variable extra information would be obtained.

OPERATIVE PROCEDURE

All the patients underwent emergency laparotomy through lower mid line or right parameter incision. Following are the operative procedures undertaken depending upon pathology.

Torsion of Ovarian cyst.	Ovariectomy/ ovariotomy	Salpingo
Tortion of Paraovarian cyst.	Excision	
Rupture of Ovarian cyst	Partial excision of cyst	
Rupture of ectopic gestation	Salpingectomy/ oophrectomy	Salpinpo

POST OPERATIVE MANAGEMENT

All patients received intravenous dextrose in water and electrolytes solutions, intravenous antibiotics and analgesics till the return of a bowel sounds and discharge of flatus. Soon after restoration of peristalsis, the oral feeds were started and patients ambulated early. Sutures were removed on eight post operative day for all. There were no cases with wound infections and post operative period was uneventful in all.

CONCLUSIONS

- 1) In any busy emergency surgery centre, the surgeon is most likely to face quite a few gynecological emergencies. This justifies the exposure and training of the postgraduate student of surgery in the common gynecological surgeries.
- 2) The quantum of gynecological acute abdomen in this study is 0.7% of all emergencies surgical operations. In other words one in about 140 patients will have gynecological acute abdomen.
- 3) Most common gynecological cause of acute abdomen, in this study is ovarian cyst complications, closely followed by ectopic gestation and its complications.
- 4) Gynecological emergencies are commonly mistaken for other surgical emergencies. In this study, only in 12% patients the gynecological causes were thought of clinically. In great majority of the patients (88%) suffering from gynecological problems, the clinical diagnosis had been appendicitis in 52 %, peritonitis in 20% and Renal Colic in 8% of patients.
- 5) 60% of patients were in 21-30 years age group.
- 6) All the ectopic gestation and its complication were found in patient all above 20 years of age.
- 7) Pain is universally present in all patients with gynecological acute abdomen.
- 8) Ultrasound has been able to localize the pathology in pelvis in 19 (86%) of the 22

patients subjected to ultrasonography of abdomen. But ultrasound suggested the exact nature of pathology only in 7 patients (33%).

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