Role of general surgeon in gynecological emergencies

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Abstract

Introduction: Acute abdominopelvic pain, specifically in female patients of reproductive age pose a diagnostic challenge. It’s in this context that general surgeon is often called to manage gynaecological emergencies (GE).

In many cases, even after the medical history, physical examination, laboratory tests and imaging, the diagnosis can’t be concluded and difficult in managing gynec emergencies, where a general surgeon plays vital role in both diagnostic and therapeutic management.

Aim of study: This study was to investigate the contribution of general surgeon in GE in our hospital.

Results: During the study period, 20 patients were included. The average age was 32 years, ranging from 16 to 60 years. The indications were dominated by ectopic pregnancies (40%). Ultrasonography was performed in all cases and helped clarify the diagnosis in 7 cases. Surgical exploration has readjusted the preoperative diagnosis in 11 cases. Laparoscopy was a therapeutic mean in 25% of cases (n = 5). The most performed of the gesture was adnexectomies followed by salpingectomies. No intraoperative complications were registered. The average hospital stay was 2 days for patients operated exclusively by laparoscopy with extremes of 1 and 4 days. All surgical specimens were examined by pathologists and no evidence of malignancy was found. No cases of operative morbidity and mortality associated with open & laparoscopy were noted.

Conclusion: This study concludes that general surgeon plays a vital role in the management of gynecological emergencies offers significant benefits not only from diagnostic and therapeutic point of view but also in terms of reducing morbidity, mortality, post operative complications and length of hospital stay.

Keywords: Laparoscopy, gynecological procedures, hospital

Introduction

Acute abdominopelvic pain, specifically in female patients of reproductive age pose a diagnostic challenge. It’s in this context that general surgeon is often called to manage gynaecological emergencies (GE).

In many cases, even after the medical history, physical examination, laboratory tests and imaging, the diagnosis can’t be concluded and difficult in managing gynec emergencies, where a general surgeon plays vital role in both diagnostic and therapeutic management.

Objective of study

The objective of this study was to investigate the contribution of general surgeon in GE in our hospital.

Patients and methods

- It was a retrospective study from 1st December 2016 to 31st December 2017, on a series of 20 patients operated for GE, in the General Surgery Department of SSIMS & RC, Davangere.
- Inclusion criteria were patients operated by open and laparoscopic for GE.
- The parameters studied were the characteristics of gynecological pathologies, therapeutic procedures, conversion factors, delay and duration of intervention, and the postoperative data.

Results

- During the study period, we performed 20 surgical procedures for GE.
- The average age of our patients was 32 years ranging from 16 to 60 years. 12 patients were nulligestes, 05 patients were Paucipares (1-2 children); 03 patient were multiparous (3-6 children).
The average delay of surgery was 13 hours, range from 2 to 48 hours. Gynaecological pathologies were dominated by ectopic pregnancies (EP) (n= 6) (Table I).

Ultrasound has clarified the diagnosis 7 times (35%). We were able to clarify the diagnosis by surgery in all patients (100%).

**Table 1: Distribution of gynecological pathologies**

<table>
<thead>
<tr>
<th>Gynaecological pathology</th>
<th>Number</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ectopic pregnancies (3 ruptured)</td>
<td>6</td>
<td>30%</td>
</tr>
<tr>
<td>Benign twisted ovarian cyst</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Ruptured ovarian cyst with RHD</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Tuboovarian abscess</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Appendicitis</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>Pelvic adhesion</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>Bowel perforation</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>Entration of small bowel through vagina</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Bladder injury</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>Uterine rupture</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>20</td>
<td>100%</td>
</tr>
</tbody>
</table>

Surgical exploration confirmed the preoperative diagnosis made on the basis of paraclinical data in 9 cases (45%) and correct the preoperative diagnosis in 11 cases (55%).

LAP was a therapeutic procedure in 5 cases (25%). 15(75%) were open procedures performed. For 3 cases (15%), the surgical indication remained for diagnostic purposes.

Table 2: Procedures performed

<table>
<thead>
<tr>
<th>Procedures</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adnexectomy</td>
<td>7</td>
</tr>
<tr>
<td>salpingectomy</td>
<td>2</td>
</tr>
<tr>
<td>Appendicectomy</td>
<td>2</td>
</tr>
<tr>
<td>Adhesiolysis</td>
<td>2</td>
</tr>
<tr>
<td>Perforation closure</td>
<td>2</td>
</tr>
<tr>
<td>Bladder repair</td>
<td>2</td>
</tr>
<tr>
<td>colpoperineorrhaphy</td>
<td>1</td>
</tr>
<tr>
<td>Uterine repair</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>20</td>
</tr>
</tbody>
</table>

The average length of open procedures performed was 90 minutes range from 60 – 120 minutes and LAP was 55 minutes range from 20-110 minutes.

The average time of laxation was 1.5 days ranging from 1 to 3 days after LAP and 3 days ranging from 2 – 4 days for patients with open surgery.

Average length of hospital stay was 2 days after LAP range from 1 to 4 days; in open surgeries 6 days with a maximum hospital stay of 20 days.

We noted no cases of morbidity in patients operated exclusively laparoscopically.

No death were noted.

Surgical specimens obtained showed no evidence of malignancy after histological examination.

**Discussion**

The laparoscopic rate in GE in our service is very low compared to other series [1-4], because a significant number of patients are managed in gynecology and obstetrics department.

Acute abdominopelvic pain, specifically in female patients of reproductive age pose a diagnostic challenge. It’s in this context that general surgeon is often called to manage gynaecological emergencies (GE).

In many cases, even after the medical history, physical examination, laboratory tests and image exams, the diagnosis can’t be concluded and difficult in managing gynec emergencies, where general surgeon plays his vital role in life saving in both diagnostic and therapeutic.

The laparoscopic rate in GE in our service is very low compared to other series, because a significant number of patients are managed in gynecology and obstetrics department.

The mean patient age was 32 years. This relatively young age is found in most of open and laparoscopic series performed in woman emergencies [5-9]. The explanation lies in the nature of the most commonly diseases encountered in emergencies such as ectopic pregnancies and adnexal pathologies frequent in young women of childbearing age (80% in our study).

Mean operative delay in our series was 13 hours, ranging from 2 hours to 48 hours according to the literature findings, with a operative delay never exceeding 48 hours [1, 6, 9].

One of the contributions of early intervention in emergency is the reduction of operative delay, thus avoiding both the late diagnosis and the late treatment, often responsible of
complications such as peritonitis, hemorrhage and sterility [1, 10, 11, 12].

- According to Paterson-Brown, early LAP in emergency has changed the active monitoring traditionally defined like attentist attitude of “wait and see” in favor of more voluntary “look and see” when presumption of surgical pathology is based on clinical and paraclinical point of view [12].
- In our study, the pathologies were dominated by ectopic pregnancies (30%) However in our study, half ectopic pregnancy was seen at ruptured stage confirming the late diagnostic in our developing countries.
- One of the advantages of surgeon in handling GE is reducing the number of unnecessary complications and increased accuracy diagnostic in acute abdomen.
- The accuracy of diagnostic and decision making in emergency by surgeon reduces post op complications and morbidity.
- In our study the accuracy diagnostic LAP was 100% in diagnostic [2, 3, 9, 13] The diagnostic contribution of LAP is especially interesting in non-specific pelvic pain and pain in the right iliac area in female patients of reproductive age for the differential diagnosis between gynecological pathologies and digestive pathologies. Our specific rate of accuracy of diagnostic for non-specific pelvic pain is 100% higher than Tendeng rate [6] (91%) or Morino rate [14] (79.2%).
- According to many authors, LAP is an alternative to the diagnostic means very important and effective at a lower cost compared with other method such as ultrasound, computed tomography, and magnetic resonance imaging in the study of many gynecological diseases.
- Furthermore, these noninvasive diagnostic procedures are expensive, not always conclusive and not available in all settings of the world.
- LAP is crucial in accuracy of diagnostic, the discovery of associated lesions and complications. Therefore, the use of more sophisticated diagnostic tests should not delay the surgical management in emergencies.
- The diagnostic correction rate in our series (65%) is higher. Our results confirm that the diagnostic readjustment in female patients of reproductive age is more important in emergency.
- Indeed, the distinction between gynecological and digestive disorders in non-specific abdominal pain of women in childbearing even after properly conducted clinical examination, laboratory tests and image exams, is often difficult.

Conclusion
This study concludes that general surgeon plays a vital role in the management of gynecological emergencies offers significant benefits not only from diagnostic and therapeutic point of view but also in terms of reducing morbidity, mortality, post operative complications and length of hospital stay.

References