ORIGINAL ARTICLE

CLINICAL STUDY OF ECTOPIC PREGNANCY IN A RURAL SETUP: A TWO YEAR SURVEY

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ABSTRACT

Aims and Objective: To study the risk factors, symptomatology and sites of ectopic pregnancy.

Materials and Methods: The study was conducted over a 2 year period from August 2011 to August 2013 in Department of OBG at Adichunchanagiri Institute of Medical Sciences, B G Nagara, Karnataka. The parameters studied were age and parity distribution, symptoms at presentation, associated risk factors and site of ectopic pregnancy.

Results: There were 25 cases of ectopic pregnancy of the total 2542 deliveries accounting to 1%. Most patients were multiparous belonging to the age group of 20 – 30 years. The most common symptom was pain abdomen followed by bleeding per vagina and history of amenorrhea. 32 % of the patients came in shock. Risk factors were associated in 60% of cases, the most common being a history of tubal surgery. Ampullary part of the tube was the most frequent site accounting for 44% of cases. All the patients were managed by surgical intervention.

Conclusion: Ectopic pregnancy is a nightmare for the obstetrician. Early diagnosis and early referral are the key to successful management. It is better to over diagnose an ectopic pregnancy especially in a rural setup. The dictum should be to ‘THINK ECTOPIC’ in a woman in reproductive age group with pain abdomen or bleeding PV or when she comes in shock irrespective of tubal ligation.

Keywords: Ectopic pregnancy, multiparous, amenorrhoes

INTRODUCTION

Ectopic pregnancy is one in which the blastocyst implants anywhere other than the endometrial lining of the uterine cavity.1

Ectopic pregnancy is a challenge for the obstetrician and gynecologist due to its bizarre clinical presentation. The diagnosis of ectopic pregnancy is complicated by the wide spectrum of clinical presentations, from asymptomatic cases to acute abdomen and hemodynamic shock2.

Its ambiguous presentation can mimic most of the gynecological and surgical emergencies.

The frequency of ectopic pregnancy has been on the rise during the last few decades because of increased incidence of venereal diseases, advent of antibiotics, increased usage of contraception and assisted reproductive techniques3.

Prior tubal damage, either from a previous ectopic pregnancy or from tubal surgery to relieve infertility or for sterilization, confers the highest risk for ectopic pregnancy4.

An accurate history and physical examination and its correlation with diagnostic techniques is important for diagnosis and management.

Due to advances in modern technology like diagnostic laparoscopy, radioimmunoassay of beta-HCG and ultrasonography diagnosis has become easier4.

Immediate intervention is required to prevent maternal morbidity and mortality4.

Modern anesthesia, blood transfusion facilities, transport facilities, immediate resuscitation as well as adequate and proper surgery are the keystone of success in reducing the maternal morbidity.

MATERIALS AND METHODS

This study was conducted over a 2 year period from August 2011 to August 2013 in Department of OBG at Adichunchanagiri Institute of Medical Sciences, B G Nagara, Karnataka.

A total of 25 cases reported during this time frame with ectopic pregnancy and were admitted at our hospital. Data was collected in a preconceived format.
Details included were age, presenting symptoms, parity, antenatal care, use of contraception, family history, antenatal investigation, detail obstetric history, genital infections, pre and post operative procedure and complication if any.

The parameters studied were age and parity distribution, symptoms at presentation, associated risk factors and site of ectopic pregnancy. Data was collected and tabulated.

RESULTS

Eighty percent of the patients belong to the age group of 20-30 years making it a disease of reproductive age group.

Table 1: Age wise distribution of study participants

<table>
<thead>
<tr>
<th>AGE (years)</th>
<th>No. of patients (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 – 25</td>
<td>11 (44)</td>
</tr>
<tr>
<td>26 – 30</td>
<td>9 (36)</td>
</tr>
<tr>
<td>31 – 35</td>
<td>4 (16)</td>
</tr>
<tr>
<td>36 – 40</td>
<td>1 (4)</td>
</tr>
</tbody>
</table>

Tubal surgery stands out as the most common risk factor of ectopic pregnancy which may also be the causative factor in the tube being the most frequent site as well.

Table 2: Parity wise distribution of study participants

<table>
<thead>
<tr>
<th>Parity</th>
<th>No. of patients (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5 (20)</td>
</tr>
<tr>
<td>1</td>
<td>10 (40)</td>
</tr>
<tr>
<td>2</td>
<td>6 (24)</td>
</tr>
<tr>
<td>3</td>
<td>3 (12)</td>
</tr>
<tr>
<td>&gt;3</td>
<td>1 (4)</td>
</tr>
</tbody>
</table>

Table 3: Risk factor wise distribution of study participants

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>No. of patients (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tubal Surgery</td>
<td>10 (40)</td>
</tr>
<tr>
<td>Previous Abortion</td>
<td>8 (32)</td>
</tr>
<tr>
<td>Previous Ectopic</td>
<td>2 (8)</td>
</tr>
<tr>
<td>PID</td>
<td>4 (16)</td>
</tr>
<tr>
<td>IUCD</td>
<td>2 (8)</td>
</tr>
</tbody>
</table>

Table 4: Clinical presentation wise distribution of study participants

<table>
<thead>
<tr>
<th>Symptom at presentation</th>
<th>No. of patients (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain abdomen</td>
<td>24 (96)</td>
</tr>
<tr>
<td>Bleeding PV</td>
<td>13 (52)</td>
</tr>
<tr>
<td>Amenorrhea</td>
<td>12 (48)</td>
</tr>
<tr>
<td>Shock</td>
<td>8 (32)</td>
</tr>
</tbody>
</table>

The classic triad of ectopic pregnancy comprising of pain abdomen, bleeding per vagina and history of amenorrhea was noted in 60% of the cases.

Fig 1: Case of tubal ectopic pregnancy along with a simple ovarian cyst
Fig 3: A case of tubal abortion
Fig 5: Hemoperitoneum due to rupture of tubal ectopic

Fig 2: A case of ruptured cornual pregnancy
Fig 4: A case of tubal ectopic pregnancy
Fig 6: Ectopic mass adhered to omentum after rupture of tubal ectopic
The fallopian tube emerges as the most common site accounting for 96% of the cases. A rare case of ovarian pregnancy was noted.

**DISCUSSION**

In the present study most of the patients belonged to the age group of 20 – 30 years, which may be because this is the most fertile period with infrequent contraceptive usage. Total 92% of the patients were multipara.

Risk factors were associated in 60% of the cases. The most common risk factor was tubal surgery reflected in 40% of the patients. 32% had a history of previous abortion while 16% gave history of PID. 8% had a history of previous ectopic which is in agreement with the result of Levin et al. and is consistent with the hypothesis that a woman with a previous ectopic pregnancy has a greater proclivity towards a subsequent ectopic pregnancy.

The most common symptoms at presentation were pain abdomen and bleeding per vagum depicted in 96% and 52% of patients respectively. Pain abdomen as the most common presentation was also observed by and Chudhary et al. 52% of the patients were without the history of amenorrhea suggesting that the presentation might be before missed period.

Urinary pregnancy test was positive in 60% of cases and inconclusive in 36% of the cases. On examination 60% patients presented with marked pallor and 32% came in shock which is comparable with 35% in study of Chudhary et al. All cases were managed by surgical intervention. One case of laparoscopy was converted to laparotomy. The most common site of ectopic pregnancy was the fallopian tube in the present study accounting for 96% of the cases which is same as Bouyer et al (95.5%). Ampullar part of the tube was the most common site reflected in 44% of the cases. One case of ovarian pregnancy was noted.

**CONCLUSION**

Ectopic pregnancy is a nightmare for the obstetrician. Early diagnosis and early referral are the key to successful management. It is better to over diagnose an ectopic pregnancy especially in a rural setup.

Due to advance diagnostic technique, conservative treatment is also a viable option but follow up with beta-HCG makes it a limitation in a resource poor setting as ours.

The main challenge in modern clinical practice is to identify and treat as early as possible cases of ectopic pregnancy and at the same time to minimize interventions in those destined to be resolved without causing any harm.

The dictum should be to “THINK ECTOPIC” in a woman in reproductive age group with pain abdomen or bleeding PV or when she comes in shock irrespective of tubal ligation.

**REFERENCES**