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# Ectopic Pregnancy Through A Five-Year-Period. Analysis of 63 Cases

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✓ 63 ectopic pregnancy cases were analyzed during a period of 5 years and 8 months. All cases were reviewed and compared with the literature regarding the incidence, age, obstetric history, clinical evaluation, laboratory findings, types of operation and mortality. The importance of early diagnosis and management together with patient education was emphasized.

**Anahtar Kelimeler:** Ectopic pregnancy.

Ectopic pregnancy, implantation of the fertilized ovum outside the uterine cavity (fallopian tubes, ovaries, cervix and abdominal cavity), has been on life threatening endemic for women in the last 20 years[1]. There are several reports pointing out that the incidence of ectopic pregnancy is increasing over the world[1-5].

## MATERIALS AND METHOD

In this study, 63 ectopic pregnancy cases were analyzed occurring in a period of 5 years and 8 months (January 1985-August 1990) in Zubeyde Hanim Maternity Hospital, Ankara, Turkey. Data were supplied from patient files and archive records.

## RESULTS

**İncidence:** A total 63 cases of ectopic pregnancy was recorded during the study period. Total live births during the same period were 59.592. Accordingly the incidence of ectopic pregnancy was found to be 1 in 946 live births. This figure is very low compared to the other series in the literature [6,7].

**Age:** In our series the average age was 27,8. The distribution of the incidence of ectopic pregnancy according to age is shown in figure 1. According to data the incidence is highest in the group of 26-30 years of age.

**Obstetric history:** Forty-four patients were multipara (%69.8), 17 patients were primipara (%27) and 2 patients were nullipara (%3.2) in our series. One patient was recorded as grand-multipara. In 40 patients there were one or more abortions in the obstetric history. In there patients there were intrauterine IUDs at the admission to the hospital. No patient in our series was recorded as an oral contraceptive user at the time of admission. In one patient there was a history of previous ectopic pregnancy. Six patients were recorded as having pelvic operatios in the past. Types of these operations are shown in table I.

**Table-I:** Types of operations in the past

| Type of operation | Number of cases |
|---|---|
| Uniteral salpingectomy (previous e.p.) | 2 |
| Tubal ligation | 2 |
| Tubo-ovarian abscess drainage | 1 |
| Tuboplasty | 1 |
| TOTAL | 6 |

**Clinical evaluation:** The Chief complaints of the patients at the time of admission were as follows (in the order of fre-

quency of occurence): abdominal pain (58 patients, %92) atypical vaginal bleeding (45 patients %71), menstrual retardation (43 patients, %68), faintness (25 patients, %39.6) and syncope (1 patient, %1.6) (Table II). The findings of physical examination in the order of frequency were as follows: abdominal tenderness (49 patients, %77.7), abdominal defense (22 patients, %34.9), rebound tenderness (19 patients, %30), hypotension (8 patients, %12.6), tachycardia (10 patients, %15.8) sub febrile fever (2 patients, %3) and shock (1 patients %1.5) (Table III). In pelvic examination there were adnexial tenderness in 58 patients (%92.6), unilateral adnexial mass in 33 patients (%52) and Douglas tenderness in 22 patients (%35) (Table IV).

Laparoscopy was applied to there patients. Eleven patients underwent diagnostic ultrasonographic evaluation, in 5 of them there were haematomas in cul-de-sac and in 4 of them adnexial masses were recorded. In 28 out of 32 cases in whom Douglas needle aspiration was performed, defibrinated blood was aspirated (%87.5) and these cases were recorded as Douglas positive.

**Laboratory findings:** In 28 patients (%44) the hemoglobin levels were below 10 g/dl, and hematocrite levels were below %35. Leucocytosis was recorded in 8 patients. In 30 patients total erythrocytes counts were below 3.500.000. The planotests were applied to a total of 38 cases. In 25 of them the test result was positive, in 13 of them the result was recorded as negative.

**Clinical diagnosis:** In 60 patients

**Table-II :** Complaints at the time of admission

| | no. | % |
|---|---|---|
| Abdominal pain | 58 | 92 |
| Atypical vaginal bleeding | 45 | 71 |
| menstural retardation | 43 | 67 |
| Faintness | 25 | 39.6 |
| Syncope | 1 | 1.6 |

**Table-III :** Physical examination findings

| | no. | % |
|---|---|---|
| Abdominal tenderness | 49 | 77.7 |
| Abdominal defence | 22 | 34.9 |
| Rebound tenderness | 19 | 30 |
| Hypotension | 8 | 12.6 |
| Tachycardia | 10 | 15.8 |
| Subfebrile fever | 2 | 3 |
| Shock | 1 | 1.5 |

**Table-IV :** Pelvic examination findings.

| | no. | % |
|---|---|---|
| Adnexial tenderness | 58 | 92.6 |
| Unilateral adnexial mass | 33 | 52 |
| Douglas tenderness | 22 | 35 |

**Table-V :** Types of operations performed in study group.

| | no. | % |
|---|---|---|
| Unilateral salpingectomy | 42 | 66.7 |
| Unilateral salpingo-oophorectomy | 14 | 22.3 |
| Lineer salpingostomy | 6 | 9.5 |
| TAH+unilateral salpingo-oophorectomy | 1 | 1.5 |
| TOTAL | 63 | 100 |
| Tubal ligation to the other side | 8 | 12.7 |

(%95.2) the preoperative diagnosis was ectopic pregnancy. Two patients (%3.1) were operated as ovarian cyst rupture, and 1 patient (1.5%) was operated as acute appendicitis.

**Operation findings:** In 33 patients (52.4%) the location of ectopic pregnancy was the right side, while in 30 patients (47.6%) the location was the left side. The most frequent location was the infundibular portion of the tube (49 patients, 77.8%), followed by the ampullary and isthmic portion. No ovarian and abdominal pregnancy was recorded. There were tubal rupture in 56 cases (88.8%), and tubal abortion in 4 cases (6.3%). In three patients (4.7%) the intact gestational sacs were recorded in the tube.

**Types of operations:** The following operations were performed in our serias: Unilateral salpingectomy (42 cases, 66.7%), unilateral salpingo-oophorectomy (14 cases, 22.3), linear salpingostomy (6 cases, 9.5%), total abdominal hysterectomy plus unilateral salpingo-oophorectomy (1 case, 1.5%). Tubal ligation was performed to the other side in 8 patients (Table IV). The average hospital stay was 6.78 days.

**Mortality:** No deaths due to ectopic pregnancy were recorded in the present series.

## DISCUSSION

The incidence of ectopic pregnancy reported in different series is between 1/80-1/200 and[8]. In our series this figure is 1/946 that is the lowest in the literature. Though it is hard to explain this, the most reasonable explanation is that the area that our hospital is giving service consists mostly of people coming from rural areas of Turkey, and amongst these people and in genaral amongst the Turkish people extra-marital sexual relations are not so common as the western counterparts because of the socio-cultural and religious effects. We know that

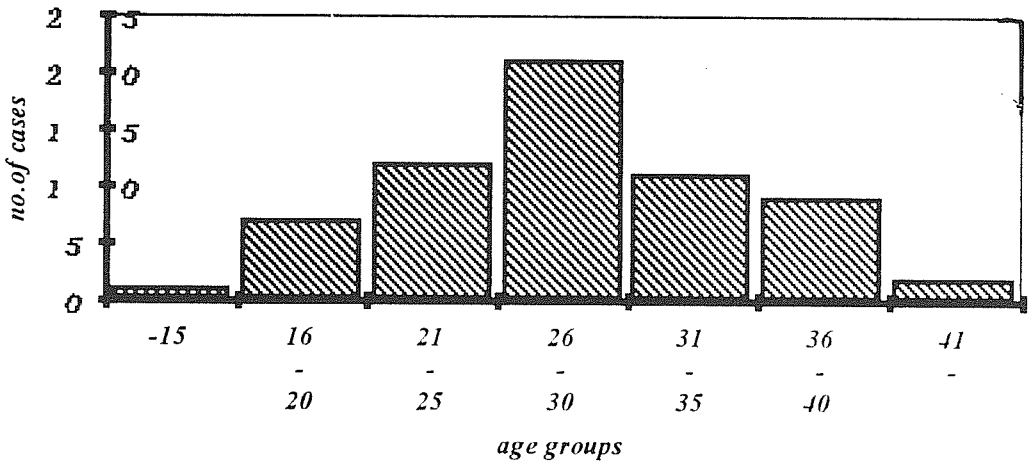


**Figure-1:** Case distribution according to age groups

chronic salpingitis that is one of the most prominent factors in the etiology of ectopic pregnancy, results commonly from the sexually transmitted diseases like gonorrhea, chlamydia and other aerobic and anaerobic pelvic infections[9-13]. In different series histopathologically proven chronic salpingitis has been reported between 20% and 90%[14,15]. In our series this figure is quite low compared to the others (%24).

Though histopathologically proven chronic salpingitis is 24%, in operation findings only 2 patients is recorded as having chronic salpingitis macroscopically. Moir et al stated that in their series there were no findings related to chronic pelvic inflammatory disease to the naked eye in most of the cases(8).

Schneider et al. reported in their series the mean age, parity and gravidity as 28.6, 3.1 and 1.8 respectively[9]. In our series the mean age is lower, the gravidity and parity are higher than previous figures. This could be due to the early marriage age and high parity rates in our region and in general in Turkey.

The classical clinical findings of ectopic pregnancy are abdominal pain, abnormal vaginal bleeding and unilateral adnexial mass. The most frequents presenting symptom is lower abdominal pain. In differential diagnosis, corpus luteum cyst rupture, acute appendicitis, acute pelvic inflammatory disease and torsion of ovarian cysts should be held in mind[14]. In our series most of the patients presented with classical signs and symptoms (abdominal pain 92%, atypical vaginal bleeding 71%, menstrual retardation 68%, adnexial tenderness 92.6% and adnexial mass 52%). In 95.2% of the patients ectopic pregnancy was the diagnosis preoperatively. In 3 patients the preoperative diagnosis were ovarian cyst ruptura and acute appendicitis.

It has been reported that the site of implantation is distal 2/3 of the tube in more than half of the ectopic pregnancy case[16]. In our series this figure was 63.5% (40 pa-

tients). The localization was ampullary in 13 cases (20.7) and isthmic in 1 case (1.5%). There were no ovarian and abdominal pregnancies in our series. Many authors have reported that the right side is more often than the left side as the implantation side, though in some reports no difference has been reported between the two sides[17]. Also, in our series, there was no change (thirty-three cases left sided, 30 cases right sided) between both sides.

In ectopic pregnancy intraperitoneal bleeding ant the death of the embryo are inevitable because of the lack of protective decidual tissue in the tubes. There are some reports relating to the presence of discrete decidual tissue foci in the tubes in both intrauterine and extra uterine pregnancies[18].

In pathologic specimens of our series there were no decidual reactions in the tubal mucosa.

It has been reported that the incidence of ectopic pregnancy is higher between the oral contraceptive (especially the low progestin type) and IUD users[19.20]. In our series there was no history of oral contraceptive usage. In three patients, intrauterine IUDs were recorded. The data is not satisfactory to comment on this subject.

Ectopic pregnancy is the second leading cause of maternal death in USA[17,18.21]. Every year 10% of the maternal deaths in this country results from ectopic pregnancy [21,2]. There are different ectopic pregnancy mortality figures in the literature varying from 1/50 to 1/826[1-3,9,16,19,21]. No maternal deaths resulting from ectopic pregnancy were recorded in our series. With improving hCG, ultrasonography and endoscopy techiques early diagnosis and management of ectopic pregnancy has been possible and this could reduce the mortality to a minimum. In regard of the importance of early diagnosis and management, it sould be emphasized that women of fertile period should be made aware of the importance of seeking medical care as early as possible in their future pregnancies.

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