INCIDENCE, DIAGNOSIS AND ECTOPIC PREGNANCY TREATMENT

Liliana Natalia Iliescu¹, N. Hrubaru¹, V. Simedrea²

SUMMARY: Considering the increased incidence of ectopic pregnancy and the diagnoses difficulties in the incipient stage, we performed a retrospective study, taking into consideration the controlled general variables (age, physiological and pathological antecedents). We assessed the possibility of precocious diagnosys of ectopic pregnancy correlating the endovaginal echography with the dynamic monitoring of beta-HCG, we compared the treated ectopic pregnancies cases that we treated by surgical manner, conservative, conventional, with those treated conservative, laparoscopically, under the aspect of a further fertility.

Keywords: ectopic pregnancy, laparoscopically, fertility.

INCIDENȚA, DIAGNOSTICUL ȘI TRATAMENTUL SARCINII ECTOPICE

Rezumat: Având în vedere incidența crescută a sarcinii ectopice ști și dificultățile diagnostice în fază incipientă, am efectuat un studiu retrospectiv prin prisma variabilelor general urmărite (vârsta, antecedentele fiziologice și patologice). Am evaluat posibilitatea diagnosticării precoce a sarcinii ectopice prin corelarea ecografiei endovaginale cu monitorizarea în dinamică a beta-HCG, am comparat cazurile de sarcină ectopică tratate chirurgical conservator convențional cu cele tratate conservator, laparoscopice, sub aspectul fertilității ulterioare.

Cuvinte cheie: sarcină ectopică, laparoscopie, fertilitate.

MATERIAL AND METHOD

The studied lot has been composed by 240 cases of ectopic pregnancies, recovered and treated in the University clinic of Obstetrics and Gynecology Bega from Timisoara, in the period January 2008 - December 2012.

We performed the retrospective analysis of the clinical observation files, of the surgery reports, taking also into consideration the direct observation of some cases recovered in that period.

In order to highlight the ectopic pregnancy in the female genital patolgy, we considered important the comparison of the studied lot with the total number of gynecology surgical interventions, but also with the total number of pregnancies finalized by birth, which took place in the same period, January 2008-December 2012, in the University clinic of Obstetrics and Gynecology Bega from Timisoara.

During the five years of study, there have been done a number of 5612 gynecological surgical interventions, both by classical approach, than laparoscopic, the 233 ectopic pregnancies on which we worked on surgically representing 4,15% from the total number of surgical interventions (Fig. 1).

Fig. 1. Ectopic pregnancies percentage in the total surgical interventions number.

Correspondence to: Prof. Univ. Dr. Anastasiu Doru Mihai,
Clinica Universitară de Obstetrică-Ginecologie “Bega” Str. Victor Babes, Nr 12, Timisoara, doru_anastasiu@yahoo.com
In the same period of the performed study, there have been recovered in the Clinical University of Gynecology-Obstetrics Bega from Timisoara a number of 11723 pregnancies, 11483 have ended by birth and 1,99% have been represented by the patients of the lot diagnosticated with isotopic pregnancy (Fig. 2).

In the studied period, the highest percentage was found in the patients having the group of age 26-32 years and corresponds to the maximum genital activity of the woman (Fig. 3).

Ectopic pregnancy location
In the studied lot existed: 223 cases of tubal location, 11 with ovarian location, 11 cervical, 2 angular and 1 located abdominally (Fig. 4).

Etiopatoghenical factors
Analyzing the physiological and patological antecedents, we found an increased frequency of the following affections: Pelvic inflammatory disease, urinary tract pathology, spontaneous or upon request abortions, anterior pelvic surgery, ectopic pregnancies in antecedents (Fig 5.).

Fig. 2. Ectopic pregnancies percentage in the total number of births.

Fig. 3. Cases distribution depending on the age of the patients.

Fig. 4. Ectopic pregnancy location.
Regarding the patients' parity, we found the highest frequency at primiparous and secundiparous -52,5% (Fig. 6.).

**Clinical diagnosis**

In the constituted lot, the pelvic pain has been accused by 82,9 % cases, the metroragy by 51,7% from the cases, disorders of the menstrual cycle 28% and other symptoms (fever, digestive disorders, urinary disorders) at 38% of the cases (Table 1.).

**Paraclinic diagnosis**

Echografical exploration has been done to all patients which presented genital bleeding or pelvic pain, evidention of an axial formation in the context of a beta-HCG over 2000 UI/L and of an uterine cavity without ovule bag, being considered suggestive for the ectopic pregnancy diagnosis. By correlating the diagnostic clinical elements with those obtained at the endovaginal echography (EEV) and with the seric beta HCG, allowed us to estimate Fernandez score: we obtained a Fernandez score < 12, at 7 of the cases (2,92%) and a Fernandez score >12, at 233 of the cases (97,08%).

**Therapeutical methods**

By analyzing the lot according to the applied therapeutical method, we highlighted the net predominence of the laparoscopy, which has been used for 193 cases, while the laparotomy has been done at 47 cases (Fig 7).
The type of laparoscopic intervention has been conservatory - salpingostomy at 36 cases or radical - salpingectomy at 147 cases (Fig. 8.).

During the surgical interventions have been performed 56 surgical sterilizations upon the patients' requests and it has been controlled the tubal permeability at 94 patients: 25 tests resulted negative, in 69 cases the tubal permeability test has been positive (Fig. 9.).

DISCUSSIONS

Ectopic pregnancy represents further on a big gynecological problem, due to the frequency and by the immediate and remote risks.

The ectopic pregnancy apparition is maximum to patients having the age between 26-32 years, but it also exists outside this interval.

In our lot, BIP (pelvic inflammatory disease), remains a principal cause, but, in comparison to other studies (1) the anteriority tubal surgery has a more reduced impact.

The evolution of diagnosys methods of ectopic pregnancy allowed us to establish a diagnosys in a precocious stage, diminishing the number of diagnosticated cases in the tubal rupture stage, which allowed us to ameliorate the prognostic and to improve the post-surgical recovery. This tendency is still accompanied by the persistence of a number of cases with diagnosys false-positive (3).

I consider that actually the type of surgical abortion shall be the laparoscopic one, the laparotomies being reserved to complicated cases, with massive hemoperitoneous and unstable from hemodynamic point of view. This tendency, presented in the actual status, is confirmed also by the studied appeared recently (1,5).

As intervention type in the herein study, have been used preponderently the radical techniques, of salpingectomy type. This technique diminishes the time until the recovery and doesn't present the risk of relapse. The use of conservatory techniques of salpingostomy type, even if in the actual studies (1, 2, 3, 4) is predominant, being applied for 80-85% of cases, in the analyzed period it has still a reduced place.
From patient fertility point of view, laparoscopy conserves it better than laparotomy, and the conservative techniques are better for the ulterior fertility than the radical ones.

CONCLUSIONS

Ectopic pregnancy is one of the most serious threatenings for a woman's life, but also for her fertility, representing an important cause of morbidity and mortality for the female population.

The studied lot included 240 ectopic pregnancies, not complicated or with minimal complications, the risk factors that we encountered being the following:

- age 26 -32 years
- pelvin inflammatory disease
- abortions in antecedents
- contraception by intrauterine device IUD

Endovaginal ecographic examination associated with the dynamic dose of seric beta - HCG, allows the precocious diagnosis in the tubal ectopic pregnancy cases, the laparoscopy completing the diagnosis.

Laparoscopic surgical treatment represents the "golden standard" in the case of ectopic pregnancy, presenting also a series of incontestable advantages:

- treatment and diagnosis simultaneity,
- reduced intraoperative bleeding,
- possibility to perform conservatory techniques,
- minimal tissue trauma, fast recovery of the patient,
- reduced post-surgical pain,
- minimal medication and reduced cost.

In our study 193 patients beneficed of a laparoscopic surgical treatment.

Conventional surgical treatment is reserved to ectopic pregnancy cases which present contra-indications for the laparoscopic treatment. In our study 47 patients beneficed of a laparoscopical surgical treatment.

The tubal permeability has been checked on 39,17 cases, the post-surgical fertility being of 28,75% cases and the ectopic pregnancy recurrence was determined at two cases.

The comparison of the results obtained by the two therapeutical methods indicate the laparoscopic surgical treatment superiority in case of ectopic pregnancy.

References: