Recurrent Ectopic Pregnancies: Analysis of Risk Factors of Thirteen Patients

Rekürren Ektopik Gebelikler: Onüç Vakanın Risk Faktörler Açısından Değerlendirmesi

Recurrent Ectopic Pregnancies / Rekürren Ektopik Gebelikler

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Özet

Amaç: Daha önce geçirilmiş ektopik gebelik, yeni bir ektopik gebelik olasılığını artırır. Bu çalışmada, rekürren ektopik gebeliklerdeki risk faktörleri araştırıldı. Gereç ve Yöntem: Ocak 2006 ve Aralık 2008 tarihleri arasında görülen onüç rekürren ektopik gebelik vakası retrospektif olarak, demografik özellikler, risk faktörleri ve tedavi modaliteleri açısından değerlendirildi. Hastalar, yapılan telefon görüşmeleri ile takip eden gebelik sonuçları açısından sorgulandı. Bulgular: On hasta (%76.9) ikinci, üç hasta (%23.1) ise üçüncü tekrar ektopik gebelik olarak tespit edildi. Daha önce ilk trimester gebelik kaybı olan ve uterin küretaj geçiren hasta sayısı beş olarak kaydedildi. Rahim içi araç kullanan hasta yoktu, bir hasta pelvik inflamatuar hastalık, bir hasta da daha önce abdominal cerrahi geçirmişti. Cerrahi tedavi %86.9 ile en çok uygulanan tedavi modalitesi idi, bunların %90.9'unda laparaskopi kullanılmıştı. Sadece bir acil laparatomi mevcuttu. Üçüncü tekrar ektopik gebeliklerde kullanılan tek cerrahi yöntem salpenjektomi iken, salpingostomi ikinci tekrar vakalarda kullanılmıştı. Hastaların iki yıl sonraki gebelik sonuçları fertilite açısından negatif olarak değerlendirildi, yaşayan yeni çocuk tespit edilmedi. Sonuç: Gebelik kayıpları ve takip eden uterin küretajlar, tekrarlayan ektopik gebelikler için belirgin risk faktörleridir. İkinci tekrar ektopik gebeliklerdeki cerrahi teknik, fertilite kaygısı nedeniyle, mümkünse salfingotomi olmalıdır.

Anahtar Kelimeler

Rekürren Ektopik Gebelik; Risk Faktörleri; Salfingotomi

Abstract

Aim: A prior ectopic pregnancy increases the risk of consequent ectopic pregnancies. In this study risk factors and treatment modalities of recurrent ectopic pregnancies were analyzed in a tertiary hospital setting. Material and Method: Between January 2006 and December 2008, 13 recurrent ectopic pregnancies were retrospectively evaluated for demographic features, risk factors and treatment modalities. One year after the last ectopic pregnancy, patients were called back for their reproductive outcomes. Results: Ten out of 13 patients (76.9 %) were second repeat ectopic and 3 (23.1 %) were third repeat ectopic pregnancies. Five patients had miscarriages after previous ectopic pregnancies and these patients were performed uterine curettage after miscarriages. Eleven out of 13 patients (84.6 %) were treated with surgical approach. Ten out of 11 patients (90,9 %) had laparoscopic approach. One emergent laparotomy was performed for a patient in the third repeat ectopic group. Salpingostomy was performed for the four patients in the second repeat ectopic pregnancy group. Salpingectomy was the only technique for all three patients in third repeat ectopic group and also for the four patients in second repeat ectopic group. There were no pregnancies among these 13 patients one year after the ectopic attacks. None of the patients were intrauterine device user, only one patient was smoker, and one patient had experienced a previous pelvic inflammatory disease. Discussion: Risk factors for recurrent ectopic pregnancy were previous miscarriages and uterine currettages. Second repeat ectopic pregnancy was better to be managed with salpingostomy by laparoscopic approach for the future fertility expectations.

Keywords

Recurrent Ectopic Pregnancy; Risk Factors; Salpingotomy

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Introduction

Incidence of ectopic pregnancy is approximately 2% of all pregnancies and this rate increases as the time passes [1]. A prior ectopic pregnancy increases the risk of consequent ectopic pregnancies [2]. In the literature, there are few studies regarding risk factors and fertility outcomes of recurrent ectopic pregnancies; besides these are mostly case reports and small series. In this study risk factors associated with recurrent ectopic pregnancies, treatment modalities, and pregnancy outcomes were analyzed in a tertiary hospital setting.

Material and Method

This retrospective study was carried out in Zekai Tahir Burak Women Education and Research Hospital, Ankara between January 2006 and December 2008. There were 666 women with ectopic pregnancies in this time period and thirteen out of the 666 patients had at least one previous ectopic pregnancy. Demographic features (age, parity, miscarriages, intrauterine device history, smoking habits, previous pelvic inflammatory disease (PID), previous abdominal surgery) and treatment modalities (expected treatment, medical treatment or surgery) were recorded.. Telephone interviews were done for subsequent reproductive outcomes one year after the treatment. Results were expressed as frequencies and percentages as descriptive statistics. Our study was approved by local ethical committee.

Results

In our study 13 out of 666 ectopic pregnancies were recurrent cases (1.2 %). Ten out of 13 patients (76.9 %) were second repeat ectopic and 3 (23.1 %) patients were third repeat ectopic pregnancies. The demographic features, risk factors and treatment modalities were summarized in table 1. All of the patients were nulliparous except one. Five out of 13 patients had miscarriages after previous ectopic pregnancies and uterine curettage was performed to all of these patients after miscarriages. The average time between the ectopic pregnancies was 2.15 year. One patient experienced second ectopic pregnancy 6 months after the first one. Risk factors analysis of ectopic pregnancies were as follows: None of the patients were intrauterine device user, only one patient was smoker, one patient had a previous history of pelvic inflammatory disease. There was no previous abdominal surgery history other than previous ectopic pregnancy operations.

About the treatment modalities, summaries of the outcomes were shown in table 2. None of the patients were managed expectantly. Eleven out of 13 patients (84.6 %) were treated with surgical approach. Ten out of 11 patients (90,9 %) had laparoscopic approach. Only one emergent laparotomy was performed for the patient in the third repeat ectopic group due to the hemodynamic instability. Salpingostomy was performed for the four patients in the second repeat ectopic pregnancy group. Salpingectomy was the only technique for all three patients in third repeat ectopic group and also for the four patients in second repeat ectopic group. Methotrexate was adminstered to two patients in second repeat ectopic pregnant group (15.4%),. Telephone interviews reported no clinical pregnancy among these 13 patients one year after the ectopic attacks.

Tablo 2 ye metinde atıfta bulunulmamış.

Table1. Demographic features of 13 recurrent ectopic patients

Patient number	Ectopic number	Age (Years)	Parity (Live birth)	Abortus	IUD history	PID history
1	Third	26	0	1	no	no
2	Third	38	0	0	no	no
3	Third	45	0	4	yes	no
4	second	32	0	1	no	no
5	second	28	1	0	no	no
6	second	36	0	0	no	yes
7	second	28	0	0	no	no
8	second	29	0	0	no	no
9	second	26	0	0	no	no
10	second	32	0	0	no	no
11	second	39	0	0	no	no
12	second	36	0	1	no	no
13	second	27	0	1	no	no

Table 2. Tretment modalities showing the final tubal situations of the recurrent ectopic pregnancies

	Medical treatment (Methotrexate) (n=2)	**Surgical treatment** **(n=11)**	
		Salpingotomy (n=3)	**Salpingectomy (n=8)**
Second repeat EP	20	30	50
Third repeat EP	0	0	100

All values are percentages. EP:Ectopic pregnancy

Discussion

Early diagnosis and effective treatment of ectopic pregnancies increase the risk of recurrent ectopic pregnancies in subsequent conceptions 2 to 5 fold [3]. Improvement of the treatment options with fertility saving procedures increases the risk of having recurrent future ectopic pregnancy.

In terms of the risk factor analysis, intrauterine devices in place were more likely to be associated with recurrent ectopic pregnancy [1], but this was not observed in our study, none of the patients were intrauterine device user. As only one patient was smoker and one had previous PID history which were also not correlated with the previous studies showing the increased risks with smoke and PID [4,5].

In this study previous miscarriages and uterine curettages were noticeable among the risk factor analysis of recurrent ectopic pregnancies. These results had supported the findings in Butts' study [6], but was different from Bernard's study which could not prove this relationship [7].

About the treatment modalities; 84.6% of the cases were treated with operative approach and 91.6% of them were done by laparoscopic techniques. Only one patient of the third repeat ectopic group was treated with laparotomy because of the intractable hemorrhage due to tubal rupture with instable hemodynamic status. Laparoscopy was proved to be safe and effective when compared with laparotomy [8]. It forms less adhesion than laparotomy, so it should be the preferred surgical procedure for the patients of infertile group. [8-10].

Salpingotomy rate was 40 % in the second repeat ectopic pregnancy group. This more rate was because of the future fertility expectations Despite the fact that preserving a damaged tube had more risks for recurrent ectopic pregnanacy, preserving the

tube had given the feeling of ongoing fertility.

Reproductive outcomes of these 13 patients were quite poor. None of the 13 patients had a clinical pregnancy one year after the last ectopic attack. Ten patients (3 of the third repeat ectopic group and 7 of the second repeat ectopic group) had tried the IVF programes, and results were unsuccessful.

In conclusion, the present study had showed that recurrent ectopic pregnancy was mostly the problem of infertile group. About the known risk factors, only the miscarriages and uterine curettages were noticable. Laparoscopic approach was the preferred way of operative treatment, and because of the future fertility expectations second repeat ectopic pregnancy could be managed with organ saving procedures, which was salpingostomy.

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