

Evaluation of Tubal Ligation Cases

TUBAL LİGASYON OLGULARININ DEĞERLENDİRİLMESİ

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Summary

Objective: Retrospective evaluation of the women who had chosen tubal ligation as a contraceptive method in two hospitals.

Institution: Osmangazi University School of Medicine, Department of Obstetrics and Gynecology and Social Security Maternity Hospital, Eskişehir.

Materials and Methods: Hospital records and patient charts of the women to whom tubal ligation were performed in two different hospitals of the same city in a period of one year between January and December 1999 were reviewed according to age, reproductive characteristics and the technique used for tubal ligation.

Results: After detailed counselling, of the 1250 women who applied for contraception a total of 225 women (18.0%) preferred tubal ligation as a contraceptive method with a mean age of 32.1(0.3 years (24-42 years)). The number of pregnancies was two and more in 219 woman (97.3%). Two hundred nine women (92.9%) had at least two deliveries, and 207 women (92.0%) had at least two living children. Tubal ligation was performed during cesarean section in 117 women (52.0%), all with Pomeroy technique and interval tubal ligation was performed in 108 women (48.0%). Interval tubal ligation was done by laparoscopic Yoon ring application in 79 women (73.1%) and by mini laparotomy and Pomeroy technique in 29 women (26.9%). There was no failure and major intraoperative or postoperative complication.

Conclusion: It is suggested that clear and comprehensive counselling could increase the number of couples who prefer tubal ligation which have very low failure and complication rate and counselling is also important to prevent the high possibility of regret.

Key Words: Contraception, Counselling, Tubal ligation

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Özet

Amaç: İki hastanede kontraseptif yöntem olarak tübal ligasyonu seçen kadınların retrospektif olarak incelenmesi.

Çalışmanın yapıldığı yer: Osmangazi Üniversitesi Tıp Fakültesi, Kadın Hastalıkları ve Doğum Anabilim Dalı ve Sosyal Sigorta Kurumu Doğumevi, Eskişehir

Materyal ve Metod: Aynı şehirdeki iki farklı hastanede Ocak ve Aralık 1999 tarihleri arasındaki bir yıllık sürede tübal ligasyon yapılan kadınların hastane kayıtları ve hasta dosyaları yaş, reproduktif karakterler ve tübal ligasyonda kullanılan teknikler yönünden araştırıldı.

Bulgular: Detaylı danışmanlık sonrası, kontrasepsiyon isteği ile başvuran 1250 kadından yaş ortalaması 32.1(0.3 yıl (24-42 yıl) olan toplam 225 kadın (%18.0) kontraseptif yöntem olarak tübal ligasyonu tercih etti. 219 kadında (%97.3) gebelik sayısı iki ya da daha fazla idi. İkiyüz dokuz kadının (%92.9) en az iki doğumu, 207 kadının (%92.0) en az iki yaşayan çocuğu vardı. Tübal ligasyon, hepsi Pomeroy tekniği ile olmak üzere 117 kadında (%52.0) Sezaryen seksio sırasında yapılırken, 108 kadına (%48.0) interval tübal ligasyon şeklinde uygulandı. Interval tübal ligasyon 79 kadına (%73.1) laparoskopik Yoon halkası uygulaması, 29 kadına ise (%26.9) mini laparotomi ve Pomeroy tekniği ile yapıldı. Hiç bir kadında başarısızlık ve intraoperatif ya da postoperatif majör komplikasyon gelişmedi.

Sonuç: Açık ve detaylı danışmanlığın çok düşük başarısızlık ve komplikasyon hızına sahip olan tübal ligasyonu seçen çiftlerin sayısını artırabileceği ve danışmanlığın ayrıca yüksek başarısızlık olasılığını da önlemek için önemli olduğu düşünüldü.

Anahtar Kelimeler: Kontrasepsiyon, Danışmanlık, Tübal ligasyon

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The factors that increase maternal mortality are high fertility rate, insufficient antenatal care and low socio-economic status (1). Maternal mortality rates can be lowered one third every year by supplying family planning methods to the couples who do not want any more children (1).

Effective contraception is an important factor that

affects the fertility rate. In Turkey, although the rate of couples who use an effective contraceptive method has increased, the usage of traditional methods is still high (2,3). Moreover, the rate of couples who do not want any more children is 63%, but the rate of those who use effective contraceptive method is only 37.7% (2).

Although it is an irreversible method, tubal ligation might be a good choice for those couples who decide to complete their family and do not want any more children. However, the rate of tubal ligation is about 4.2% in Turkey (2).

This study was designed to evaluate the characteristics of women who had chosen tubal ligation in a university hospital and a Social Security Maternity Hospital.

Material and Methods

The demographic characteristics of the women who had chosen tubal ligation as a contraceptive method in gynecology clinics of the university hospital and the maternity hospital during one year period between January and December 1999 were reviewed from the hospital records and patient files. Age, gravidity, parity and the number of living children were accepted as the demographic characteristics and the private patients were excluded from the study.

The contraceptive counseling and methods were offered by ten physicians, all of whom had been trained in a competency-based family planning education program supported by John Hopkins University from United States of America and the General Directorate of Mother and Child Health and Family Planning of Turkish Government and four nurses, who had been trained by these physicians. All of the women received preliminary and method specific counseling in which the reproductive physiology was explained briefly and each contraceptive method was described in detail by discussing their advantage and disadvantage objectively, and both the irreversible and reversible contraceptive methods were offered without any payment.

Results

After detailed counselling, of the 1250 women who applied for contraception a total of 225 women (18.0%) were preferred tubal ligation as a contraceptive method during the study period. The mean age of the women who preferred tubal ligation was 32.1 (0.3 years) (24-42 years) and only 17 women (7.6%) were <26 years of age (Table 1). The mean number of pregnancies, deliveries and living children were 3.56 (0.84), 2.93 (0.67) and 2.53 (0.81), respectively) and 16 (7.1%) women had only one living child (Table 1).

Tubal ligation was performed during cesarean section in 117 women (52.0%) all with Pomeroy technique and interval tubal ligation was performed in 108 women (48.0%), either with laparoscopy or mini laparotomy. Interval tubal ligation was done by laparoscopic Yoon ring application in 79 women (73.1%) and by mini laparotomy and Pomeroy technique in 29 women (26.9%). There was

Table 1. The demographic characteristics of the women and the technique used for tubal ligation

Demographic characteristics	Number of women (n)
Age (years)	
<26	17 (7.6%)
26-35	133 (59.1%)
>35	75 (33.3%)
Gravidity (n)	
1	6 (2.7%)
2 or 3	139 (61.7%)
>3	80 (35.6%)
Parity (n)	
1	16 (7.1%)
2 or 3	197 (87.6%)
>3	12 (5.3%)
Living children (n)	
1	18 (8.0%)
2 or 3	198 (88.0%)
>3	9 (4.0%)
Technique of tubal ligation (n)	
Pomeroy during cesarean	117 (52.0%)
Laparoscopic Yoon ring	79 (35.1%)
Pomeroy with mini laparotomy	29 (12.9%)

no failure and major intraoperative or postoperative complication.

Discussion

More than 1400 women die of pregnancy related problems per year in Turkey which can be reduced by avoiding unwanted and high-risk pregnancies (2). Although the fertility rate dropped from 6.9% to 2.7%, unfortunately many families are still unsuccessful to prevent the unwanted pregnancies (2,3). Sixty-two percent of the women, whose last pregnancies were terminated by induced abortion, reported that they did not want any more children (2). However the rate of women who currently use effective contraceptive methods is only 37.7%. Among the effective contraceptive methods, tubal ligation is in the fourth rank with the ratio 4.2% (2).

Tubal ligation is a suitable contraceptive method with failure rates of 0.0-0.8% for couples who do not desire any more children (4-7). The average ideal number of children per family was varied from 2.4 to 2.6 independent from the site of residency in Turkey (2). The mean number of living children was 2.53 (0.81) in this study and 7.1% of the women had only one child. None of the women had any failure or major intraoperative or postoperative complication during the study period.

The mean age of the women with tubal ligation (32.3(0.3 years)) in this study was found to be younger than those of reported in the literature (4-7). However, in our country 96% of women and 93% of men get married before the age of 30 and the median age of marriage for women is 19 years, which suggests that couples can reach their ideal number of children at younger age (2).

Tubal ligation might be performed as an interval, postpartum or postcurative procedure. Tubal ligation was found to be performed as an interval procedure in 48.0% of cases and as a postpartum procedure in 52.0% of cases in this study. Laparoscopic tubal ligation has many advantages, such as short period for hospitalization, less need for analgesics, and short period for recovery (4-7). Tubal ligation can be performed by mechanical occlusion including rings and clips or by electrocautery during laparoscopy. Both methods have similar failure rates while ectopic pregnancy rates are higher with electrocautery (5,6). Interval tubal ligation was performed by laparoscopic Yoon Ring application in 35.1% of the cases in this study. Pomeroy technique was chosen in all postpartum procedures. However, it should always be considered that tubal ligation is not an indication for cesarean section and counseling should be given during antenatal period to reduce the risk of regret after tubal ligation (5,6).

It is well known that clear and comprehensive counseling which allows informed choice, is very important for couples to make their decision to select one of the contraceptive methods (5,6). This study showed that after detailed counseling given by trained physicians or nurses, 18.0% of the couples who applied for family planning services preferred tubal ligation as a contraceptive method in two hospitals. This ratio is higher than the ratio of 4.2% reported for the whole country (2). This finding suggests that clear and comprehensive counselling could increase the number of couples who prefer tubal ligation,

although, they had only one living child. Detailed counseling is also important when tubal ligation is planned to be performed during cesarean because of the high possibility of regret.

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