



ENDOMETRİOZİS- KOH-IUI UYGULAMALARI

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Endometriosis and Subfertility: Is the Relationship Resolved?

**Thomas M. D'Hooghe, M.D., Ph.D.,¹ Sophie Debrock, Ph.D.,¹
Joseph A. Hill, M.D.,² and Christel Meuleman, M.D.¹**

D'Hooghe et al., 2003

Endometriosis and Subfertility

Siklik fekundite oranı

- Endometriozis; %2-10
- Fertil populasasyonda; %15-20

The Practice Committee of the American Society for Reproductive Medicine, 2006

FECUNDITY IN WOMEN WITH ENDOMETRIOSIS

Tedavi almamış endometriozisde kümülatif canlı doğum oranları



Laparoskopik cerrahi-fertilite restorasyonu

Evre 1-2 endometriozisde laparoskopik rezeksiyon ya da lezyonların ablasyonu tek başına fertiliteyi restore edebilir mi??

Surgery for peritoneal disease (ASRM stage I–II)

Table 7 Comparison of Two Randomized Controlled Trials^{36,73} Evaluating Fertility Outcome in Women with Minimal-Mild Endometriosis after Surgical Excision of Endometriosis (Excision Group) and after Diagnostic Laparoscopy (Control Group)

Parameter	Endocan, 1997	GISE Italy, 1999
N patients included	341	91 (54 excision, 47 control)
Duration infertility	2 years	4 years
Postoperative GnRH analogs	No	Yes, <i>n</i> = 41 (18 excision, 23 control)
MFR control group	2.4%	No data
MFR excision group	4.7%	No data
Rate ratio comparing MFR between groups	1.9 (95% CI, 1.2–3.1)	No data
CPR control group	17.7%	No data
CPR excision group	30.7%	No data
<i>P</i> value comparing CPR between groups	<i>P</i> = 0.006	No data
Live birth per patient (control group)	No data	22%
Live birth per patient (excision group)	No data	20%
<i>P</i> value comparing live birth per patient between groups	No data	NS

MFR, monthly fecundity rate; CPR, cumulative pregnancy rate.

Laparoscopic surgery for subfertility associated with endometriosis (Review)

Jacobson TZ, Barlow DH, Koninckx PR, Olive D, Farquhar C

This record should be cited as:

Jacobson TZ, Barlow DH, Koninckx PR, Olive D, Farquhar C. Laparoscopic surgery for subfertility associated with endometriosis. *Cochrane Database of Systematic Reviews* 2002, Issue 4. Art. No.: CD001398. DOI: 10.1002/14651858.CD001398.

Meta analize dahil edilen 2(Marcoux 1997- Gruppo Italiano 1999) randomize çalışma

**laparoskopik cerrahi tedavi vs sadece diagnostik laparoskopisi
canlı doğum
gebelik
fetal kayıp ve
cerrahi komplikasyon açısından karşılaştırılmış**

Surgery for peritoneal disease (ASRM stage I-II)

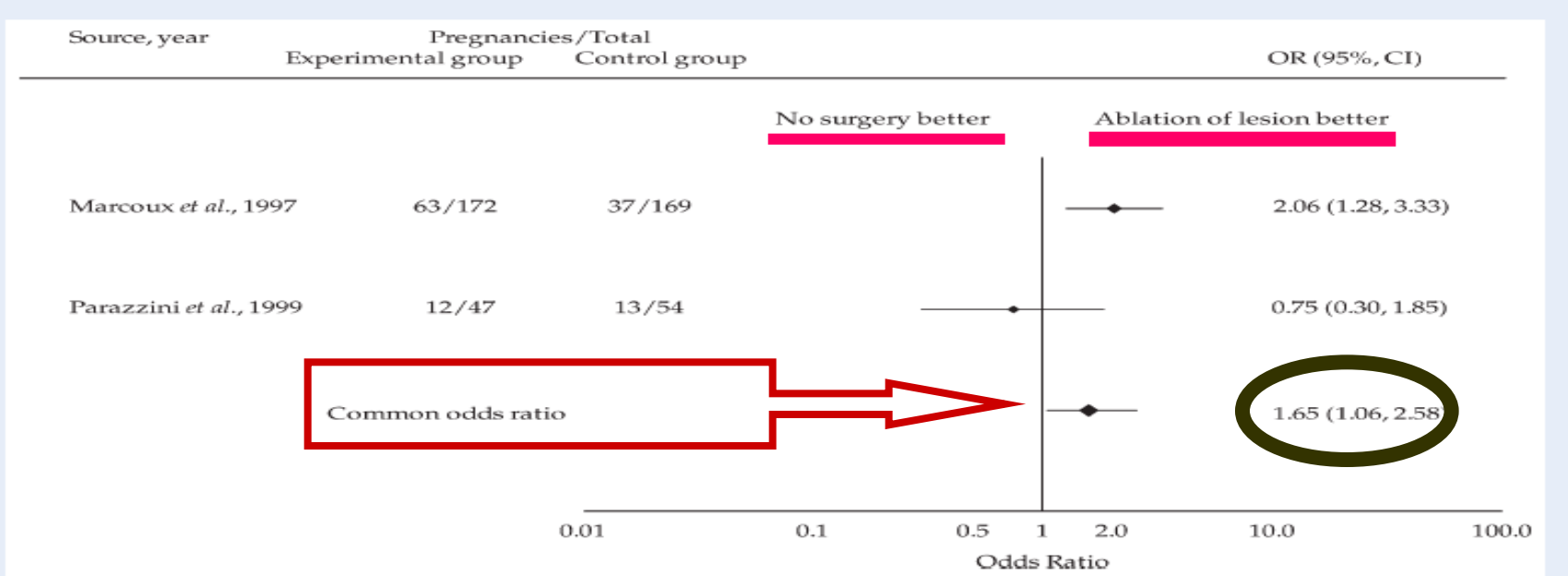


Figure 2 Overview of RCTs comparing laparoscopic ablation of lesions with no surgery in infertile women with minimal or mild endometriosis.- Diamonds represent odds ratio of conception and horizontal lines 95% CIs. Breslow-Day test for heterogeneity: $\chi^2 = 13.24$, $P = 0.42$. Data from

Jacobson TZ., Cochrane Database Syst Rev. 2002;(4):CD001398

Laparoskopik cerrahi tedavi?

Clinical condition	Recommendation		
	ESHRE 2005	ASRM 2006	RCOG 2006
Minimal-mild endometriosis (stage I-II disease)	Limited benefit: surgery recommended	Small benefit: surgery recommended	Demonstrated benefit: surgery recommended
Moderate-severe endometriosis (stage III-IV disease)	Possible but unproven benefit: surgery recommended	Possible benefit: surgery recommended	Possible benefit: recommendation uncertain
Post-operative adjuvant treatment	No benefit: not recommended	No benefit: not recommended	No benefit: not recommended
Surgery before IVF	Recommended if endometrioma ≥ 4 cm	Doubtful benefit: no recommendation	Recommended if endometrioma ≥ 4 cm
Recurrent endometriosis	No recommendation	Second-line surgery not recommended	No recommendation

Endometriozisde fertilite bozulmuştur. Rezeksiyon ya da ablasyon uygulamaları yarar sağlamakla birlikte fertiliteyi tam olarak düzeltememektedir.

KOH/IUI

Hangi evre?

Cerrahi tedavi ile kombine edilmelimi?

Hangi kriterler?

Kaç siklus uygulanmalı?

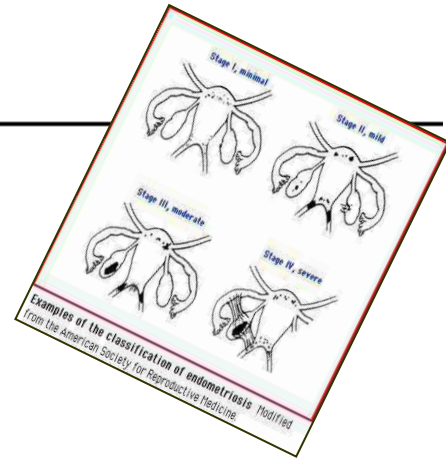
Hum Reprod 2005

ESHRE guideline for the diagnosis and treatment of endometriosis

Assisted reproduction in endometriosis

Intrauterine insemination

(ASRM stage I–II)



A Treatment with intrauterine insemination (IUI) improves fertility in minimal–mild endometriosis: IUI with ovarian stimulation is effective but the role of unstimulated IUI is uncertain (Tummon *et al.*, 1997).

Stephen Kennedy^{1,10}, Agneta Bergqvist², Charles Chapron³, Thomas D’Hooghe⁴, Gerard Dunselman⁵, Robert Greb⁶, Lone Hummelshoj⁷, Andrew Prentice⁸ and Ertan Saridogan⁹ on behalf of the ESHRE Special Interest Group for Endometriosis and Endometrium Guideline Development Group*



Neden KOH/IUI?

Randomized controlled trial of superovulation and insemination for infertility associated with minimal or mild endometriosis*

Ian S. Tummon, M.D.†‡
Linda J. Asher, R.N.C.†
James S. B. Martin, M.D.†
Togas Tulandi, M.D.§

The University of Western Ontario, London, Ontario, and McGill University, Montréal, Québec, Canada

Patient(s): Three hundred eleven cycles in 103 couples in whom minimal or mild endometriosis was the sole identified subfertility factor.

Intervention(s): Superovulation with FSH and IUI.

Main Outcome Measure(s): Live birth.

Human Reproduction Vol.20, No.10 pp. 2698-2704, 2005
Advance Access publication June 24, 2005.

doi:10.1093/humrep/del135

ESHRE guideline for the diagnosis and treatment of endometriosis

Stephen Kennedy^{1,10}, Agneta Bergqvist², Charles Chapron³, Thomas D'Hooghe⁴, Gerard Dunselman⁵, Robert Greb⁶, Lone Hummelshoj⁷, Andrew Prentice⁸ and Ertan Saridogan⁹ on behalf of the ESHRE Special Interest Group for Endometriosis and Endometrium Guideline Development Group*

Tummon IS, Fertil Steril, 1997

Neden KOH/IUI?

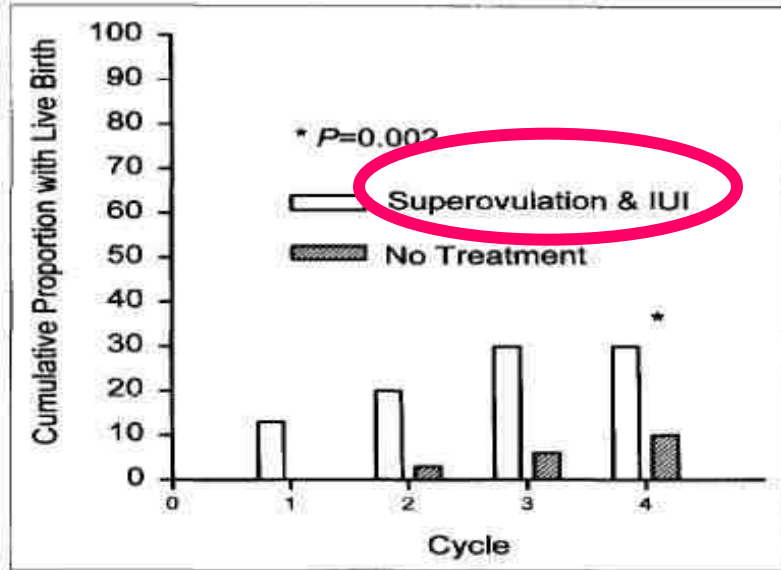


Figure 1 Cumulative proportion of patients with live birth.

Table 2 Cycles and Live Births

Cycle	Superovulation and IUI		No treatment	
	No.	Live births	No.	Live births
1	53	7	50	0
2	39	3	48	1
3	27	4	44	1
4	8	0	42	2

10 Tummon et al. *Superovulation / IUI for endometriosis*

Result(s): Live birth followed 14 of 127 (11%) superovulation and IUI cycles and 4 of 184 (2%) no-treatment cycles. The odds ratio was 5.6 (95% confidence interval 1.8 to 17.4) in favor of superovulation and IUI.

Conclusion(s): Treatment with superovulation and IUI was associated with superior outcome both by crude live-birth rates and proportional hazard analysis. (Fertil Steril® 1997;68:8-12. © 1997 by American Society for Reproductive Medicine.)

Neden KOH/IUI?

FECUNDITY IN WOMEN WITH ENDOMETRIOSIS

Cycle fecundity in women with stage I or II endometriosis, according to treatment.

(ASRM stage I–II)

Endometriosis-associated infertility

Group	Unexplained infertility	Endometriosis-associated infertility			
	Guzick et al. (27)	Deaton et al. (28)	Chaffkin et al. (29)	Fedele et al. (30)	Kemmann et al. (31)
Treatment					
No treatment or intracervical insemination	0.02	0.033	—	0.045	0.028
IUI	0.05 ^a	—	—	—	—
Clomiphene	—	—	—	—	0.066
Clomiphene/IUI	—	0.095 ^a	—	—	—
Gonadotropins	0.04 ^a	—	0.066	—	0.073 ^a
Gonadotropin/IUI	0.09 ^a	—	0.129 ^a	0.15 ^a	—
IVF	—	—	—	—	0.222 ^a

The Practice Committee of the American Society for Reproductive Medicine, 2006

Subfertility guidelines in Europe: the quantity and quality of intrauterine insemination guidelines

Human Reproduction Vol.21, No.8 pp. 2103–2109, 2006

E.C.Haagen^{1,2}, R.P.M.G.Hermens², W.L.D.M.Nelen^{1,2}, D.D.M.Braat¹, R.P.T.M.Grol²
and J.A.M.Kremer^{1,3}

Table IV. Comparison of recommendations of the intrauterine insemination (IUI) guideline from England and Wales ($n = 8$) with recommendations of IUI guidelines from Denmark, France and the Netherlands

Recommendation topics	Denmark	England and Wales	France	Netherlands
Indications for (un)stimulated IUI ^a				
Male-factor subfertility	Stimulated IUI	Unstimulated IUI	Stimulated IUI	Stimulated IUI in mild male-factor subfertility ^b Unstimulated IUI in severe male-factor subfertility ^c
Unexplained subfertility	Stimulated IUI	Unstimulated IUI	Stimulated IUI	Stimulated IUI
Minimal to mild endometriosis	Stimulated IUI	(Un)stimulated IUI	Stimulated IUI	Not mentioned

Min-mild endometriozisde KOH/IUI Sonuları

L/S ile tedavi edilmemiř olgular

L/S ile tedavi edilmiř olgular

Minimal-Mild Endometriosis-KOH/IUI



Table 5 Cycle Fecundity Rate and Implantation Rate per Cycle after Intrauterine Insemination in Women with Minimal-Mild Endometriosis and Women with Unexplained Infertility

Rate	Reference	Minimal-Mild Endometriosis	Unexplained Infertility	P Value
Cycle fecundity rate	Omland et al, 1998 ⁵³	8/49 (16%)	40/119 (34%)	< 0.05
	Nuojua-Huttunen et al, 1999 ⁵⁴	9/148 (6%)	63/418 (15%)	0.05
Implantation rate	Omland et al, 1998 ⁵³	9/49 (18%)	52/119 (44%)	< 0.05

Intrauterine insemination treatment in subfertility: an analysis of factors affecting outcome

Sinikka Nuojua-Huttunen^{1,4}, Candido Tomas²,
Risto Bloigu³, Leena Tuomivaara¹ and
Hannu Martikainen²

Table II. Intrauterine insemination pregnancy rate according to female characteristics and sperm parameters (after preparation)

	Pregnancies/cycle (%)
Infertility aetiology ^c	
Unexplained	63/413 (15.3)
Male factor	27/229 (11.8)
<u>Endometriosis</u>	<u>9/138 (6.5)</u>
Ovarian dysfunction	3/31 (9.7)



Success in intrauterine insemination: the role of etiology

KATJA AHINKO-HAKAMAA¹, HEINI HUHTALA^{2,3} & HELENA TINKANEN¹¹Department of Obstetrics and Gynaecology, Tampere University Hospital, ²School of Public Health, University of Tampere, and ³Research Unit, Tampere University Hospital, Tampere, Finland**Abstract**

Background. We aimed to identify the prognostic factors for the highest pregnancy rate and lowest multiple pregnancy rate in different infertility etiology groups among women undergoing insemination treatment. **Methods.** A total of 1,171 cycles among 532 infertile couples were retrospectively studied and the impact of different prognostic factors on pregnancy rate in five different etiology subgroups was analyzed. **Results.** The pregnancy rate/cycle was highest (19.2%) among women with anovulatory infertility and lowest (11.9%) in endometriosis based infertility. Multiple pregnancy rate varied between 3.6% (male infertility) and 13.2% (anovulatory infertility). In unexplained infertility ovarian stimulation resulting in three follicles (pregnancy rate 24.2%) and inseminated motile sperm count $> 30 \times 10^6$ (pregnancy rate 19.8%) were significant prognostic factors. In anovulatory infertility stimulation with sequential clomiphene citrate and human menopausal gonadotrophin was a positive predictive factor, with a pregnancy rate of 36%. In male infertility stimulation with sequential clomiphene citrate/human menopausal gonadotrophin resulted in the best pregnancy rate (25.0%). In endometriosis-based infertility the pregnancy rate was best with clomiphene citrate stimulation (21.1%) and inseminated motile sperm count $> 30 \times 10^6$ (24.3%). In combined infertility the highest pregnancy rate was with sequential clomiphene citrate/human menopausal gonadotrophin stimulation and with three follicles (30%), and even 18.2% with inseminated motile sperm count $< 5.0 \times 10^6$. **Conclusions.** The etiology of the infertility is important when optimal insemination treatment is planned. The impact of the woman's age, sperm count, stimulation protocol, and the follicle number on the pregnancy rate and multiple pregnancy rate is associated with the etiology of the infertility.

Table I. Pregnancy rates (%) per cycle (n) according to etiology.

	Unexplained		Male		Anovulatory		Endometriosis		Many reasons	
	%	n	%	n	%	n	%	n	%	n
Overall PR	14.1	637	18.2	154	19.2	198	11.9	126	17.9	56

DEBATE

**KOH/IUI öncesi Evre 1-2
endometriozisin
laparoskopik tedavisi
sonuçları olumlu etkiler
mi?**

No difference in cycle pregnancy rate and in cumulative live-birth rate between women with surgically treated minimal to mild endometriosis and women with unexplained infertility after controlled ovarian hyperstimulation and intrauterine insemination

Erika Werbrouck, M.D., Carl Spiessens, Ph.D., Christel Meuleman, M.D., and Thomas D'Hooghe, M.D., Ph.D.

Intervention(s): Controlled ovarian hyperstimulation using clomiphene citrate (23 cycles) or gonadotrophins (236 cycles) in combination with IUI.

Main Outcome Measure(s): Clinical PR per cycle and CLBR within four cycles of treatment with COH and IUI.

Result(s): The clinical PR per cycle was comparable in women with minimal or mild endometriosis (21% or 18.9%, respectively) and in women with unexplained infertility (20.5%). The CLBR within four cycles of COH and IUI was also comparable in women with minimal endometriosis, mild endometriosis, and unexplained infertility (70.2%, 68.2 %, 66.5%, respectively).

Conclusion(s): The data from our study suggest that COH and IUI shortly after laparoscopic excision of endometriosis is as effective as COH and IUI in patients with unexplained subfertility. (*Fertil Steril*® 2006;86: 566–71. ©2006 by American Society for Reproductive Medicine.)

Werbrouck E, 2006

Retrospektif, kontrollü

107 kadının 259 KOH/IUI siklusu

- Endometriozis (n = 58; 137 siklus, n = 41 siklus, minimal; n = 17 siklus, mild)
- Unexplained infertilite (n = 49; 100 siklus)



259 KOH + IUI siklusunun;
23 siklus CC
236 siklus gonadotropin

No difference in cycle pregnancy rate and in cumulative live-birth rate between women with surgically treated minimal to mild endometriosis and women with unexplained infertility after controlled ovarian hyperstimulation and intrauterine insemination

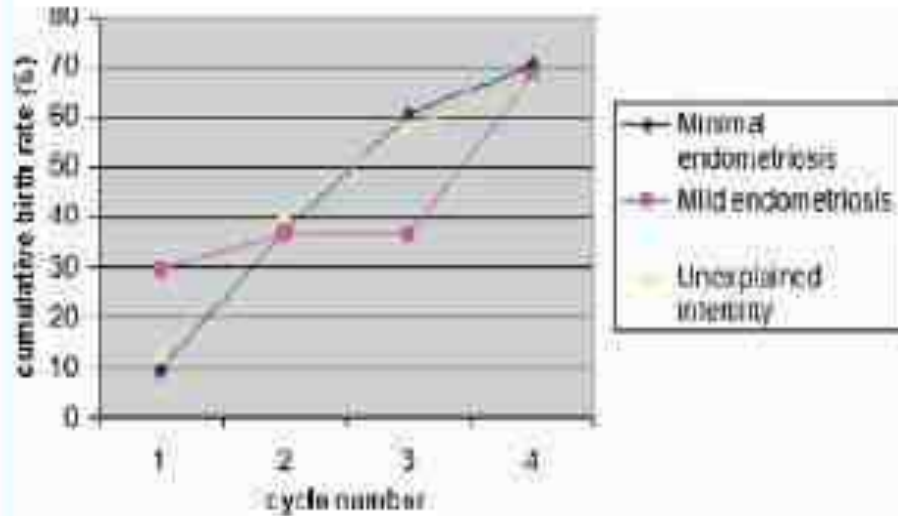
Erika Werbrouck, M.D., Carl Spiessens, Ph.D., Christel Meuleman, M.D., and Thomas D'Hooghe, M.D., Ph.D.

Clinical PR and live-birth rate per cycle after treatment with COH and IUI in women with endometriosis and women with unexplained infertility.

Characteristic	Total	Minimal–mild endometriosis	Minimal endometriosis	Mild endometriosis	Unexplained infertility
Patients	107	58	41	17	49
Cycles	259	137	100	37	122
No. of pregnancies/no. of cycles	<u>20%</u> (53/259)	<u>20%</u> (28/137)	<u>21%</u> (21/100)	<u>19%</u> (7/37)	<u>20%</u> (25/122)
No. of implantations/no. of cycles	23% (60/259)	23% (32/137)	25% (25/100)	19% (7/37)	23% (28/122)

Werbrouck E, Fertil Steril, 2006

Cumulative birth rate:



4 siklus
KOH/IUI'da
Kümülatif canlı
doğum oranı
Min end, %70
Mild end, %68
Unexplained, %66

Evre 1-2'de L/S
cerrahi(rezeksiyon-
ablasyon) sonrası 6 ay-1
yıl'da gebelik yoksa



KOH + IUI



Werbrock E, 2006

Conclusion(s): The data from our study suggest that COH and IUI shortly after laparoscopic excision of endometriosis is as effective as COH and IUI in patients with unexplained subfertility. (Fertil Steril® 2006;86: 566-71. ©2006 by American Society for Reproductive Medicine.)

No difference in cycle pregnancy rate and in cumulative live-birth rate between women with surgically treated minimal to mild endometriosis and women with unexplained infertility after controlled ovarian hyperstimulation and intrauterine insemination

Erika Werbrouck, M.D., Carl Spiessens, Ph.D., Christel Meuleman, M.D., and Thomas D'Hooghe, M.D., Ph.D.

**Evre 1-2 endometriozisde
KOH/IUI öncesi laparoskopik
rezeksiyon ya ablasyon
uygulanması siklik gebelik
oranlarını ve kümülatif canlı
doğum oranlarını
arttırmaktadır.**

Collectively, these data suggest that surgical treatment before COH and IUI restores the clinical PR after COH and IUI in women with minimal to mild endometriosis to the same level as reached in women with unexplained infertility.

Werbrouck E, Fertil Steril, 2006

-
- Endometriozisde evrelere göre KOH/IUI'in yeri nedir?**
 - Evrelere göre IVF-ET ile KOH/IUI sikluslarının farklılıkları nelerdir?**
-

Cycle-specific and cumulative fecundity in patients with endometriosis who are undergoing controlled ovarian hyperstimulation–intrauterine insemination or in vitro fertilization–embryo transfer

W. Paul Dmowski, M.D., Ph.D., Michelle Pry, M.S.N., Jianchi Ding, Ph.D., and Nasir Rana, M.D., M.P.H.

Result(s): With COH-IUI, 69 patients conceived; 65 conceived with IVF-ET; and 30 conceived with IVF-ET after COH-IUI (PR 11%, 47%, and 44%). With COH-IUI, six-cycle cf was 41%, and f for cycles 1–6 was 15%, 12%, 8%, 7%, 7%, and 0. With IVF-ET, three-cycle cf was 73%, whereas f for cycles 1–3 was 47%, 27%, and 33%. First-cycle f with IVF-ET was significantly higher than cf of six COH-IUI cycles. When the data were stratified according to the stage of endometriosis and women's age, the benefit of IVF over COH was even more pronounced. Prior COH-IUI failure did not adversely affect IVF-ET outcome.

Conclusion(s): In endometriosis, PR, f, and cf are significantly higher with IVF-ET than COH-IUI, especially in stage IV and in women >38 years of age. Considering adverse effects of prolonged ovarian stimulation on endometriosis, IVF-ET should be the first-line approach in the management of infertility in this disease. If COH-IUI is attempted, it should not exceed three to four cycles. (*Fertil Steril*® 2002;78:750–6. ©2002 by American Society for Reproductive Medicine.)



FERTILITY AND STERILITY

The Official Journal of the American Society for Reproductive Medicine

Dmowski et al. Fertil Steril 2002

Cycle-specific and cumulative fecundity in patients with endometriosis who are undergoing controlled ovarian hyperstimulation–intrauterine insemination or in vitro fertilization–embryo transfer

W. Paul Dmowski, M.D., Ph.D., Michelle Pry, M.S.
Nasir Rana, M.D., M.P.H.



**FERTILITY
STERILITY**

The Official Journal of the
Society for Reproductive Medicine

2002

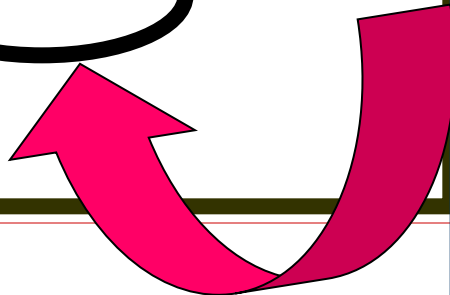
Retrospektif

313 endometriozisli kadın

202;648 KOH/IUI

56; KOH/IUI başarısız ve
bunlara 68 IVF-ET
siklus

111;139 IVF-ET siklus



Tüm hastalara
laparoskopik cerrahi
tedavi (lezyon ya da
endometrioma
rezeksiyonu ve
adezyolizis)
uygulanmış.

Extensive adezyon
Ağır tubal değişiklikler
Ağır male faktör
İnkomplet rezeksiyon

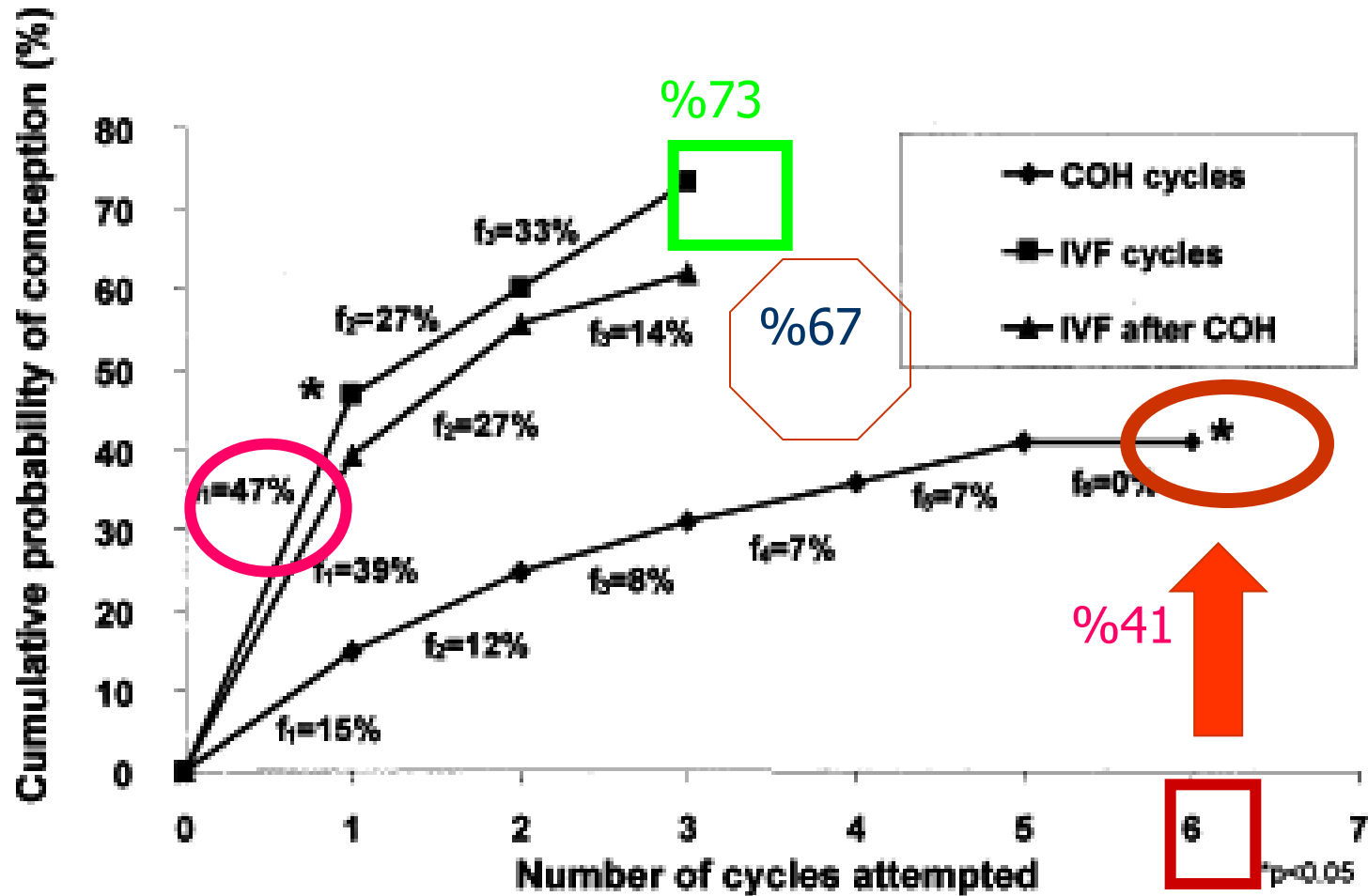
Cycle-specific and cumulative fecundity in patients with endometriosis who are undergoing controlled ovarian hyperstimulation–intrauterine insemination or in vitro fertilization–embryo transfer

W. Paul Dmowski, M.D., Ph.D., Michelle Pry, M.S.N., Jianchi Ding, Ph.D., and Nasir Rana, M.D., M.P.H.

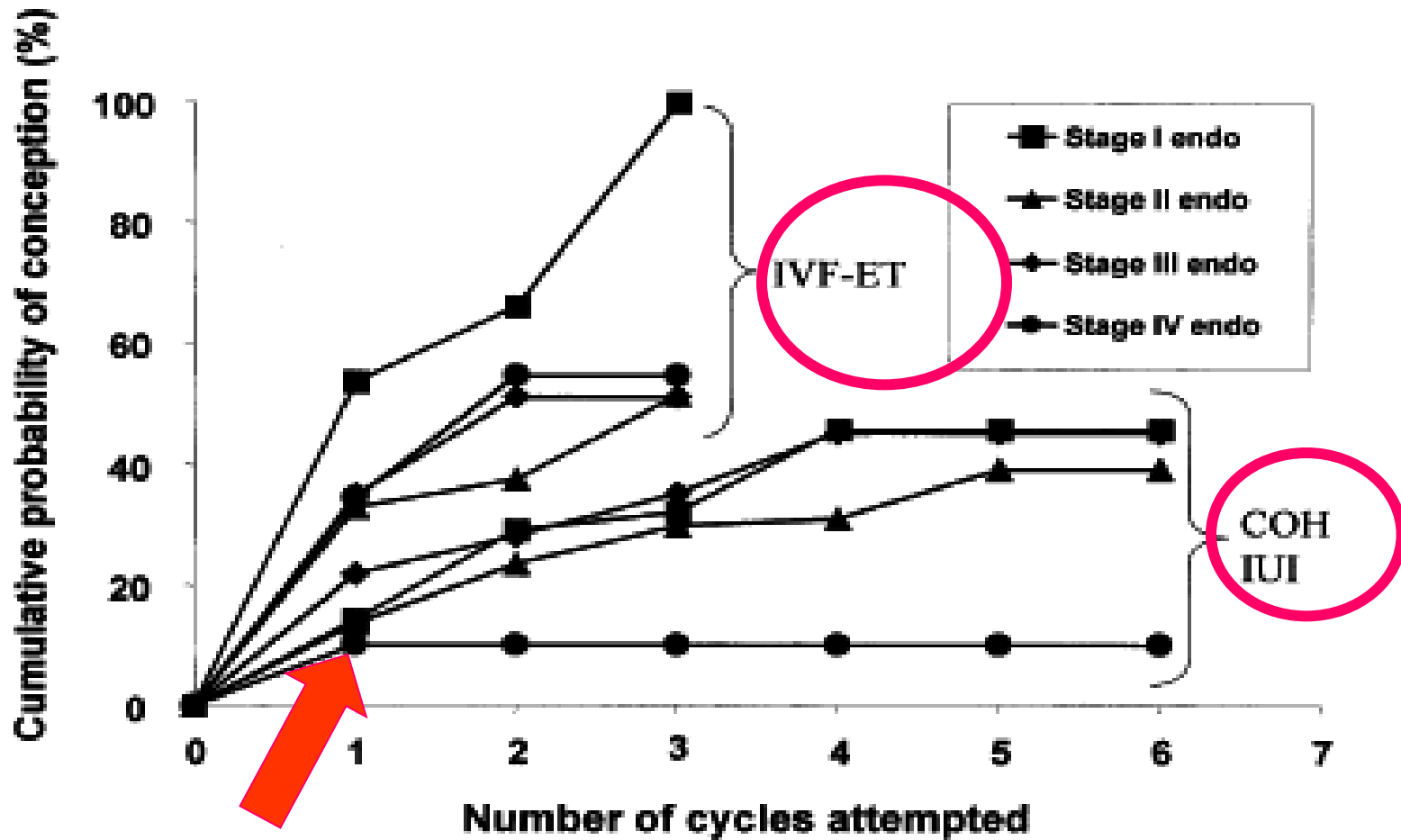
Parameter	COH-IUI	IVF-ET	IVF after COH
Patients/cycles	202/648	111/139	56/98
Mean age (range)	34 (21–43)	33 (23–43)	34 (23–43)
Years of infertility (mean)	3.3	4.3	4
Months since first diagnosis (mean)	46	38	30
Months since last surgery (mean)	43	38	46
% Stage distribution at last surgery (%)			
Stage I	19	21	25
Stage II	54	44 ^a	56
Stage III	19	15	8
Stage IV	8	20 ^a	11

KOH-IUI uygulanan ileri evre olgular; HSG patensi normal ve daha önce KOH-IUI uygulanmamış olgular.

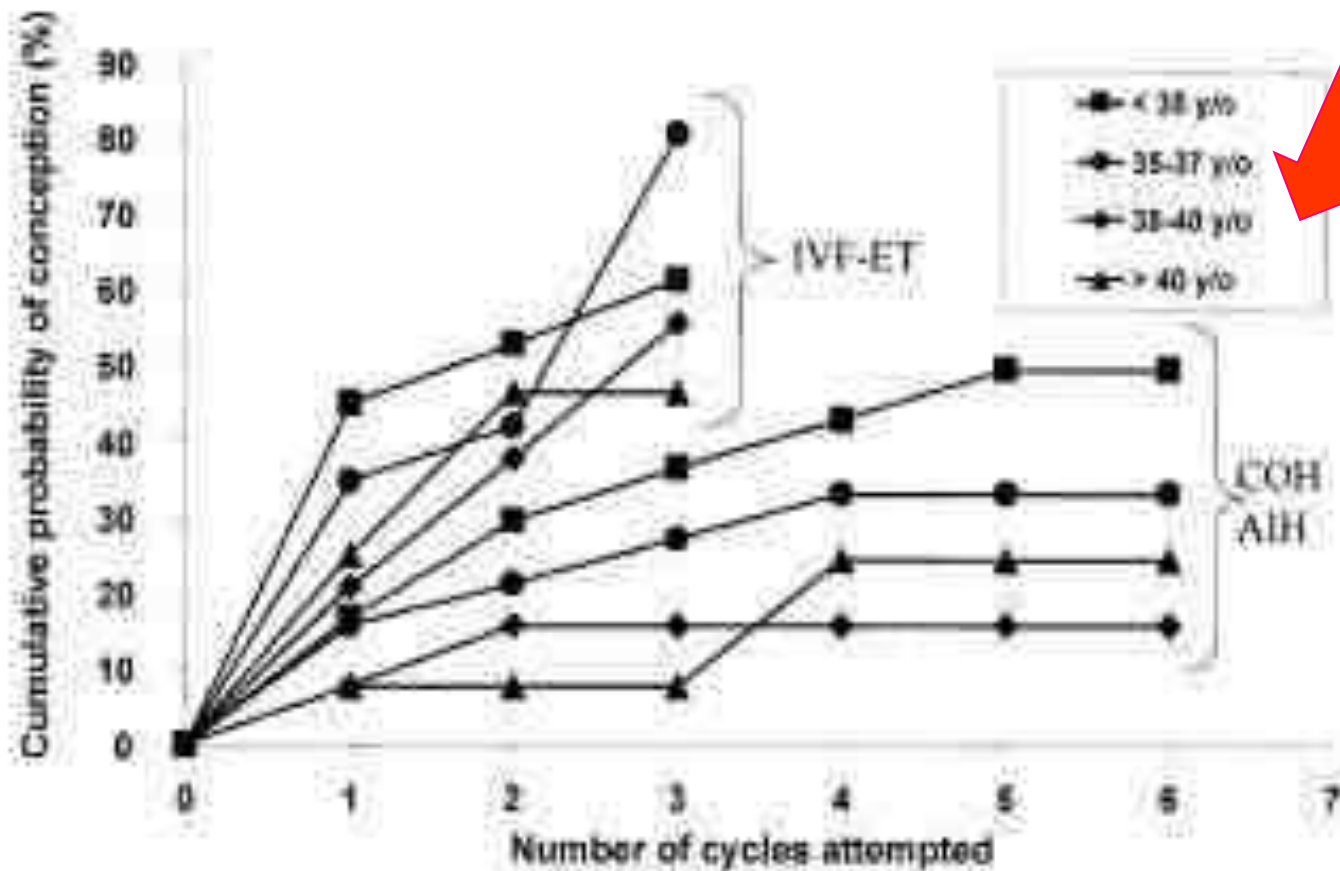
Cycle and cumulative fecundity in women with endometriosis undergoing COH-IUI, IVF-ET, or IVF-ET after failed COH-IUI.



Effect of COH-IUI or IVF-ET on fecundity according to the stage of endometriosis.



Effect of COH-IUI or IVF-ET on fecundity according to the age of the women with endometriosis.



Pregnancy rates and outcome according to treatment.

Treatment group	No. patients	No. cycles	No. (%) pregnant	No. embryos transferred (mean)	Implantation rate (%)	% Multiple gestation	No. SAB (%)
COH-IUI	202	648	69 (11)	N/A	N/A	10	18 (26)
IVF-ET	111	139	65 (47) ^a	2.9	27 ^a	26	13 (20)
IVF after COH	56	68	30 (44) ^a	3.1	23 ^a	27	5 (17)
IVF-ET + FUET	111	139	71 (51) ^a	2.8	23 ^a	25	13 (18)
Excluding significant male factor							
COH-IUI	172	534	58 (11)	N/A	N/A	8	10 (17)
IVF-ET	85	94	48 (51) ^a	2.8	29 ^a	26	7 (14)

^a Significantly different than the corresponding COH-IUI group at $P < .05$.

SAB = spontaneous abortions; FUET = cryopreserved embryo transfer.

Dmowski. Fecundity with COH or IVF in endometriosis. Fertil Steril 2002.

Treatment group	No. patients	No. cycles	No (%) pregnant
COH-IUI	202	648	69 (11)
IVF-ET	111	139	65 (47)^a
IVF after COH	56	68	30 (44)^a

Dmowski et al. Fertil Steril 2002

KOH/IUI'da kriterler

**Evre 1-2
<38 yař
Male faktör yok**



KOH/IUI

***ESHRE, ASRM
Dmowski, 2002***

Kaç siklus uygulanmalı??

Recommendation topics	Denmark	England and Wales	France	Netherlands
Indications for (un)stimulated IUI ^a				
Male-factor subfertility	Stimulated IUI	Unstimulated IUI	Stimulated IUI	Stimulated IUI in mild male-factor subfertility ^b Unstimulated IUI in severe male-factor subfertility ^c
Unexplained subfertility	Stimulated IUI	Unstimulated IUI	Stimulated IUI	Stimulated IUI
Minimal to mild endometriosis	Stimulated IUI	(Un)stimulated IUI	Stimulated IUI	Not mentioned
Indication for IUI or FSP	FSP in unexplained subfertility	FSP in unexplained subfertility	Not mentioned	Not mentioned
Single versus double IUI	Single IUI per cycle	Single IUI per cycle	Not mentioned	Not mentioned
Total number of IUI cycles				
Male-factor subfertility	3–6	Up to 6	Up to 6	Up to 6
Unexplained subfertility	3–6	Up to 6	At least 6	Up to 6
Minimal to mild endometriosis	3–6	Up to 6	Not mentioned	Not mentioned

Henüz konsensus yok..

Haagen EC, Hum Reprod, 2006

Treatment group	Montly fecundity (%) E1-2 end	Montly fecundity (%) Fertil
No treatment	2-6.5	15-20
After surgery	4.7	15-20
COH/IUI	13	15-20

Endometriozisde;

- **KOH/IUI, Laparoskopik tedavi (rezeksiyon ya da ablasyon) uygulanan ya da uygulanmayan evre 1-2 endometriozisde siklik fekundite ve canlı doğum oranlarını arttırmaktadır.**
 - **KOH/IUI öncesi laparoskopik tedavi uygulanması sonuçları olumlu etkilemektedir.Ancak RCT eksik...**
 - **KOH/IUI'in başarısını etkileyen en önemli faktörler evre ve yaştır.**
 - **KOH/IUI, evre 1-2, selektif olgularda tercih edilmelidir (<38 yaş ve ek infertilite faktörü olmayanlarda).**
-

TEŞEKKÜRLER

Panel 1: Theories on the pathogenesis of endometriosis

Retrograde menstruation/transplantation

Coelomic metaplasia

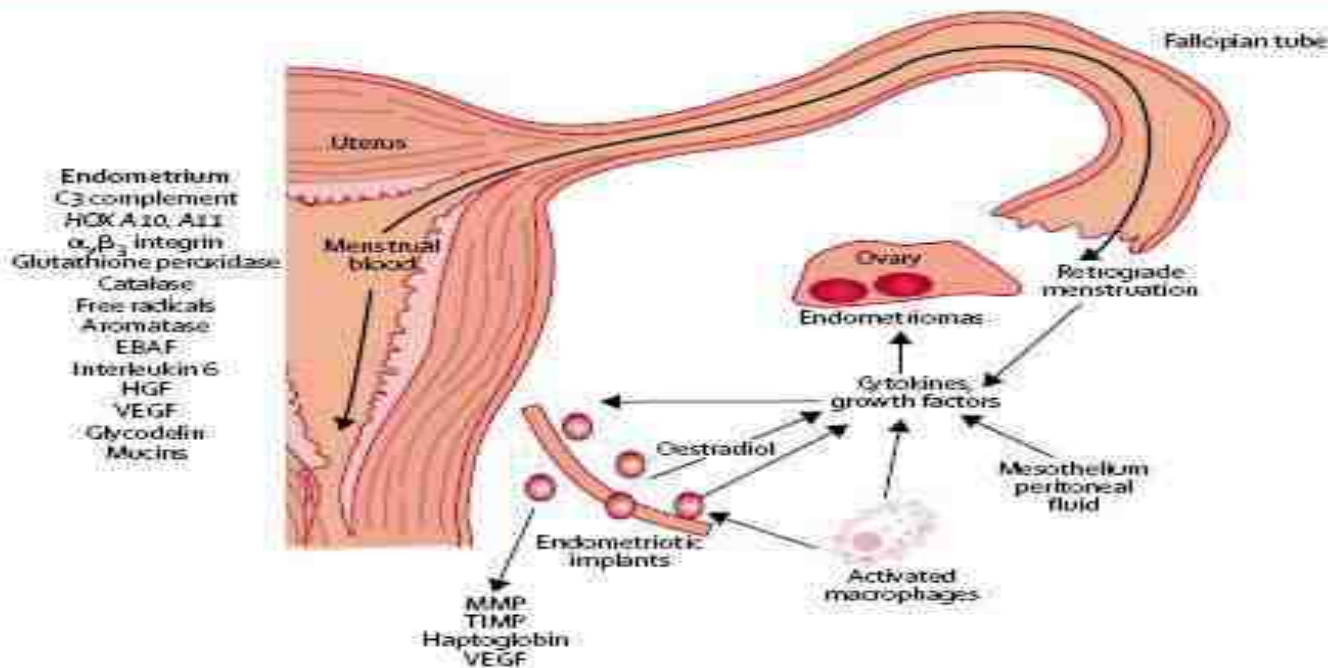
Altered cellular immunity

Metastasis

Genetic basis

Environmental basis

Multifactorial mode of inheritance with interactions between specific genes and the environment



Nedeni Açıklanamayan İnf + IUI

. Pregnancy rates following treatment for unexplained infertility.

Treatment	Monthly fecundity (%)
No treatment	3
IUI	4
Clomiphene	6
Clomiphene plus IUI	7
Gonadotrophin	8
Gonadotrophin plus IUI	18
IVF	23

Gonadotropinler, unexplained grupta IUI sikluslarında aylık fekundite oranlarını %10-15 oranında arttırmaktadır.

Fecundity of infertile women with minimal or mild endometriosis and women with unexplained infertility

Sylvie Bérubé, Ph.D., Sylvie Marcoux, Ph.D., Mylaine Langevin, R.N.,
Rodolphe Maheux, M.D., and The Canadian Collaborative Group on Endometriosis*

Prospektif kohort multicenter çalışma,

168 minimal-mild endometriozisli olgu

263 açıklanamayan infertilite

Her iki grup 36 hafta ekspektan olarak izlenmiş..



Result(s): Fecundity was 18.2% in infertile women with minimal or mild endometriosis and 23.7% in women without endometriosis (log-rank test). The fecundity rate was 2.52 per 100 person-months in women with endometriosis and 3.48 per 100 person-months in women with unexplained infertility. The crude and adjusted fecundity rate ratios were 0.72 and 0.83 (95% confidence interval = 0.53–1.32), respectively.

Conclusion(s): The fecundity of infertile women with minimal or mild endometriosis is not significantly lower than that of women with unexplained infertility. (Fertil Steril® 1998;69:1034–41. ©1998 by American Society for Reproductive Medicine.)

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Table 4 Fecundity of Infertile Women with Minimal or Mild Endometriosis and Women with Unexplained Infertility

Outcome	Endo Stage I-II	Unexplained Infertility	Crude RR	95% CI
CLPR > 20/52 within 36 weeks				
All recruited patients	18.15	23.66	0.77	0.52-1.15
After exclusion of patients with additional fertility treatment	15.7	23.6	0.66	0.45-1.17?
MFR (per 100 person-months)				
All recruited patients	2.52	3.48	0.72	0.46-1.12
After exclusion of patients with additional fertility treatment	<2.52	About 3.48	<0.72	?

Data based on Berube et al, 1998.¹¹

L/S ile tanı konmuş rezeksiyon ve ablasyon uygulanmamış evre 1-2 endometriozisde 36 haftalık expectant management sonrası siklik fekundite unexplained grupla benzerdir. Ancak >20 hafta gebelik oranı endometriozisde daha düşük bulunmuştur...

Bérubé et al., 1998

Reproduktif performans ve evre doğrudan ilişkilimidir??

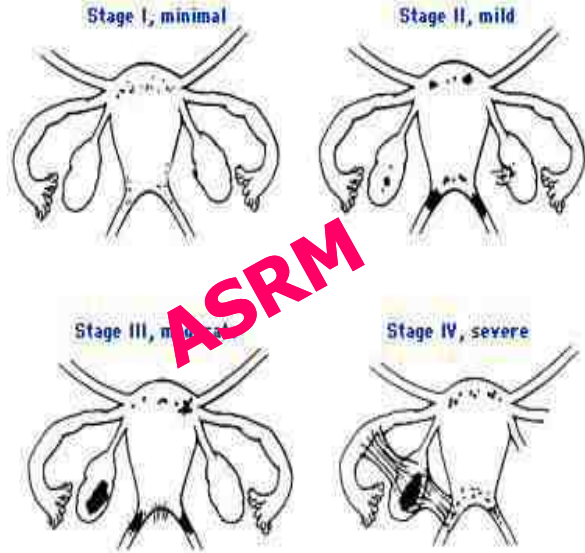


Table 3 Prevalence of Endometriosis According to Stage of Disease in Infertile and Fertile Women, Based on the Studies Published between 1988 and 2000 (Presented in Table 1 and Table 2)

Fertility Status	Number	Endometriosis	Minimal-Mild	Moderate-Severe
Previously fertile	7953	300 (4%)	216 (91%)	21 (9%)
Infertile	2372	781 (33%)	463 (58%)	215 (32%)
P value		$P < 0.0001$		$P < 0.0001$

Table 8 Negative Correlation between Stage of Endometriosis and Cumulative Pregnancy Rate (CPR) after Surgical Excision and Pelvic Reconstruction

CPR	Reference	Stage of Endometriosis				P value
		Minimal	Mild	Moderate	Severe	
1 year	Guzick et al, 1997 ²⁵	39%	31%	30%	25%	NS
1 year	Adamson et al, 1993 ³⁴	45%		32%		NS
1.5 years	Osuga et al, 2002 ⁸⁶	45%		28%		< 0.01

Examples of the classification of endometriosis Modified from the American Society for Reproductive Medicine.

Canis, M, Donnez, JG, Guzick, DS, et al. Revised American Society for American Society for Reproductive Medicine Classification of Endometriosis: 1996. Fertil Steril 1997; 67:817



Differences in characteristics among 1,000 women with endometriosis based on extent of disease

Ninet Sinait, Ph.D.,^a Katherine Plumb, B.A.,^b Louise Cotton, R.N.,^c Ann Lambert, Ph.D.,^c Stephen Kennedy, M.D.,^c Krina Zondervan, D.Phil.,^d and Pamela Stratton, M.D.^b

Presenting symptoms for endometriosis diagnosis based on self-reported data from 940 women with surgically diagnosed endometriosis completing the OXEGENE study questionnaire.

Symptoms that led to diagnosis

Symptoms that led to diagnosis	Group I ^a (N = 423)	Group II ^b (N = 517)	Total (N = 940)	P value ^c
Dysmenorrhea	332 (78.5)	408 (78.9)	740 (78.7)	.95
Pelvic pain	302 (71.4)	350 (67.7)	652 (69.4)	.25
Dyspareunia	218 (51.5)	204 (39.5)	422 (44.9)	<.001
Bowel upset (e.g., constipation, diarrhea)	143 (33.8)	199 (38.5)	342 (36.4)	.29
Bowel pain	114 (27.0)	159 (30.8)	273 (29.0)	.23
Infertility	91 (21.5)	155 (30.0)	246 (26.2)	.004
Ovarian mass/tumor	31 (7.3)	152 (29.4)	183 (19.5)	<.001
Dysuria	48 (11.4)	45 (8.7)	93 (9.9)	.21
Other urinary problems	24 (5.7)	34 (6.6)	58 (6.2)	.67

Conclusion(s): Pelvic pain is common to all with endometriosis and those with more extensive disease report higher rates of subfertility. Remarkably, the time to diagnosis was similar among women. (Fertil Steril® 2008;89:538–45. ©2008 by American Society for Reproductive Medicine.)

Reproductive performance, pain recurrence and disease relapse after conservative surgical treatment for endometriosis: the predictive value of the current classification system

Paolo Vercellini^{1,4}, Luigi Fedele², Giorgio Aimi¹, Olga De Giorgi¹, Dario Consonni³ and Pier Giorgio Crosignani¹

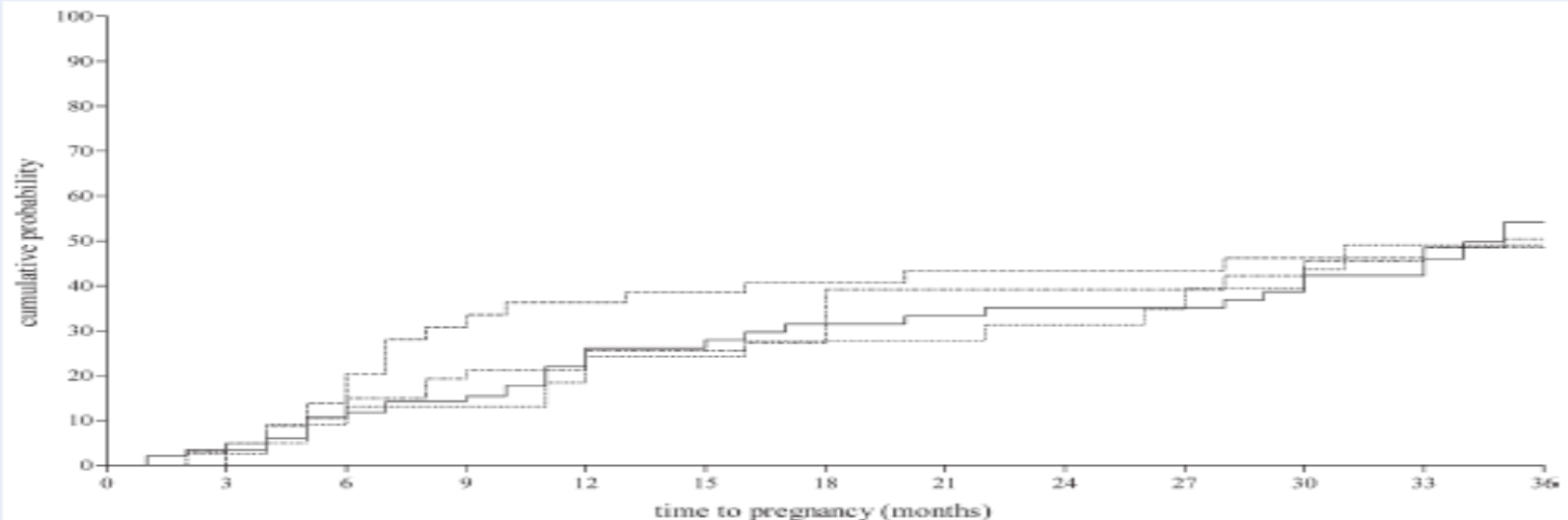


Figure 1 Cumulative 36-month probability of becoming pregnant by disease stage in 222 infertile women who underwent conservative surgery for endometriosis and had no other infertility factor (continuous line, stage I; dotted line, stage II; dashed line, stage III; dash-dotted line, stage IV). From Vercellini et al. (2006a), with permission.