

# Bölüm 52

## ESHRE GUIDELİNE 2014: ENDOMETRİOZİSLİ KADININ YÖNETİMİ

Prof. Dr. Önder ÇELİK  
Yrd. Doç. Dr. Murat BOZKURT  
Uzm. Dr. M. Akif ŞANLI

14 kişilik ESHRE Endometriozis grubu tarafından hazırlanan ve Ocak 2014 yılında yayınlanan bu guideline endometriozisle ilgili tanısai, medikal ve cerrahi yaklaşımları ayrıntılı olarak literatür bazında incelemiş ve klinisyenler için özet bilgiler haline getirip kullanımlarına sunmuştur. Ancak bu guideline endometriozis yönetiminin tüm aşamalarını bünyesinde barındıran ve başka kaynaklara ihtiyacı ortadan kaldıran bir eser anlamına gelmemelidir. Guideline daha çok endometriozis tanı ve tedavi yaklaşımlarını incelemiş ancak etyoloji, yeni tanı ve tedavi yaklaşımları konusunda bilgi vermemiş, sadece yapılması gereken bilimsel çalışmalarla ilgili önerilerde bulunmuştur. Bu yazı "B.A.J. Dunselman et al. ESHRE guideline:management of women with endometriosis. Human Reproduction, Vol.0, No.0 pp. 1-13, 2014" isimli yazının özet çevirisidir. **Editorial**

### Giriş

Endometriozis endometrium benzeri dokuların uterus dışında yerleşmesi ve kronik inflamatuvar bir reaksiyona yol açması olarak tanımlanır (Kennedy et al., 2005). Bazı endometriozisli hastalar ağrılı semptomlar veya infertilite ile başvururken bazılarında herhangi bir semptom yoktur. Kesin prevalansı bilinmemekle beraber reproduktif yaştaki kadınların %2-10'nunda infertil kadınların ise %50'sinde ortaya çıktığı tahmin edilmektedir (Eskenazi and Warner, 1997; Meuleman et al., 2009).

### Sorular ve Öneriler

#### Tanı

Birçok çalışma endometriozis tanısında gecikme olduğu konusunda hemfikirdir. Tanıda gecikme; Almanya ve Avusturya'da 10 yıl, İspanya ve İngiltere'de 8 yıl, Norveç'te 7 yıl, İtalya'da 7-10 yıl, İrlanda ve Belçika'da ise 4-5 yıl olarak rapor edilmiştir (Ballard et al., 2006; Nnoaham et al., 2011; Hudelist et al., 2012).

#### Hangi Semptomlar Endometriozisle İlgili veya Tanısaldır?

Birçok çalışmada; dismenore, kronik pelvik ağrı, derin dispareni, siklik intestinal şikayetler, yorgunluk, bitkinlik ve infertilite gibi semptomların endometriozisle ilgili olduğu saptanmış olmakla beraber çalışmaların tamamı retrospektif olarak dizayn edilmiş ve saptanan semptomların prediktif değerleri bulunmamıştır (Davis et al., 1993; Forman et al., 1993; Lemaire, 2004; Thomassin et al., 2004; Seracchioli et al., 2008; Luscombe et al., 2009; Bellelis et al., 2010). Ballard'ın 2008 yılında yapmış olduğu geniş retrospektif analizde (Ballard et al., 2008). endometriozis tanısında prediktif değeri olan aşağıdaki semptomlar saptanmıştır;

- İnfertil olgularda ciddi dismenore
- Abdominopelvik ağrı
- Dismenore

mıştır. OKS'lerin ve fiziksel ekzersizin primer önlemedeki faydaları kesin değildir (Vercellini et al., 2011; Vitonis et al., 2010).

### Endometriozis ve Kanser

Guideline komitesi, kanser gelişim riski ile ilgili danışmanlık isteyen endometriozisli kadınların klinisyen tarafından bilgilendirilmesini önerir;

- Endometriozisin kansere yol açtığına dair veri yoktur
- Endometrioziste kanser insidansı artmaz
- Over kanseri ve non-Hodgkin lenfoma gibi bazı kanserlerin insidansında hafif bir artış vardır.

Ayrıntılı bilgi için bakınız “B.A.J. Dunselman et al. ESHRE guideline:management of women with endometriosis. Human Reproduction, Vol.0, No.0 pp. 1–13, 2014”.

### Kaynaklar

1. Abou-Setta AM, Al-Inany HG, Farquhar CM. Levonorgestrel-releasing intrauterine device (LNG-IUD) for symptomatic endometriosis following surgery. Cochrane Database Syst Rev 2006.
2. Agarwal A, Gupta S, Sharma RK. Role of oxidative stress in female reproduction. Reprod Biol Endocrinol 2005;3:28.
3. Ahmad G, Duffy JM, Farquhar C, Vail A, Vandekerckhove P, Watson A, Wiseman D. Barrier agents for adhesion prevention after gynaecological surgery. Cochrane Database Syst Rev 2008.
4. Al Kadri H, Hassan S, Al-Fozan HM, Hajeer A. Hormone therapy for endometriosis and surgical menopause. Cochrane Database Syst Rev 2009.
5. Allen C, Hopewell S, Prentice A, Gregory D. Non-steroidal anti-inflammatory drugs for pain in women with endometriosis. Cochrane Database Syst Rev 2009.
6. Astin JA, Marie A, Pelletier KR, Hansen E, Haskell WL. A review of the incorporation of complementary and alternative medicine by mainstream physicians. Arch Intern Med 1998;158:2303–2310.
7. Ballard K, Lowton K, Wright J. What's the delay? A qualitative study of women's experiences of reaching a diagnosis of endometriosis. Fertil Steril 2006;86:1296–1301.
8. Ballard KD, Seaman HE, de Vries CS, Wright JT. Can symptomatology help in the diagnosis of endometriosis? Findings from a national case-control study—Part 1. BJOG 2008;115:1382–1391.
9. Barnhart K, Dunsmoor-Su R, Coutifaris C. Effect of endometriosis on in vitro fertilization. Fertil Steril 2002;77:1148–1155.
10. Bazot M, Lafont C, Rouzier R, Roseau G, Thomassin-Naggara I, Darai E. Diagnostic accuracy of physical examination, transvaginal sonography, rectal endoscopic sonography, and magnetic resonance imaging to diagnose deep infiltrating endometriosis. Fertil Steril 2009;92:1825–1833.
11. Bellelis P, Dias JA Jr, Podgaec S, Gonzales M, Baracat EC, Abrao MS. Epidemiological and clinical aspects of pelvic endometriosis—a case series. Rev Assoc Med Bras 2010;56:467–471.
12. Benaglia L, Somigliana E, Iemello R, Colpi E, Nicolosi AE, Ragni G. Endometrioma and oocyte retrieval-induced pelvic abscess: a clinical concern or an exceptional complication?. Fertil Steril 2008;89:1263–1266.
13. Benaglia L, Somigliana E, Vercellini P, Benedetti F, Iemello R, Vighi V, Santi G, Ragni G. The impact of IVF procedures on endometriosis recurrence. Eur J Obstet Gynecol Reprod Biol 2010;148:49–52.
14. Benaglia L, Somigliana E, Santi G, Scarduelli C, Ragni G, Fedele L. IVF and endometriosis-related symptom progression: insights from a prospective study. Hum Reprod 2011;26:2368–2372.

15. Benschop L, Farquhar C, van der Poel N, Heineman MJ. Interventions for women with endometrioma prior to assisted reproductive technology. *Cochrane Database Syst Rev* 2010.
16. Bergqvist A. Extragenital endometriosis. A review. *Eur J Surg* 1992;158:7–12.
17. Dunselman et al. Downloaded from <http://humrep.oxfordjournals.org/> by guest on April 14, 2014.
18. Bergqvist A, Jacobson J, Harris S. A double-blind randomized study of the treatment of endometriosis with nafarelin or nafarelin plus norethisterone. *Gynecol Endocrinol* 1997;11:187–194.
19. Bianchi PH, Pereira RM, Zanatta A, Alegretti JR, Motta EL, Serafini PC. Extensive excision of deep infiltrative endometriosis before in vitro fertilization significantly improves pregnancy rates. *J Minim Invasive Gynecol* 2009;16:174–180.
20. Brown CB, Luciano AA, Martin D, Peers E, Scrimgeour A, diZerega GS, Adept Adhesion Reduction Study G. Adept (icodextrin 4% solution) reduces adhesions after laparoscopic surgery for adhesiolysis: a double-blind, randomized, controlled study. *Fertil Steril* 2007;88:1413–1426.
21. Brown J, Pan A, Hart RJ. Gonadotrophin-releasing hormone analogues for pain associated with endometriosis. *Cochrane Database Syst Rev* 2010.
22. Brown J, Kives S, Akhtar M. Progestagens and anti-progestagens for pain associated with endometriosis. *Cochrane Database Syst Rev* 2012.
23. Burks-Wicks C, Cohen M, Fallbacher J, RNT, Wieser F. A Western primer of Chinese herbal therapy in endometriosis and infertility. *Womens Health (Lond Engl)* 2005;1:447–463.
24. Carmona F, Martinez-Zamora MA, Rabanal A, Martinez-Roman S, Balasch J. Ovarian cystectomy versus laser vaporization in the treatment of ovarian endometriomas: a randomized clinical trial with a five-year follow-up. *Fertil Steril* 2011;96:251–254.
25. Chan E. Quality of efficacy research in complementary and alternative medicine. *JAMA* 2008;299:2685–2686.
26. Chang FH, Chou HH, Soong YK, Chang MY, Lee CL, Lai YM. Efficacy of isotopic CO<sub>2</sub> laser laparoscopic evaporation in the treatment of infertile patients with minimal and mild endometriosis: a life table cumulative pregnancy rates study. *J Am Assoc Gynecol Laparosc* 1997;4:219–223.
27. Chapron C, Dubuisson JB, Pansini V, Vieira M, Faconnier A, Barakat H, Dousset B. Routine clinical examination is not sufficient for diagnosing and locating deeply infiltrating endometriosis. *J Am Assoc Gynecol Laparosc* 2002;9:115–119.
28. Chapron C et al. Oral contraceptives and endometriosis: the past use of oral contraceptives for treating severe primary dysmenorrhea is associated with endometriosis, especially deep infiltrating endometriosis. *Hum Reprod* 2011;26:2028–2035.
29. Coccia ME, Rizzello F, Gianfranco S. Does controlled ovarian hyperstimulation in women with a history of endometriosis influence recurrence rate? *J Womens Health (Larchmt)* 2010;19:2063–2069.
30. Condous G, Van Calster B, Van Huffel S, Lam A. What is the value of preoperative bimanual pelvic examination in women undergoing laparoscopic total hysterectomy? *J Minim Invasive Gynecol* 2007;14:334–338.
31. D'Hooghe TM, Denys B, Spiessens C, Meuleman C, Debrock S. Is the endometriosis recurrence rate increased after ovarian hyperstimulation? *Fertil Steril* 2006;86:283–290.
32. Davis GD, Thillet E, Lindemann J. Clinical characteristics of adolescent endometriosis. *J Adolesc Health* 1993;14:362–368.
33. Davis L, Kennedy SS, Moore J, Prentice A. Modern combined oral contraceptives for pain associated with endometriosis. *Cochrane Database Syst Rev* 2007.
34. De Cicco C, Corona R, Schonman R, Mailova K, Ussia A, Koninckx P. Bowel resection for deep endometriosis: a systematic review. *BJOG* 2011;118:285–291.
35. Donnez J, Squifflet J. Complications, pregnancy and recurrence in a prospective series of 500 patients operated on by the shaving technique for deep rectovaginal endometriotic nodules. *Hum Reprod* 2010;25:1949–1958.
36. Donnez J, Wyns C, Nisolle M. Does ovarian surgery for endometriomas impair the ovarian response to gonadotropin? *Fertil Steril* 2001;76:662–665.
37. Eisenberg DM, Davis RB, Ettner SL, Appel S, Wilkey S, Van Rompay M, Kessler RC. Trends in alternative medicine use in the United States, 1990–1997: results of a follow-up national survey. *JAMA* 1998;280:1569–1575.
38. Eskenazi B, Warner ML. Epidemiology of endometriosis. *Obstet Gynecol Clin North Am* 1997;24:235–258.
39. Eskenazi B, Warner M, Bonsignore L, Olive D, Samuels S, Vercellini P. Validation study of nonsurgical diagnosis of endometriosis. *Fertil Steril* 2001;76:929–935.
40. Ferreira RA, Vieira CS, Rosa ESJC, Rosa-e-Silva AC, Nogueira AA, Ferriani RA. Effects of the levonorgestrel-releasing intrauterine system on cardiovascular risk markers in patients with endometriosis: a comparative study with the GnRH analogue. *Contraception* 2010;81:117–122.
41. Ferrero S, Gillott DJ, Venturini PL, Remorgida V. Use of aromatase inhibitors to treat endometriosis-related pain symptoms: a systematic review. *Reprod Biol Endocrinol* 2011;9:89.
42. Flower A, Liu JP, Chen S, Lewith G, Little P. Chinese herbal medicine for endometriosis. *Cochrane Database Syst Rev* 2009.
43. Forman RG, Robinson JN, Mehta Z, Barlow DH. Patient history as a simple predictor of pelvic pathology in subfertile women. *Hum Reprod* 1993;8:53–55.
44. Furness S, Yap C, Farquhar C, Cheong Y. Pre and post-operative medical therapy for endometriosis surgery. *Cochrane Database Syst Rev* 2004.

45. Gerhard I, Postneek F. Auricular acupuncture in the treatment of female infertility. *Gynecol Endocrinol* 1992;6:171–181.
46. Gomes MK, Ferriani RA, Rosa e Silva JC, Japur de Sa Rosa e Silva AC, Vieira CS, Candido dos Reis FJ. The levonorgestrel-releasing intrauterine system and endometriosis staging. *Fertil Steril* 2007;87:1231–1234.
47. Gylfason JT, Kristjansson KA, Sverrisdottir G, Jonsdottir K, Rafnsson V, Geirsson RT. Pelvic endometriosis diagnosed in an entire nation over 20 years. *Am J Epidemiol* 2010;172:237–243.
48. Harris P, Rees R. The prevalence of complementary and alternative medicine use among the general population: a systematic review of the literature. *Complement Ther Med* 2000;8:88–96.
49. Hart RJ, Hickey M, Maouris P, Buckett W. Excisional surgery versus ablative surgery for ovarian endometriomata. *Cochrane Database Syst Rev* 2008.
50. Healey M, Ang WC, Cheng C. Surgical treatment of endometriosis: a prospective randomized double-blinded trial comparing excision and ablation. *Fertil Steril* 2010;94:2536–2540.
51. Hudelist G, English J, Thomas AE, Tinelli A, Singer CF, Keckstein J. Diagnostic accuracy of transvaginal ultrasound for non-invasive diagnosis of bowel endometriosis: systematic review and meta-analysis. *Ultrasound Obstet Gynecol* 2011;37:257–263.
52. Hudelist G, Fritzer N, Thomas A, Niehues C, Oppelt P, Haas D, Tammaa A, Salzer H. Diagnostic delay for endometriosis in Austria and Germany: causes and possible consequences. *Hum Reprod* 2012;27:3412–3416.
53. Hughes E, Brown J, Collins JJ, Farquhar C, Fedorkow DM, Vandekerckhove P. Ovulation suppression for endometriosis. *Cochrane Database Syst Rev* 2007.
54. Jacobson TZ, Duffy JM, Barlow D, Koninckx PR, Garry R. Laparoscopic surgery for pelvic pain associated with endometriosis. *Cochrane Database Syst Rev* 2009.
55. Jacobson TZ, Duffy JM, Barlow D, Farquhar C, Koninckx PR, Olive D. Laparoscopic surgery for subfertility associated with endometriosis. *Cochrane Database Syst Rev* 2010.
56. Management guidelines for women with endometriosis 11 Downloaded from <http://humrep.oxfordjournals.org/> by guest on April 14, 2014.
57. Jenkins TR, Liu CY, White J. Does response to hormonal therapy predict presence or absence of endometriosis? *J Minim Invasive Gynecol* 2008;15:82–86.
58. Joseph J, Sahn SA. Thoracic endometriosis syndrome: new observations from an analysis of 110 cases. *Am J Med* 1996;100:164–170.
59. Jubanyik KJ, Comite F. Extrapelvic endometriosis. *Obstet Gynecol Clin North Am* 1997;24:411–440.
60. Kennedy S, Bergqvist A, Chapron C, D'Hooghe T, Dunselman G, Greb R, Hummelshoj L, Prentice A, Saridogan E, ESHRE Special Interest Group for Endometriosis and Endometrium Guideline Development. ESHRE guideline for the diagnosis and treatment of endometriosis. *Hum Reprod* 2005;20:2698–2704.
61. Kondo W, Bourdel N, Tamburro S, Cavoli D, Jardon K, Rabischong B, Botchorishvili R, Pouly J, Mage G, Canis M. Complications after surgery for deeply infiltrating pelvic endometriosis. *BJOG* 2011;118:292–298.
62. Koninckx PR, Meuleman C, Oosterlynck D, Cornillie FJ. Diagnosis of deep endometriosis by clinical examination during menstruation and plasma CA-125 concentration. *Fertil Steril* 1996;65:280–287.
63. Lemaire GS. More than just menstrual cramps: symptoms and uncertainty among women with endometriosis. *J Obstet Gynecol Neonatal Nurs* 2004;33:71–79.
64. Liang CC, Tsai CC, Chen TC, Soong YK. Management of perineal endometriosis. *Int J Gynaecol Obstet* 1996;53:261–265.
65. Ling FW. Randomized controlled trial of depot leuprolide in patients with chronic pelvic pain and clinically suspected endometriosis. *Pelvic Pain Study Group. Obstet Gynecol* 1999;93:51–58.
66. Luscombe GM, Markham R, Judio M, Grigoriu A, Fraser IS. Abdominal bloating: an under-recognized endometriosis symptom. *J Obstet Gynaecol Can* 2009;31:1159–1171.
67. Makarainen L, Ronnberg L, Kauppila A. Medroxyprogesterone acetate supplementation diminishes the hypoestrogenic side effects of gonadotropin-releasing hormone agonist without changing its efficacy in endometriosis. *Fertil Steril* 1996;65:29–34.
68. Marinis A, Vassiliou J, Kannas D, Theodosopoulos TK, Kondi-Pafiti A, Kairi E, Smyrniotis V. Endometriosis mimicking soft tissue tumors: diagnosis and treatment. *Eur J Gynaecol Oncol* 2006;27:168–170.
69. Marjoribanks J, Proctor M, Farquhar C, Derks RS. Non-steroidal anti-inflammatory drugs for dysmenorrhoea. *Cochrane Database Syst Rev* 2010.
70. May KE, Conduit-Hulbert SA, Villar J, Kirtley S, Kennedy SH, Becker CM. Peripheral biomarkers of endometriosis: a systematic review. *Hum Reprod Update* 2010;16:651–674.
71. May KE, Villar J, Kirtley S, Kennedy SH, Becker CM. Endometrial alterations in endometriosis: a systematic review of putative biomarkers. *Hum Reprod* 2011;17:637–653.
72. Update 2011;17:637–653.
73. Meuleman C, Vandenabeele B, Fieuws S, Spiessens C, Timmerman D, D'Hooghe T. High prevalence of endometriosis in infertile women with normal ovulation and normospermic partners. *Fertil Steril* 2009;92:68–74.
74. Meuleman C, D'Hoore A, Van Cleynenbreugel B, Tomassetti C, D'Hooghe T. Why we need international agreement on terms and definitions to assess clinical outcome after endometriosis surgery. *Hum Reprod* 2011a;26:1598–1599; author reply 1599–1600.
75. Meuleman C, Tomassetti C, D'Hoore A, Van Cleynenbreugel B, Penninckx F, Vergote I, D'Hooghe T. Surgical treatment of deeply infiltrating endometriosis

- with colorectal involvement. *Hum Reprod Update* 2011b;17:311–326.
76. Moen MH, Stokstad T. A long-term follow-up study of women with asymptomatic endometriosis diagnosed incidentally at sterilization. *Fertil Steril* 2002;78:773–776
  77. Moghissi KS, Schlaff WD, Olive DL, Skinner MA, Yin H. Goserelin acetate (Zoladex) with or without hormone replacement therapy for the treatment of endometriosis. *Fertil Steril* 1998;69:1056–1062.
  78. MolBW, Bayram N, Lijmer JG, Wiegerinck MA, BongersMY, van der Veen F, Bossuyt PM. The performance of CA-125 measurement in the detection of endometriosis: a meta-analysis. *Fertil Steril* 1998;70:1101–1108.
  79. Moore J, Copley S, Morris J, Lindsell D, Golding S, Kennedy S. A systematic review of the accuracy of ultrasound in the diagnosis of endometriosis. *Ultrasound Obstet Gynecol* 2002;20:630–634.
  80. Nawathe A, Patwardhan S, Yates D, Harrison GR, Khan KS. Systematic review of the effects of aromatase inhibitors on pain associated with endometriosis. *BJOG* 2008;115:818–822.
  81. Nezhat C, Crowley S, Nezhat F. Videolaseroscopy for the treatment of endometriosis associated with infertility. *Fertil Steril* 1989;51:237–240.
  82. Nezhat C, Hajhosseini B, King LP. Robotic-assisted laparoscopic treatment of bowel, bladder, and ureteral endometriosis. *JSL* 2011;15:387–392.
  83. Nisolle M, Pasleau F, Foidart JM. Extragenital endometriosis. *J Gynecol Obstet Biol Reprod (Paris)* 2007;36:173–178.
  84. Nissotakis C, Zouros E, Revelos K, Sakorafas GH. Abdominal Wall endometrioma: a case report and review of the literature. *AORN J* 2010;91:730–742; quiz 743–735.
  85. Nnoaham KE, Hummelshoj L, Webster P, d'Hooghe T, de Cicco Nardone F, de Cicco Nardone C, Jenkinson C, Kennedy SH, Zondervan KT, World Endometriosis Research Foundation Global Study of Women's Health consortium. Impact of endometriosis on quality of life and work productivity: a multicenter study across ten countries. *Fertil Steril* 2011; 96:366–373 e368.
  86. Nowroozi K, Chase JS, Check JH, Wu CH. The importance of laparoscopic coagulation of mild endometriosis in infertile women. *Int J Fertil* 1987;32:442–444.
  87. Nulsen JC, Walsh S, Dumez S, Metzger DA. A randomized and longitudinal study of human menopausal gonadotropin with intrauterine insemination in the treatment of infertility. *Obstet Gynecol* 1993;82:780–786.
  88. Olive DL, Stohs GF, Metzger DA, Franklin RR. Expectant management and hydrotubations in the treatment of endometriosis-associated infertility. *Fertil Steril* 1985;44:35–41.
  89. Opoien HK, Fedorcak P, Byholm T, Tanbo T. Complete surgical removal of minimal and mild endometriosis improves outcome of subsequent IVF/ICSI treatment. *Reprod Biomed Online* 2011;23:389–395.
  90. Pabuccu R, Onalan G, Kaya C. GnRH agonist and antagonist protocols for stage I-II endometriosis and endometrioma in in vitro fertilization/ intracytoplasmic sperm injection cycles. *Fertil Steril* 2007;88:832–839.
  91. Papaleo E, Ottolina J, Viganò P, Brigante C, Marsiglio E, De Michele F, Candiani M. Deep pelvic endometriosis negatively affects ovarian reserve and the number of oocytes retrieved for in vitro fertilization. *Acta Obstet Gynecol Scand* 2011;90:878–884.
  92. Pascual MA, Guerriero S, Hereter L, Barri-Soldevila P, Ajossa S, Graupera B, Rodriguez I. Diagnosis of endometriosis of the rectovaginal septum using intra-trait three-dimensional ultrasonography. *Fertil Steril* 2010;94:2761–2765.
  93. Petta CA, Ferriani RA, Abrao MS, Hassan D, Rosa ESJC, Podgaec S, Bahamondes L. Randomized clinical trial of a levonorgestrel-releasing intrauterine system and a depot GnRH analogue for the treatment of chronic pelvic pain in women with endometriosis. *Hum Reprod* 2005;20:1993–1998.
  94. Proctor ML, Smith CA, Farquhar CM, Stones RW. Transcutaneous electrical nerve stimulation and acupuncture for primary dysmenorrhoea. *Cochrane Database Syst Rev* 2002.
  95. Proctor M, Latthe P, Farquhar C, Khan K, Johnson N. Surgical interruption of pelvic nerve pathways for primary and secondary dysmenorrhoea. *Cochrane Database Syst Rev* 2005.
  96. Dunselman et al. Downloaded from <http://humrep.oxfordjournals.org/> by guest on April 14, 2014
  97. Rawson JM. Prevalence of endometriosis in asymptomatic women. *J Reprod Med* 1991;36:513–515.
  98. Ripps BA, Martin DC. Correlation of focal pelvic tenderness with implant dimension and stage of endometriosis. *J Reprod Med* 1992;37:620–624.
  99. Sallam HN, Garcia-Velasco JA, Dias S, Arici A. Long-term pituitary down-regulation before in vitro fertilization (IVF) for women with endometriosis. *Cochrane Database Syst Rev* 2006.
  100. Scottish Intercollegiate Guidelines Network EH, 8–10 Hillside Crescent, Edinburgh EH7 5EA. 2010. [www.sign.ac.uk](http://www.sign.ac.uk) (12 December 2013, date last accessed).
  101. Seracchioli R, Mabrouk M, Guerrini M, Manuzzi L, Savelli L, Frasca C, Venturoli S. Dyschezia and posterior deep infiltrating endometriosis: analysis of 360 cases. *J Minim Invasive Gynecol* 2008;15:695–699.
  102. Seracchioli R, Mabrouk M, Manuzzi L, Vicenzi C, Frasca C, Elmakky A, Venturoli S. Post-operative use of oral contraceptive pills for prevention of anatomical relapse or symptom-recurrence after conservative surgery for endometriosis. *Hum Reprod* 2009;24:2729–2735.
  103. Sesti F, Pietropolli A, Capozzolo T, Broccoli P, Pierangeli S, Bollea MR, Piccione E. Hormonal suppression treatment or dietary therapy versus placebo in the control of painful symptoms after conservative surgery for endometriosis stage III–IV. A randomized comparative trial. *Fertil Steril* 2007;88:1541–1547.

104. Song JY, Borncamp E, Mehaffey P, Rotman C. Large abdominal Wall endometrioma following laparoscopic hysterectomy. *JLS* 2011; 15:261–263.
105. Stratton P, Winkel C, Premkumar A, Chow C, Wilson J, Hearn-Stokes R, Heo S, Merino M, Nieman LK. Diagnostic accuracy of laparoscopy, magnetic resonance imaging, and histopathologic examination for the detection of endometriosis. *Fertil Steril* 2003;79:1078–1085.
106. Taskin O, Yalcinoglu AI, Kucuk S, Uryan I, Buhur A, Burak F. Effectiveness of tibolone on hypoestrogenic symptoms induced by goserelin treatment in patients with endometriosis. *Fertil Steril* 1997;67:40–45.
107. Thomassin I, Bazot M, Detchev R, Barranger E, Cortez A, Darai E. Symptoms before and after surgical removal of colorectal endometriosis that are assessed by magnetic resonance imaging and rectal endoscopic sonography. *Am J Obstet Gynecol* 2004;190:1264–1271.
108. Trew G, Pistofidis G, Pados G, Lower A, Mettler L, Wallwiener D, Korell M, Pouly JL, Coccia ME, Audebert A et al. Gynaecological endoscopic evaluation of 4% icodextrin solution: a European, multi-centre, double-blind, randomized study of the efficacy and safety in the reduction of de novo adhesions after laparoscopic gynaecological surgery. *Hum Reprod* 2011;26:2015–2027.
109. *Reprod* 2011;26:2015–2027.
110. Tummon IS, Asher LJ, Martin JS, Tulandi T. Randomized controlled trial of superovulation and insemination for infertility associated with minimal or mild endometriosis. *Fertil Steril* 1997;68:8–12.
111. Van Holsbeke C, Van Calster B, Guerriero S, Savelli L, Paladini D, Lissoni AA, Czekierdowski A, Fischerova D, Zhang J, Mestdagh G et al. Endometriomas: their ultrasound characteristics. *Ultrasound Obstet Gynecol* 2010;35: 730–740.
112. Vercellini P, Trespidi L, Colombo A, Vendola N, Marchini M, Crosignani PG. A gonadotropin-releasing hormone agonist versus a low-dose oral contraceptive for pelvic pain associated with endometriosis. *Fertil Steril* 1993;60:75–79.
113. Vercellini P, Frontino G, De Giorgi O, Pietropaolo G, Pasin R, Crosignani PG. Continuous use of an oral contraceptive for endometriosis-associated recurrent dysmenorrhea that does not respond to a cyclic pill regimen. *Fertil Steril* 2003;80:560–563.
114. Vercellini P, Fedele L, Aimi G, De Giorgi O, Consonni D, Crosignani PG. Reproductive performance, pain recurrence and disease relapse after conservative surgical treatment for endometriosis: the predictive value of the current classification system. *Hum Reprod* 2006;21:2679–2685.
115. Vercellini P, Barbara G, Somigliana E, Bianchi S, Abbiati A, Fedele L. Comparison of contraceptive ring and patch for the treatment of symptomatic endometriosis. *Fertil Steril* 2010a;93:2150–2161.
116. Vercellini P, Somigliana E, Vigano P, De Matteis S, Barbara G, Fedele L. Post-operative endometriosis recurrence: a plea for prevention based on pathogenetic, epidemiological and clinical evidence. *Reprod Biomed Online* 2010b;21:259–265.
117. Vercellini P, Eskenazi B, Consonni D, Somigliana E, Parazzini F, Abbiati A, Fedele L. Oral contraceptives and risk of endometriosis: a systematic review and meta-analysis. *Hum Reprod Update* 2011;17:159–170.
118. Vitonis AF, Hankinson SE, Hornstein MD, Missmer SA. Adult physical activity and endometriosis risk. *Epidemiology* 2010;21:16–23.
119. Werbrouck E, Spiessens C, Meuleman C, D'Hooghe T. 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. *Fertil Steril* 2006;86:566–571.
120. Wright J, Lotfallah H, Jones K, Lovell D. A randomized trial of excision versus ablation for mild endometriosis. *Fertil Steril* 2005;83:1830–1836.
121. Wurn BF, Wurn LJ, King CR, Heuer MA, Roscow AS, Hornberger K, Scharf ES. Treating fallopian tube occlusion with a manual pelvic physical therapy. *Altern Ther Health Med* 2008;14:18–23.
122. Wykes CB, Clark TJ, Khan KS. Accuracy of laparoscopy in the diagnosis of endometriosis: a systematic quantitative review. *BJOG* 2004;111:1204–1212.
123. Xu X, Yin H, Tang D, Zhang L, Gosden RG. Application of traditional Chinese medicine in the treatment of infertility. *Hum Fertil (Camb)* 2003;6:161–168.
124. Zegers-Hochschild F, Adamson GD, de Mouzon J, Ishihara O, Mansour R, Nygren K, Sullivan E, van der Poel S, International Committee for Monitoring Assisted Reproductive Technology and World Health Organisation. The International Committee for Monitoring Assisted Reproductive Technology (ICMART) and the World Health Organization (WHO) Revised Glossary on ART Terminology, 2009. *Hum Reprod* 2009;24:2683–2687.
125. Zhou J, Qu F. Treating gynaecological disorders with traditional Chinese medicine: a review. *Afr J Tradit Complement Altern Med* 2009; 6:494–517.
126. Zhu X, Hamilton KD, McNicol ED. Acupuncture for pain in endometriosis. *Cochrane Database Syst Rev* 2011.