

Association between body mass index and endometriosis risk: a meta-analysis

The study "Association between body mass index and endometriosis risk: a meta-analysis" was published in Oncotarget

Endometriosis increases the risk of obstetric and neonatal complications.

A retrospective cohort study from Denmark showed that adverse obstetric outcomes was significantly increased in women with endometriosis.

Endometriosis Awareness Turkey (EndoMarch Turkey)

Turkish Endometriosis and Adenomyosis Society have carried out "Endometriosis Awareness Panel" in collaboration with Kadikoy Municipality and Lions Club in March 23, 2017.

4 EUROPEAN CONGRESS ON ENDOMETRIOSIS
September 20 - 23, 2018
Antalya / Turkey
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SELD CONGRESS 2017
13th CONGRESS OF THE SOCIETY OF ENDOMETRIOSIS AND UTERINE DISORDERS
FIBROIDS & UTERINE BLEEDING: UNLOCKING THE ISSUES
2017 APRIL 6, 7, 8 SINGAPORE

PREFACE

Dear Colleagues we are with you again in this second issue and this new issue is as colorful as the first one. Our bulletin will be presented quarterly. Turkish Endometriosis and Adenomyosis Society have achieved more success in last three months. The most prestigious one is that we attain the opportunity to organize a course in 13th World Endometriosis Society Congress in Vancouver-Canada in May 2017. In this course, Prof. Engin Oral, Prof Gurkan Uncu , Prof Yücel Karaman, Prof Kutay Biberoglu, Assoc. Prof Baris Ata from Turkey and Prof Sun Wei Guo (China), Prof Marc Laufer (USA), Prof Joseph Sanfilippo (USA) from the other countries will proudly take part.

We have given a "start" to working for European Endometriosis League 2018 Congress which will be held in Antalya. We will inform you in detail in coming issues.

Another good news is that Turkish Endometriosis and Adenomyosis Society was included in "Effect Tools" project of World Endometriosis Research Foundation and we expect that this study will be presented in Turkish in official website very soon.

In the last February we have performed "Endometriosis Academy-V" in Guven Hospital, Ankara. As a panel-meeting, in first session, "infertility in endometriosis" was discussed by Prof.Gurkan Uncu, Prof. Hakan Yarali, Prof. Hulusi Zeyneloğlu, Prof. Murat Sonmezer, Prof.Berfu Demir and moderated by Prof. Engin Oral. In the second session, "pain in endometriosis" was discussed by Prof Taner Usta, Prof. Kutay Biberoglu, Prof. Cem Atabekoglu, Prof Bulent Berker, Prof.Nuray Bozkurt, Prof. Turgut Var. Around 80 colleagues were attended the Academy meeting and positive feed-backs from our colleagues motivated us for the future meetings.

On 23rd of March, 2017, for Endo-March Turkey activity, we have performed "endometriosis awareness panel" in collaboration with Kadikoy Municipality and Lions Club. In the panel Assoc.Prof Taner Usta and Dr. Pinar Yalcin Bahat have given speeches.

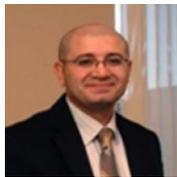
We hope to meet in the next issue. With Our Kind Regards...

Turkish Endometriosis and Adenomyosis Society Board Members

Board Members of Endometriosis&Adenomyosis Society 2017



Prof. Yücel Karaman, M.D. (President)



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Endometriosis e-bulletin is prepared by Turkish Endometriosis&Adenomyosis Society. If there will be subjects, which you would like to be included in the bulletin or comments/questions that you would like to add, please contact us via drtanerusta@gmail.com or drenginoral@gmail.com.

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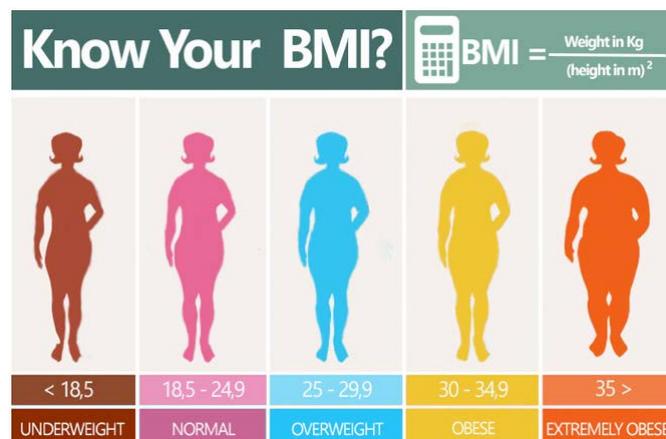
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SELECTED ARTICLES

1 - Association between body mass index and endometriosis risk: a meta-analysis

Liu Y, Zhang W.
Oncotarget. 2017 Jan 31

The study "Association between body mass index and endometriosis risk: a meta-analysis" was published in Oncotarget journal. According to large data, it is known that increased Body Mass Index (BMI) decreased the risk of endometriosis and this finding may shed a light to mechanisms leading to endometriosis. Previous studies showed conflicting results on the relationship between BMI and endometriosis. The researchers from Beijing Obstetrics and Gynecology Hospital, Capital Medical University in Beijing China performed a meta-analysis on this subject.



According to this study, the risk of endometriosis was 11% lower in overweight women when compared to normal weight-women!

According to study results, each 5kg/m² increase in BMI leads to 33% decrease in the risk of endometriosis. When compared to normal weight-women, 11% lower risk of endometriosis was found in overweight women. Risk reduction in overweight women was not statistically significant.

Additionally when infertility is also taken into account, the study revealed that infertile women with higher BMI have lower risk of endometriosis when compared to fertile women with high BMI.

When researchers included the known risk factors for endometriosis to the analysis

(smoking, the length of menstrual cycle, age of menarche), the relationship between high BMI and endometriosis was waned. Researchers from different parts of the world (America, Asia, Europe) couldn't find significant difference. Similar findings were found when only high quality studies were included in the analysis.

Although it is not surprising that endometriosis is less expected in women with high BMI when the plausible pathogenetic mechanisms of endometriosis were considered, the researchers stressed that there might be other reasons. Diagnostic bias may be one explanation; surgical

diagnosis for pelvic pain is less offered to overweight women. Since only surgically diagnosed women were included in the meta-analysis, this trend might be the cause.

Future studies on weight and mechanisms of endometriosis may lead to expansion of our knowledge.

2 - Endometriosis increases the risk of obstetric and neonatal complications.

Berlac JF, Hartwell D, Skovlund CW, Langhoff-Roos J, Lidegaard Ø.
Acta Obstet Gynecol Scand. 2017 Feb 9.



A retrospective cohort study from Denmark revealed that adverse obstetric outcomes have been increased in women with endometriosis. According to authors of this published study, this is the largest data on obstetric and neonatal complications in women with endometriosis. The results of this study confirm the previous study results. When higher complication rate is taken into consideration, authors advise close neonatal follow-up in these patients.

In this study, the risk of pre-eclampsia, severe pre-eclampsia, hemorrhage in pregnancy, placental abruption, placenta previa, premature rupture of membranes, retained placenta, and hemorrhage later than 22nd week of gestation was higher in women with endometriosis when compared to women in control group.

Obstetrical complications and neonatal outcomes in women with endometriosis were analyzed using data extracted from the Danish Health Registry and the Medical Birth Register. The study population was consisted of all delivering women (aged 15-49) and their newborns in Denmark 1997-2014. This is 11.739 women with endometriosis and 19.331 babies in total. Control group was consisted of 615.533 women and 1.071.920 babies. Logistic regression analysis with the consideration of age, women with endometriosis had more risk of pre-eclampsia (1.4 times), severe pre-eclampsia (1.7 times), hemorrhage in pregnancy (2.3 times), placental abruption (2 times), placenta previa (3.9 times), premature rupture of membranes (1.7 times), retained placenta (3.1 times), hemorrhage after 22nd week of gestation (2.3 times), compared to women in control group.

Neonatal complication analysis revealed that there was significantly increased risk of preterm labor earlier than 28 weeks (3.1 times), preterm labor earlier than 34 weeks (2.7 times), SGA baby (1.5 times), low APGAR's score (1.4 times), malformation diagnosed in the first year of life (1.3 times) and neonatal death (1.8 times) in women with endometriosis.

Additionally, researchers performed a subgroup analysis for primiparous women with a singleton pregnancy and the results were similar. In another subgroup analysis, they have found higher pregnancy-related-complication rates in women who had previous surgery for endometriosis. The authors interpreted that previous surgery was a sign for severe endometriosis. In addition, previous surgery might disrupt the intrauterine milieu, thus may more negatively affect obstetric outcome. Further studies are needed to illuminate this.

Limitation of the study is that women in control group might have undiagnosed endometriosis, or they may not be recorded in the Danish Health Registry. This may cause underestimation of the complication risk in women with endometriosis. They have also admitted that histologic verification was missing for endometriosis.

3 - Estrogen-Progestins and progestins for the management of endometriosis

Vercellini P, Buggio L, Berlanda N, Barbara G, Somigliana E, Bosari S. Fertil Steril. 2016 Dec;

Endometriosis is a disease with frequent recurrences of the symptoms even after surgical extirpation. Medical therapies may control the disease but don't cure the disease itself. Pharmacological therapy may be needed until pregnancy or natural menopause. Hormonal drugs exert their effects via suppression of ovulation and menstruation. Only estrogen-progestins and progestins are suitable for the long term treatment. These substances induce atrophy on eutopic and ectopic endometrium, and have anti-inflammatory and pro-apoptotic properties. They can be given via different modes such as transdermal, subcutaneous, intramuscular, vaginal or intrauterine routes. Pain subsides and quality of life increases in at least two thirds of women using these compounds. However rest one third is unresponsive to the therapy due to progesterone resistance. Continuous, individualized use of drugs containing estrogen-progestin leads to increased compliance. All combinations independent from the type of progesterone exert similar effects on dysmenorrhea. For optimum suppression of the lesion, the lowest effective dose of estrogen-progestin containing drugs should be chosen to limit the thrombotic risk. Progestins may be offered to patients who do not respond or develop intolerance to estrogen-progestin containing drugs, or patients with dyspareunia and/or deep lesions. Since progestins do not significantly increase the risk of thrombosis, they are usually used in situations when estrogens are contraindicated. Estrogen-progestin containing drugs or progestins decrease the postoperative recurrence risk of endometriomas and protects against endometriosis-related epithelial ovarian cancer.



4 - mRNA levels of low-density lipoprotein receptors are over expressed in the foci of deep bowel endometriosis

Gibran L, Maranhão RC, Tavares ER, Carvalho PO, Abrão MS, Podgaec S. Hum Reprod. 2016 Dec 16.

Study question: Is mRNA expression of LDL receptors altered in deep bowel endometriotic foci?

Summary answer: mRNA expression of LDL receptors is up-regulated in deep bowel endometriotic foci of patients with endometriosis.

What is known already: Several studies have demonstrated the overexpression of low-density lipoprotein receptors in various tumor cell lines and endometriosis has similar aspects to cancer, mainly concerning the pathogenesis of both diseases. This is the first study we know of to investigate lipoprotein

receptors expression in deep endometriosis with bowel involvement.

Study design, size, duration: During 2014-2015, an exploratory case-control study was conducted with 39 patients, including 20 women with a histological diagnosis of deep endometriosis compromising the bowel and 19 women without endometriosis who underwent laparoscopic tubal ligation.

Participants/Materials, Setting, Methods: Peripheral blood samples were collected on the day of surgery for lipid profile analysis, and samples



of endometrial tissue and of bowel endometriotic lesions were also collected. The tissue samples were sent for histopathological analysis and for LDL-R and LRP-1 gene expression screening using quantitative real-time PCR.

mRNA levels of low-density lipoprotein receptors are overexpressed in the foci of deep bowel endometriosis

Main results: Patients with deep endometriosis had lower LDL-cholesterol than patients without the disease (119 ± 23 versus 156 ± 35 ; $P = 0.001$). Gene expression analysis of LDL receptors revealed that LDL-R was more highly expressed in endometriotic lesions when compared to the endometrium of the same patient but not more than in the endometrium of women without endometriosis (0.027 ± 0.022 versus 0.012 ± 0.009 versus 0.019 ± 0.01 , respectively; $P < 0.001$). LRP-1 was more highly expressed in endometriotic lesions, both when

compared with the endometrium of the same patient and when compared with the endometrium of patients without the disease (0.307 ± 0.207 versus 0.089 ± 0.076 and versus 0.126 ± 0.072 , respectively; $P < 0.001$). The study also showed that LDL-R gene expression in the endometrium of women with endometriosis was higher during the secretory phase of the menstrual cycle ($P = 0.001$). LRP-1 gene expression was increased during the secretory phase in the endometrium of women without the disease ($P = 0.008$).

Limitations: In the endometriotic

lesions, the presence of fibrosis is substantial, restricting access to the stromal and glandular components of the lesion. Despite that, we found that LDL receptor mRNA was overexpressed. Future studies may perform laser microdissection to isolate the area of interest in the target tissue, excluding fibrosis contamination.

Wider implications of the findings:

This study supports the feasibility of LDL-R targeted therapy in the treatment of deep endometriosis.

5 - Homeopathy for endometriosis-associated pelvic pain

(<http://newhomeopathicmedicines.com>)

According to a double blind, randomized, controlled study from Brazil, potentized estrogen therapy is effective treatment method for endometriosis-associated pelvic pain (EAPP) resistant to conventional hormone therapy. Potentized estrogen is oral form of 17-beta estradiol formulated in alcohol solution at a potency of 12cH, 18cH and 24cH. Fifty women were randomized into 2 groups to evaluate the effect of homeopathy. One group had 3 drops of potentized estrogen twice daily and the other group alcohol solution as placebo.



Homeopathic treatment is based on a principle that if a substance causes a health problem in healthy people, to give his substance in small amounts to ill people will cure the disease.

Inclusion criteria were age 18-45, diagnosis of deeply infiltrating endometriosis based on magnetic resonance imaging or transvaginal ultrasonography after bowel preparation. In addition, presence of pelvic pain resistant to conventional hormone therapy and visual analogue scale (VAS) for EAPP ≥ 5 (VAS range 0-10) had to be present.

The primary outcome was analyzed as the change in the

severity of the EAPP global score and its 5 components (dysmenorrhea, deep dyspareunia, non-cyclic pelvic pain, cyclic bowel pain and/or cyclic urinary pain) from baseline to week 24. The findings showed that of the components of global EAPP score, dysmenorrhea, non-cyclic pelvic pain and cyclic bowel pain in women treated with potentized estrogen were significantly decreased. Control group did not show any significant changes in

EAPP global or partial scores.

Homeopathy for endometriosis-associated pelvic pain

The secondary outcome measures were mean score difference for quality of life assessed with SF-36 Health Survey Questionnaire, depression symptoms on Beck Depression Inventory (BDI), and anxiety symptoms on Beck Anxiety Inventory (BAI). Significant improvement in three of eight SF-36 domains (bodily pain, vitality and mental health) and depression symptoms (BDI) was found only in the potentized estrogen group. In this study, authors reported that treatment of endometriosis-related pelvic pain was difficult, thus alternative management options such as homeopathy was considered. There are conflicts on homeopathic

treatment of endometriosis-related chronic pelvic pain because of lack of published evidence. They have aimed to accomplish this randomized controlled trial. As stated in the website "New Homeopathic Medicines <http://newhomeopathicmedicines.com>", Homeopathic treatment is based on a principle that if a substance causes a health problem in healthy people, to give his substance in small amounts to ill people will cure the disease. Therapy mimics the response of the body against to disease, however "dilution" of the treatment substance protects from the worsening of the symptoms. Since it may lead to

endometriosis-associated problems (e.g. depression, anxiety, insomnia, migraine, rhino-sinusitis, endometrial proliferation), 17-beta estradiol was chosen as homeopathic treatment in the treatment of EAPP.

NEXT ACTIVITIES

A course will be held in 13th World Endometriosis Congress by our association: : WES, Course 8: “Endometriosis: Lifecycle Approach”

Our association broke a big ground of success representing our country in World Endometriosis Congress which is going to be held in Canada this year. Out of 8 courses organized in World Endometriosis Congress, one is going to be planned and carried out by our association. Our course titled “Endometriosis: A Lifecycle Approach” is going to have Engin Oral, Yücel Karaman, Gürkan Uncu, Kutay Biberoglu, Baris Ata from our country and Sun Wei Guo, Marc Laufer, Joseph Sanfilippo from all around the world as lecturers. You can reach the course programme and details by clicking the link below.

<http://endometriosis.ca/wp-content/uploads/WCE2017-PCC8-Lifecycle.pdf>

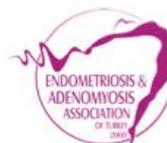


PCC#8 **17 May 2017**

Endometriosis: a lifecycle approach

CHAIRS:	<i>Engin Oral (Turkey) and Gürkan Uncu (Turkey)</i>
08.30 – 09.00	Where are we, and where are we going? <i>Sun-Wei Guo (China)</i>
09.00 – 09.15	Pathophysiology of adolescent endometriosis <i>Sun-Wei Guo (China)</i>
09.15 – 09.45	Adolescent endometriosis: does it really exist? <i>Gürkan Uncu</i>
09.45 – 10.15	How to diagnose earlier and prevent progression in adolescents? <i>Marc Laufer (USA)</i>
10.15 – 10.45	Management of symptomatic endometriosis in adolescents <i>Joseph Sanfilippo (USA)</i>
10.45 – 11.00	DISCUSSION
11.00 – 11.15	BREAK
11.15 – 11.30	How frequent is endometriosis after the age of 40? <i>Baris Ata (Turkey)</i>
11.30 – 11.45	How can we manage women with menopausal endometriosis? <i>Yucel Karaman (Turkey)</i>
11.45 – 12.00	Is endometriosis a pre-neoplastic condition after the age of 40? <i>Engin Oral (Turkey)</i>
12.00 – 12.15	The use of hormone therapy after surgical menopause in women with endometriosis <i>Kutay Biberoglu (Turkey)</i>
12.15 – 12.30	DISCUSSION and CLOSE

This WCE2017 pre-congress course is organised by



NEWS FROM WORLD OF ENDOMETRIOSIS

ENDOMETRIOSIS IS ON UNITED NATIONS AGENDA

Founder of Endometriosis Foundation of America(EFA), a Turkish gynecologist Dr. Tamer Seçkin who lives in US, stated that endometriosis, a common disease in women, should not be a taboo anymore.



Seçkin gave a speech in a panel leaded by France, held during UN Economic and Social Council(ECOSOC), Women's Status Commission's 61th session titled "Fight against endometriosis:An essential for empowering women" and claimed that one of every ten women has endometriosis, raising awareness about this disease is crucial.

"Young people should be educated" told Seçkin and stated that endometriosis should not be a taboo anymore.

"It's time for us to fight against taboos about women's body and health"

French Minister of Family, Children and Women's Rights Laurence Rossignol, who was a participant, said "It is time for us to fight against taboos about women's body and health".

A famous doctor about endometriosis in US, Seçkin is also the founder of EFA. Being one the most important

laparoscopic surgeons, Seçkin has many famous patients from arts and movi world. Seçkin cofounded EFA with Indian descented Padma Lakshmi; through EFA, Blossom Gala organized every year in US and bringing important names of arts and movie world together.

Endometriosis is seen in one of every ten women aged 15-49. 180 million patients are present worldwide and more than one million in Turkey. The disease characterized by endometrial tissue spreading to another organs in abdominal cavity, presents itself with painful

intercourse, constipation, abdominal pain, painful menstruation or irregular menstruation.

Dr. Farr Nezhat spoke at the same meeting, emphasized that menstruation is normal but pain is not. During the meeting, it was clear that endometriosis is being endemic and discussions about preventive measures were made.

Endometriosis is in England's Parliament

Dr Ertan Saridoğan, a Turkish scientist who lives in England, made a presentation in the name of English Society for Endometriosis, about endometriosis and fibroids in the parliament. Devoted himself to endometriosis, Saridoğan gave comments on endometriosis on BBC5. Saridoğan emphasized that endometriosis is aproblem growing worldwide.



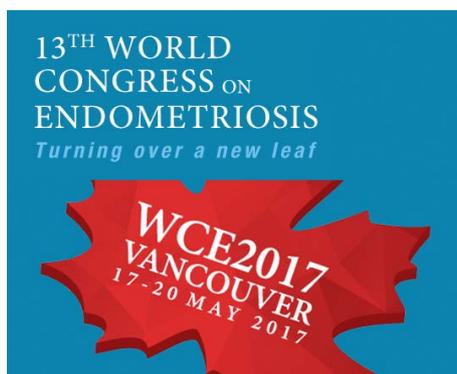
ENDOMETRİOZİS DÜNYASINDAN HABERLER



SEUD CONGRESS 2017

After the first congress of SEUD was held in Paris and second in Barcelona; the third is going to be held in Singapur. Click on the link below for further information.

<http://seud.org/welcome-note-for-seud-meeting-2017/>



13th World Congress on Endometriosis in Vancouver, Canada / 17-20 May, 2017

The World Endometriosis Society Congress is going to be held in Vancouver, Canada this year. WES is the biggest platform about endometriosis in the world, the congress is receiving attention by its rich scientific and detailed course program. Click on the link below for further information.

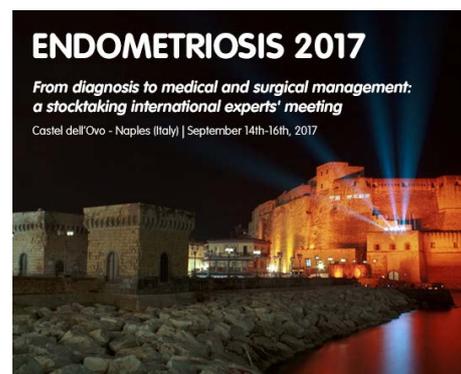
<http://endometriosis.ca/world-congress/wce2017/>



ESHRE CAMPUS: "Methodological approaches for investigating endometrial function and endometriosis" 18-19 September 2017 Edinburg / United Kingdom

This two day course of ESHRE campus is going to be held in Edinburg/ United Kingdom. You can visit ESHRE web site below for further information.

<https://www.eshre.eu/Education/Calendar-Campus-events/Methodological-approaches-for-investigating-endometrial-function-and-endometriosis.aspx>



Endometriosis 2017 From Diagnosis To Medical And Surgical Management: A Stocktaking International Experts' Meeting, 14-16 September, 2017, Italy

Many endometriosis experts are going to meet in Napoli/Italy this September. Scientific programme emphasized on diagnosis and surgery is remarkable, especially live surgery sessions. Courses will be held on 10-13th of September, 2017. Click on the link below for further information.

<https://www.eshre.eu/Education/Calendar-Campus-events/Methodological-approaches-for-investigating-endometrial-function-and-endometriosis.aspx>



AAGL GLOBAL ENDOMETRIOSIS SUMMIT, ICELAND 20-21 July, 2017-04-18

For the first time ever, AAGL will organize a meeting about endometriosis, attracting attention with its rich scientific programme. Click on the link below for details.

<https://www.aagl.org/iceland/>

SOCIAL MEDIA



ENDOMETRIOSIS&ADENOMYOSIS SOCIETY, WEB SITE FOR HEALTHCARE PROFESSIONALS

Did you know that you can reach activities of our society, national and international meetings, endometriosis diagnosis and treatment guideline published in 2014, even many books? Now in English!

Yurtdışından yabancı ziyaretçilerimiz içinde dernek sayfamızın İngilizce versiyonuna <http://www.endometriozisdernegi.com/en> linkinden ulaşabilirsiniz. Türkçe sitemiz ile birebir güncellenmektedir.

www.endometriozisdernegi.com



ARTICLE SUMMARIES ABOUT ENDOMETRIOSIS

Prof. Dr. Fatma Ferda Verit scans and summarizes articles about endometriosis every month and the summaries are on homepage of www.endometriozisdernegi.com. You can reach to the most recent articles about endometriosis by clicking the link below.

<http://www.endometriozisdernegi.com/makaleler-0>



ENDOMETRIOSIS&ADENOMYOSIS SOCIETY, WEB SITE FOR OUR PATIENTS

One priority of us is to reach out not only to healthcare professionals, but also to patients. Setting up [endometriozis.org](http://www.endometriozis.org) was one of the activities we made on this purpose. Recent news, information booklets, simple tests and videos about endometriosis can be found here. Web site is being updated everyday. It is totally free and is created for our patients to reach accurate information.

www.endometriozis.org



ENDOMETRIOSIS GUIDELINES

7 different countries and societies' guidelines on endometriosis (including our guideline published in 2014) are gathered in the website. Medical professionals can reach each guideline fast and simply. Another fact that makes us happy is that Bayer Turkey ushered this process. We are very thankful to Bayer Turkey, for their support for this useful site for our colleagues.

<http://www.endometriozisdernegi.com/makaleler-0>

You can follow us on social media!

 Endometriozis Türkiye Endometriosis

 Endometriozis (cikolata kisti hastaligi)
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 European Endometriosis League



**EUROPEAN CONGRESS ON
ENDOMETRIOSIS**

*September 20 - 23, 2018
Antalya / Turkey*

www.endometriosis2018.com