



11th year
2009-2020

ENDOMETRIOSIS BULLETIN

MARCH 2020 / ISSUE XIII



WE WOULD LIKE TO EXPRESS OUR GRATITUDE TO ALL OUR HEALTH PROFESSIONALS AND COLLEAGUES WORKING ON THE FRONT LINES DUE TO COVID-19 PANDEMIC.



1 in 10 Women are Affected by Endometriosis

www.endometriosis.org

Preface

Hello,

We are pleased to present to you the 13th and also the first issue of 2020. Unfortunately, due to the COVID-19 pandemic, which affected the whole world, many important meetings and events in the field of endometriosis have been cancelled or postponed; hence, we have mainly focused on the recent scientific studies in this issue.

In these past three months, our society completed our joint project with **'The Institute of Loans and Accommodations'**, which started last year and has met with hundreds of students in 49 dormitories in 13 different cities and has held seminars on **'Women's Health and Hygiene'**. With the motivation stemmed from the positive feedbacks that we have received, we have decided to continue such seminars in the upcoming school term at different dormitories of The Institute of Loans and Accommodations to reach more young women around Turkey.

Unfortunately, due to the pandemic, we could only organize two of our EndoMarch activities, which were planned by the joint work of our society's board members and our youth branch. One of the activities took place at the **Tennis Club in Ankara** where **Onur Topcu, MD** organized an **'awareness on endometriosis'** meeting. The other one, **Endo-Kitchen Workshop**, was held in collaboration with Gastroart in **Samsun** with the leadership of **Seher Sari, MD**. Both of our activities attracted great attention and brought us together with our patients.

The **Endo Ball**, which was going to be the first ball organized by our society, has been postponed to a later date. Similarly, many of our planned activities in different cities have been cancelled or postponed.

We proudly announce that **Hale Goksever Celik, MD** and **Nura Fitnat Topbas Selcuki, MD**, from our youth branch, were selected as the **World Endometriosis Society Young Ambassadors**.

We are very happy to establish a common platform with our patients for the first time, to join our forces in raising awareness for endometriosis and to start exchanging ideas and organize joint projects.

A great amount of effort has been given by our young colleagues and volunteers that support our cause, to set up our society's **new headquarters** at **Gayrettepe Yıldız Posta Caddesi**. However, the inauguration was postponed to a later date due to the COVID 19 pandemic.

We continued our **Endo at School** project with **Eda Ureyen Ozdemir, MD's** seminar at Ankara **Yukselis College** and will continue our seminars in other schools nationwide.

European Endometriosis League, of which **Engin Oral, MD**, our founding president, is the president, started a **monthly webinar program** with the participation of expert colleagues from all over the world. The very first of this webinar series was held by **Juan Garcia Velasco** on **'Is Fertility Preservation Required in Patients with Endometriosis and to Whom It Is?'** You can find the monthly webinar program in our newsletter.

Our websites were updated to have a more user-friendly interface for colleagues and patients. In our next issue we hope to share with you good news from Turkey and the world.

Best regards,

Board Members of Turkish Endometriosis & Adenomyosis Society

Turkish Endometriosis & Adenomyosis Society Board of Directors 2019-2022



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Endometriosis e-bulletin is prepared by Turkish Endometriosis & Adenomyosis Society. If there are any topics that you would like us to include in the bulletin or any questions that you would like to ask, you can contact us via e-mail to dr_pinaryalcin@hotmail.com or baharyl86@gmail.com.

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A- SELECTED ARTICLES

1 Endometriosis in adolescence: Early manifestation of the traditional disease or a unique variant?

Tsonis O, Barmpalia Z, Gkrozou F, Chandraharan E, Pandey S, Siafaka V, Paschopoulos M. Eur J Obstet Gynecol Reprod Biol. 30054-3. 2020

Abstract

Little is known about Endometriosis in Adolescents and its prevalence is yet to be estimated. Traditional Endometriosis seems to be, by far, quite different with this unique variant when it comes to clinical presentation, management and course of the disease. Further research needs to be conducted in order to classify these two, phenomenically similar, diseases. Adolescents with a history of dysmenorrhea and chronic pelvic pain (CPP) imply findings suggestive of endometriosis. The severity of the disease is variable, from superficial endometriosis to deep endometriotic lesions or even ovarian endometriomas. The course of the disease also suggests the necessity of a more personalized approach since among adolescents, endometriosis could resolve or even aggravate with no particular pathophysiological pattern. Some studies suggest that appropriate treatment should be based on the understanding of the pathophysiologic mechanisms. Long term course of the disease, as well as, a high recurrence rate pose a difficulty to scientists, deciding conservative over operative surgery. Some believe that early operation on superficial forms of endometriosis could potentially prevent deep endometriotic lesions in the long-run. Others find medication such as, combined oral contraceptive pills (COCPs), progestins, levonorgestrel intrauterine device or gonadotrophin releasing hormone



analogues (GnRHa), more appropriate for this age group. Last but not least, operation with post-operative hormonal treatment remains the most common treatment approach. Nevertheless, our limited understanding of the disease, as well as, particular factors needed to be taken into consideration, for instance, bone formation in this age group, underline the necessity of further studies, needed to be appointed, in order to determine the best diagnostic and therapeutic approach.

KEYWORDS:

Adolescence; Chronic pelvic pain; Endometriosis; Teenagers

2 Recommendations for the surgical treatment of endometriosis. Part 2: deep endometriosis.

Working group of ESGE, ESHRE, and WES, Joerg Keckstein, Christian M. Becker, Michel Canis, Anis Feki, Grigoris F. Grimbizis, Lone Hummelshoj et al. Human Reproduction Open 2020, no. 1 (2020)

Abstract

STUDY QUESTION:

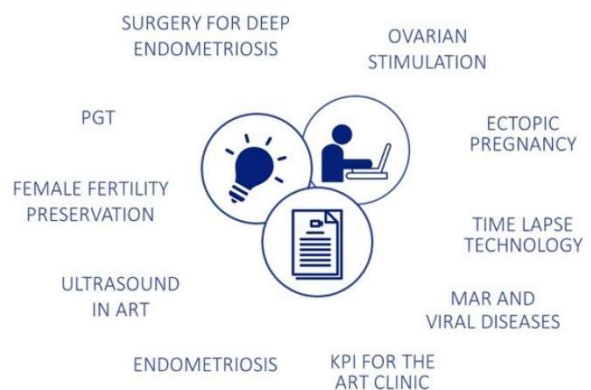
How should surgery for endometriosis be performed?

SUMMARY ANSWER:

This document provides recommendations covering technical aspects of different methods of surgery for deep endometriosis in women of reproductive age.

WHAT IS KNOWN ALREADY:

Endometriosis is highly prevalent and often associated with severe symptoms. Yet compared to equally prevalent conditions, it is poorly understood and a challenge to manage. Previously published guidelines have provided recommendations for (surgical) treatment of deep endometriosis, based on the best available evidence, but without technical information and details on how to best perform such treatment in order to be effective and safe.



STUDY DESIGN SIZE DURATION:

A working group of the European Society for Gynaecological Endoscopy (ESGE), ESHRE and the World Endometriosis Society (WES) collaborated on writing recommendations on the practical aspects of surgery for treatment of deep endometriosis.

PARTICIPANTS/MATERIALS SETTING METHODS:

This document focused on surgery for deep endometriosis and is complementary to a previous document in this series focusing on endometrioma surgery.

MAIN RESULTS AND THE ROLE OF CHANCE:

The document presents general recommendations for surgery for deep endometriosis, starting from preoperative assessments and first steps of surgery. Different approaches for surgical treatment are discussed and are respective of location and extent of disease; uterosacral ligaments and rectovaginal septum with or without involvement of the rectum, urinary tract or extrapelvic endometriosis. In addition, recommendations are provided on the treatment of frozen pelvis and on hysterectomy as a treatment for deep endometriosis.

LIMITATIONS REASONS FOR CAUTION:

Owing to the limited evidence available, recommendations are mostly based on clinical expertise. Where available, references of relevant studies were added.

WIDER IMPLICATIONS OF THE FINDINGS:

These recommendations complement previous guidelines on management of endometriosis and the recommendations for surgical treatment of ovarian endometrioma.

STUDY FUNDING/COMPETING INTERESTS:

The meetings of the working group were funded by ESGE, ESHRE and WES. Dr Roman reports personal fees from ETHICON, PLASMASURGICAL, OLYMPUS and NORDIC PHARMA, outside the submitted work; Dr Becker reports grants from Bayer AG, Volition Rx, MDNA Life Sciences and Roche Diagnostics Inc. and other relationships or activities from AbbVie Inc., and Myriad Inc, during the conduct of the study; Dr Tomassetti reports non-financial support from ESHRE, during the conduct of the study; and non-financial support and other were from Lumenis, Gedeon-Richter, Ferring Pharmaceuticals and Merck SA, outside the submitted work. The other authors had nothing to disclose.

TRIAL REGISTRATION NUMBER:

na.

KEYWORDS:

deep endometriosis; endometriosis; extrapelvic; frozen pelvis; good practice recommendations; hysterectomy; laparoscopy; surgery

3 T-cadherin inhibits invasion and migration of endometrial stromal cells in endometriosis.

Lu, Qinsheng, Yanqing Huang, Jiabao Wu, Yutao Guan, Miaomiao Du, Fenghua Wang, Zhihong Liu et al. Human Reproduction 35, no. 1 145-156. (2020)

Abstract

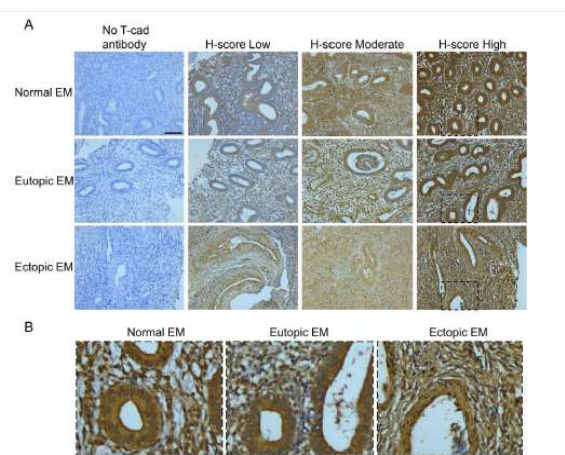
STUDY QUESTION: What is the expression level of T-cadherin in endometriosis, and does T-cadherin play a role in regulating invasion and migration of endometrial stromal cells?

SUMMARY ANSWER: T-cadherin expression was reduced in ectopic endometriotic lesions compared to eutopic endometrium, and T-cadherin overexpression inhibited the invasion and migration of endometrial stromal cells.

WHAT IS KNOWN ALREADY: Endometriosis is a disease that involves active cell invasion and migration. T-cadherin can inhibit cell invasion, migration and proliferation in various cancer cells, but its role in endometriosis has not been investigated.

STUDY DESIGN, SIZE, DURATION: We explored the expression status of T-cadherin in 40 patients with and 24 without endometriosis. We also isolated endometrial stromal cells to study the invasion, migration and signaling pathway regulation of T-cadherin overexpression.

PARTICIPANTS/MATERIALS, SETTING, METHODS: Patients were recruited at the Guangzhou Women and Children’s Medical Center to study the expression levels of T-cadherin. The expression of T-cadherin was detected by immunohistochemistry staining and western blot. H-score was used to evaluate the staining intensity of T-cadherin.



The correlation between T-cadherin expression levels (H- score) and endometriosis patients’ age, stage, lesion size and adhesion was analyzed. Endometrial stromal cells from patients with and without endometriosis were isolated, and cell invasion and migration were detected by transwell assays after T-cadherin overexpression. The expression of vimentin in T-cadherin-overexpressed cells was detected by western blot. After T-cadherin overexpression, the phosphorylation profile of signaling pathway proteins was detected with the Proteome Profiler Human Phospho-Kinase Array Kit.

MAIN RESULTS AND THE ROLE OF CHANCE: There was no difference in the expression of T-cadherin in the normal endometrium of control patients and the eutopic endometrium of endometriotic patients, but it was significantly decreased in the ectopic endometrium of endometriotic patients, compared with control endometrium and eutopic endometrium of endometriosis patients ($P < 0.0001$, for both). Western blot analysis also showed that the expression of T-cadherin was decreased in ectopic endometriotic lesions, but not the normal control endometrium or the endometriotic eutopic endometrium. The results of transwell assays indicated that T-cadherin overexpression inhibited the invasion and migration of endometrial stromal cells. In addition, T-cadherin overexpression promoted the phosphorylation of HSP27 (S78/S82) and JNK 1/2/3 (T183/Y185, T221/Y223) and decreased the expression of vimentin, MMP2 and MMP9 in eutopic endometriosis stromal cells.

LARGE-SCALE DATA: N/A.

LIMITATIONS, REASONS FOR CAUTION: The control group were patients with benign gynecological conditions (e.g. uterus myoma, endometrial or cervical polyp), which may have genetic or epigenetic variations associated with T-cadherin expression and signaling pathways. The case numbers of involved endometriosis and control patients were limited.

This study only used endometrial stromal cells from patients with or without endometriosis. Ideally, ectopic endometrial stromal cells of the ovarian endometriotic lesions should also be utilized to explore the function of T-cadherin.

WIDER IMPLICATIONS OF THE FINDINGS: Further investigation of the role of T-cadherin in endometriosis may generate new potential therapeutic targets for this complex disorder.

STUDY FUNDING AND COMPETING INTEREST(S): This study was supported by the Natural Science Foundation of Guangdong Province (2016A030313495), National Natural Science Foundation of China (81702567, 81671406, 31871412), the Science and Technology Programs of Guangdong (2017A050501021), Medical Science Technology Research Fund of Guangdong Province (A2018075), the Science and Technology Programs of Guangzhou City (201704030103), Internal Project of Family Planning Research Institute of Guangdong Province (S2018004), Post-doc initiation fund of Guangzhou (3302) and Post-doc science research initiation fund of Guangzhou Women and Children's Medical Center (20160322). There are no conflicts of interest.

Keywords: T-cadherin / endometriosis / invasion / migration / signaling transduction / phosphorylation

4 Progesterone's role in deep infiltrating endometriosis: Progesterone receptor and estrogen metabolism enzymes expression and physiological changes in primary endometrial stromal cell culture.

Kamergorodsky, Gil, Adriana L. Invitti, Paulo D'Amora, Rafael M. Parreira, Alexander Kopelman, Tatiana CS Bonetti, Manoel JBC Girão, and Eduardo Schor Molecular and Cellular Endocrinology 505 110743. (2020)

Abstract

To study progesterone signaling activation, we measured changes in extracellular pH as a reflection of Na^+/H^+ exchange (NHE) using a cytosensor microphysiometer and assessed progesterone receptor (PR) and estrogen metabolism enzymes mRNA expression in cultured endometrial cells from women with deep infiltrating endometriosis and healthy controls using real-time quantitative PCR. This study was conducted at a University hospital and included patients with and without deep infiltrating endometriosis (DIE). Primary endometrial stromal cells (ECs) from women with DIE and controls were treated with 17β -estradiol and progesterone prior to microphysiometer measurements and qPCR evaluations. Decreased progesterone responsiveness and decreased total nuclear PR and HSD17B1 mRNA expression were observed in cultured ECs from women with deep infiltrating endometriosis relative to those from control samples before and after hormone treatment. These cells also showed increased 17β -hydroxysteroid dehydrogenases types 2 (HSD17B2) relative to control group and increased expression of aromatase (CYP19) after exposure to progesterone. These physiological and expression patterns observed in ECs cultures from women with DIE reinforces previous findings in the literature supporting the progesterone resistance hypothesis in the pathogenesis of endometriosis



5 Phenotyping Sexual Pain in Endometriosis Using the Central Sensitization Inventory.

Orr, Natasha L., Kate J. Wahl, Heather Noga, Catherine Allaire, Christina Williams, Mohamed A. Bedaiwy, Arianne Albert, Kelly B. Smith, and Paul J. Yong. *The Journal of Sexual Medicine* 24,(2020).

Abstract

INTRODUCTION:

Deep dyspareunia, a common symptom in endometriosis, has previously been associated with bladder and/or pelvic floor tenderness (BPFT), which suggests a role for central nervous system sensitization. The Central Sensitization Inventory (CSI, 0-100) is a validated self-reported scale for patients with central sensitization.

AIM:

The objective of this study was to phenotype deep dyspareunia using BPFT and the CSI.

METHODS:

The methods included cross-sectional analysis from a prospective registry from January 2018 to June 2018 at a tertiary center for endometriosis (ClinicalTrials.gov #NCT02911090). Included were women aged 18-50 years with endometriosis (previously surgically diagnosed, current visualized endometrioma on ultrasound, or current palpable or visualized nodule on ultrasound), who were newly or re-referred to the center. Severity of deep dyspareunia was self-reported using an 11-point numeric rating scale (0 = no pain; 10 = worst pain imaginable), categorized as no or low deep dyspareunia (0-4) and high deep dyspareunia (5-10). We identified the subgroup with high deep dyspareunia and presence of BPFT, where we hypothesized a central component of the sexual pain. This subgroup was compared with 2 other subgroups: no or low deep dyspareunia and high deep dyspareunia but no BPFT. The CSI was compared between the groups using analysis of variance, followed by post hoc testing ($P < .05$).

MAIN OUTCOME MEASURE:

The main outcome measure was the CSI score ranging from 0 to 100.

RESULTS:

Data from 163 women with endometriosis were analyzed. The mean age of this cohort was 36.4 ± 6.8 years, and the mean CSI score was 41.0 ± 18.6 . 37 percent (61/163) had high deep dyspareunia and BPFT; 29% (47/163) had high deep dyspareunia and no BPFT; and 34% (55/163) had no or low deep dyspareunia. The CSI significantly differed between the 3 groups (analysis of variance:



$F = 22.4, P < .001$). In post hoc testing, the CSI was higher in women with high deep dyspareunia and BPFT (51.3 ± 16.9), compared with women with no or low deep dyspareunia ($30.9 \pm 15.4, P < .001$) and compared with women with high deep dyspareunia but no BPFT ($39.4 \pm 17.2, P = .001$).

CLINICAL IMPLICATIONS:

The CSI could be used to classify and phenotype patients with endometriosis-associated sexual pain.

STRENGTH & LIMITATIONS:

Strengths include a prospective registry with integrated pain scores, validated questionnaires, and physical examination findings. Limitations include the lack of quantitative sensory testing for central sensitization.

CONCLUSIONS:

In women with endometriosis, the subgroup with high deep dyspareunia and bladder and/or pelvic floor tenderness had a significantly higher score on the CSI than other subgroups, suggesting that this group may have a central component to their sexual pain. Orr NL, Wahl KJ, Noga H, et al. Phenotyping Sexual Pain in Endometriosis Using the Central Sensitization Inventory. *J Sex Med* 2020;17:761-770.

KEYWORDS:

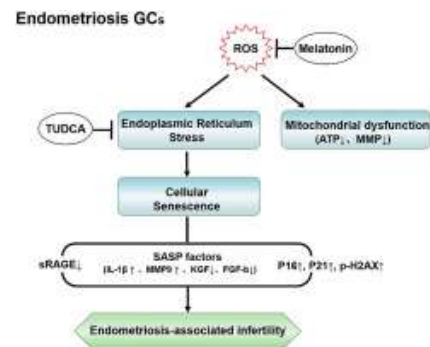
Bladder or pelvic Floor Tenderness; Central Sensitization; Central Sensitization Inventory; Deep Dyspareunia; Endometriosis; Painful Bladder Syndrome

6 Excessive oxidative stress in cumulus granulosa cells induced cell senescence contributes to endometriosis-associated infertility.

Lin, Xiang, Yongdong Dai, Xiaomei Tong, Wenzhi Xu, Qianmeng Huang, Xiaoying Jin, Chao Li et al. *Redox Biology* 30 101431. (2020)

Abstract

Endometriosis an important cause of female infertility and seriously impact physical and psychological health of patients. Endometriosis is now considered to be a public health problem that deserves in-depth investigation, especially the etiopathogenesis of endometriosis-associated infertility. We aimed to illuminate the etiopathogenesis of endometriosis-associated infertility that involve excessive oxidative stress (OS) induced pathological changes of ovary cumulus granulosa cell (GCs). Senescence-associated β -galactosidase (SA β -gal) activity in GCs from endometriosis patients, soluble isoform of advanced glycation end products receptor (sRAGE) expression in follicular fluid from endometriosis patients and differentially expressed senescence-associated secretory phenotype factors (IL-1 β , MMP-9, KGF and FGF basic protein) are all useful indexes to evaluate oocyte retrieval number and mature oocyte number. RNA-sequencing and bioinformatics analysis indicated senescent phenotype of endometriosis GCs and aggravated endoplasmic reticulum (ER) stress in endometriosis GCs. Targeting ER stress significantly alleviated OS-induced GCs senescence as well as mitochondrial membrane potential (MMP) and adenosine triphosphate (ATP) reduction in GCs. Moreover, melatonin administration rescued OS-enhanced ER stress, cellular senescence, and MMP and ATP abnormalities of endometriosis GCs in vitro and in vivo. In conclusion, our results indicated excessive reactive oxygen species induces senescence of endometriosis GCs via arouse ER stress, which finally contributes to endometriosis-associated infertility, and melatonin may represent a novel adjuvant therapy strategy for endometriosis-associated infertility.



Keywords: Senescence, Endometriosis, Cumulus granulosa cell, Oxidative stress, Endoplasmic reticulum stress, Infertility

B- NEWS FROM OUR SOCIETY

PAST ACTIVITIES



Project with The Institute of Loans and Accommodations

We are continuing our 'Women's Health and Hygiene' seminars at the girls' dormitories of The Institute of Loans and Accommodations. This project where our board members, and other society member physicians worked on a volunteer basis became an extensive and successful project nationwide. We have visited a total of **49 dormitories in 13 cities** (Istanbul, Ankara, Izmir, Bursa, Antalya, Samsun, Sinop, Sakarya, Adana, Amasya, Giresun, Ordu and Tekirdag) and hundreds of young women attended these seminars. We are very proud to be the organizers of this project.







March is Endometriosis Awareness Month (EndoMarch)



Ankara Tennis Club March 8, 2020

On International Women's Day, March 8, 2020, our Ankara Team led by **Onur Topcu, MD** organized a series of EndoMarch awareness events at **Ankara Tennis Club**. An information session took place between 12:30-13:30 which was open to the public. This event was also recognized by the international Worldwide Endomarch platform.





EndoKitchen with Samsun Gastroart

One of our members, **Seher Sari, MD** who is working currently in Samsun organized the EndoKitchen event with the collaboration of **@gastroart.com.tr**. The importance of nutrition in the management of endometriosis was explained by Seher Sari to the participants who were patients with endometriosis. Pain relieving and anti-inflammatory diet and antioxidants were the main topics of discussion where participants got a chance to prepare an endo-friendly menu as well. We thank **Gastroart.com.tr** team for their professional input and support.

REST OF OUR PLANNED ACTIVITIES FOR ENDOMARCH HAVE BEEN CANCELLED OR POSTPONED DUE TO COVID-19 PANDEMIC.

Endo Ball (Postponed)



Endo Ball (Postponed)

Our first **Endo Ball**, originally planned for March 25, 2020, where we were going to present Sampson Award to the founder of Endofoundation **Tamer Seçkin, MD** has been postponed due to COVID-19 pandemic. We hope to organize this ball in the upcoming healthier days.

XII. EndoAcademy (Postponed)



ENDOMETRİOZİS & ADENOMYOZİS DERNEĞİ
XII. ENDOAKADEMİ 2020
20 Eylül 2020 - Pazar, İstanbul
Mercure Hotel Altunizade - İstanbul



**XII. Endoakademi toplantımız
20 Eylül 2020 tarihine ertelenmiştir.**

Due to COVID-19 pandemic we postponed **XII. EndoAcademy** meeting to **September 20, 2020**, which was initially going to take place on the 5th of April where our guest speaker **Antonia Simone Lagana** from Italy was going to join us in Istanbul.

Endo at School





We are continuing our **Endo at School Project** in different schools around Turkey where we inform high school students on Endometriosis and Reproductive Health. On the 2nd of March also as a part of the EndoMarch activities we visited **Ankara Yuxselen College and Fen High School Dogukent Campus**. **Eda Ureyen Ozdemir, MD** gave a seminar to educate high school students and also to raise awareness.

If you want us to visit your school and be a part of our Endo at School Project you can fill out the form using the link below:

<https://www.endometriozisdernegi.org/dernekten-haber/endo-okulda-projesi>

TJOD Istanbul Sunday Meetings



On February 16, 2020 under the supervision of our founding president **Engin Oral, MD** Turkish Gynecology and Obstetrics Society Istanbul Branch's Sunday Meeting took place. One of our board members, **Banu Kumbak Aygun, MD**, delivered a talk on '**Which endometriosis patients are suitable for ovulation induction? And how to do it?**'.

Our Society's New Headquarters



We have a **new headquarter** where our young colleagues, our youth chapter, volunteers and our patients will be able to get together and work to raise awareness for endometriosis. However, due to COVID-19 pandemic the inauguration of the new HQ was postponed to a later date.

Our New Website

www.endometriosturkey.org



Our websites were updated to have a more user-friendly interface for colleagues and patients.

C- NEWS FROM THE WORLD OF ENDOMETRIOSIS

WES YOUNG AMBASSADORS



Our founding president and the current president of European Endometriosis League (EEL) Engin Oral, MD was selected last year as a WES Senior Ambassador. With the joint proposal of Engin Oral, MD and our current president Taner Usta, MD, **Hale Goksever Celik, MD** and **Nura Fitnat Topbas Selcuki, MD** has been appointed as WES Young Ambassadors. On behalf of our society we are very honored to share this news with you.

EEL Webinar



The image shows a promotional graphic for EEL Webinars. On the left is a vertical banner with the text 'EEL Webinars' in white and blue, set against a background of blue, glowing, abstract lines. At the bottom of the banner is the EEL logo and the text 'European Endometriosis League'. On the right is a white box with the title 'PROGRAMME' in bold black letters. Below the title is a list of webinar dates, speakers, and topics. At the bottom of the white box are icons for a key and a clock, with the text 'REGISTER LINK', 'HTTPS://ZOOM.US/j/917071787', 'TIME', and '7.00 PM CET'.

PROGRAMME

17.3.2020 | Juan Garcia Velasco, MD, PhD
IS FERTILITY PRESERVATION REQUIRED IN PATIENTS WITH ENDOMETRIOSIS AND TO WHO IT IS?

14.4.2020 | Harald Krentel, MD
WHAT IS NEW IN THE DIAGNOSIS AND THERAPY IN ADENOMYOSIS IN 2020?

19.5.2020 | Engin Oral, MD
WHAT IS THE CURRENT MANAGEMENT IN ADVANCED ENDOMETRIOSIS AND INFERTILITY?

16.6.2020 | Sebastian Schäfer, MD
HOW IS ULTRASONOGRAPHY LINKED TO SURGERY IN ADVANCED ENDOMETRIOSIS?

14.7.2020 | Hans-Rudolf Tinneberg, MD, PhD
COMPLEMENTARY MEDICINE FOR TREATMENT OF ENDOMETRIOSIS

15.09.2020 | Attila Bokor, MD, PhD
NATURAL ORIFICE SPECIMEN EXTRACTION DURING DEEP ENDOMETRIOSIS SURGERY

13.10.2020 | Horace Roman, MD, PhD
TIPS AND TRICKS IN SURGICAL MANAGEMENT OF DEEP ENDOMETRIOSIS

17.11.2020 | Shaheen Khazali, MD
MANAGEMENT OF URETERAL ENDOMETRIOSIS

15.12.2020 | Ertan Saridogan, MD, PhD
WHAT DO WE KNOW ABOUT ENDOMETRIOSIS IN ADOLESCENTS?

19.01.2021 | Joerg Keckstein, MD, PhD
THE ROLE OF CLASSIFICATION OF ENDOMETRIOSIS: FROM R-ASRM TO #ENZIAN, THE COMMON LANGUAGE FOR DIAGNOSTICS AND TREATMENT!

16.2.2021 | Gernot Hudelist, MD
COMPLICATIONS OF DE SURGERY

REGISTER LINK
[HTTPS://ZOOM.US/j/917071787](https://zoom.us/j/917071787)

TIME
7.00 PM CET

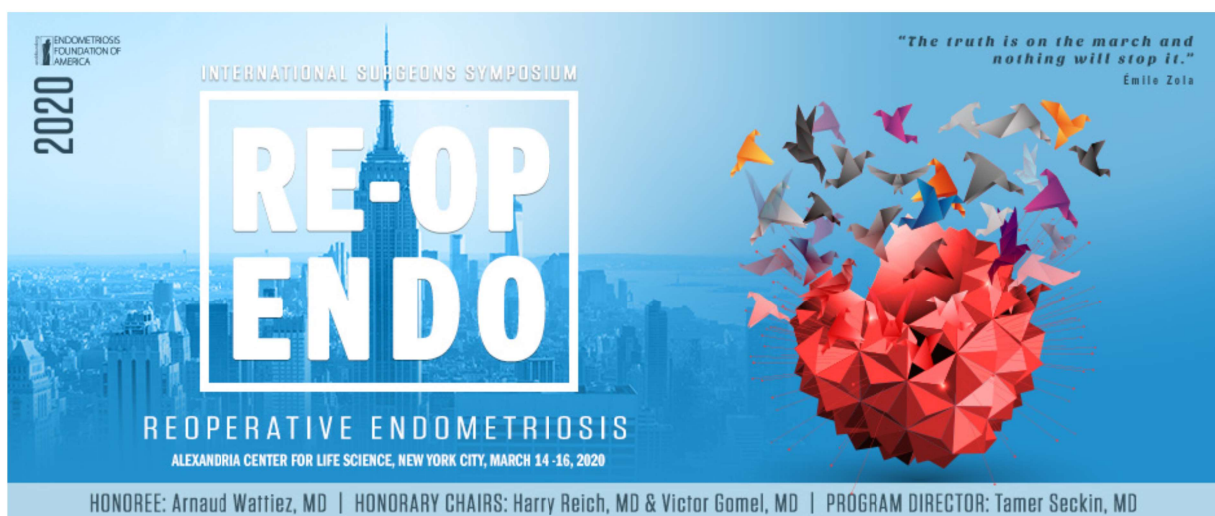
European Endometriosis League (EEL) president **Engin Oral, MD** and his team prepared EEL Webinar program which started this month. Juan Garcia Velasco from Spain gave the first webinar in March on the topic; **'Is fertility preservation required in patients with endometriosis and to who it is?'**. International specialists focusing on different aspects of endometriosis will be participating in these monthly webinars. For more information you can visit the following website; <https://www.endometriosis-league.eu/home> or you can follow the social media accounts of European Endometriosis League or Euro Endo League.

ENDO DUBAI 2020



5th ENDO DUBAI took place on **February 27-29, 2020**. The congress hosted many international speakers under a general motto of **'Truth and Lies'**. Guests and specialists from all around the world came together to talk about the future of minimal invasive surgery.

EFA (Postponed)



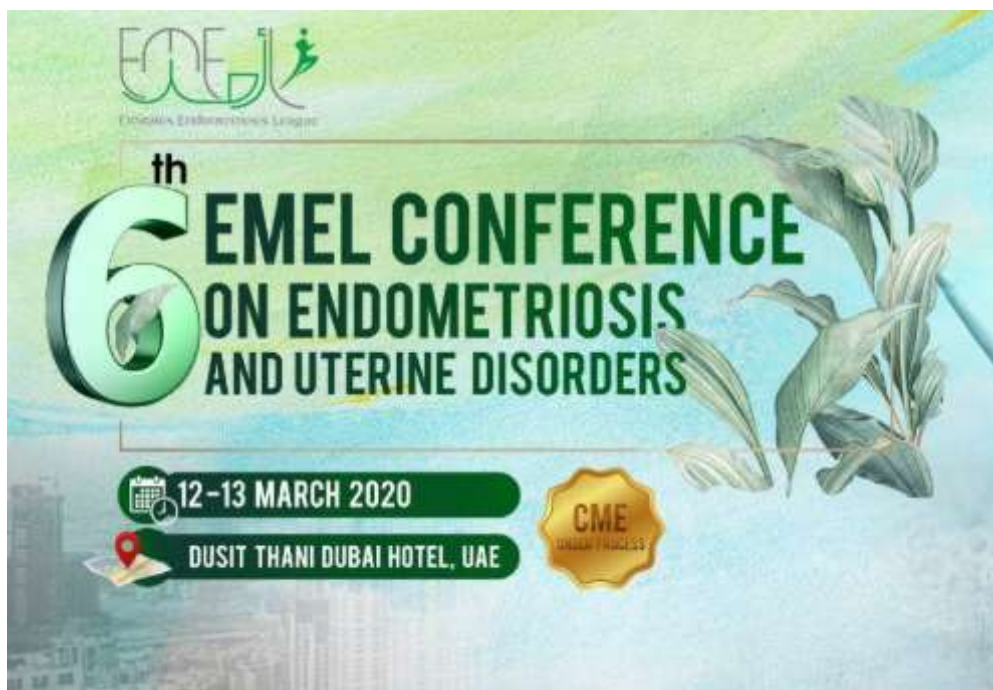
'Re-operative Endometriosis' meeting organized by Endometriosis Foundation of America (EFA) under the presidency of Tamer Seckin, MD was postponed because of COVID-19 pandemic.

WCE 2020 (Postponed)



14th World Congress on Endometriosis which was going to take place in China on **May 8-11, 2020** was postponed due to COVID-19 pandemic. The congress will be held in Dubai on **September 11-14, 2020**.

6th EMEL Conference on Endometriosis



6th EMEL Conference where our founding president **Engin Oral, MD** was invited as a guest speaker was cancelled due to COVID-19 pandemic.

ESHRE Campus Workshops (Postponed)



ESHRE Campus Workshops which were going to be held in March and April have either been postponed or cancelled due to COVID-19 pandemic. e-Campus access has been made public. The congress, which was going to take place on **July 5-8, 2020** in Copenhagen has been cancelled.

SEUD (Cancelled)



6th SEUD Congress organized by **The Society of Endometriosis and Uterine Disorders** in May in Sweden was cancelled due to COVID-19 pandemic.

D- INTERVIEW WITH AN 'ENDO SPECIALIST'



Tamer Seçkin, MD

A Short Curriculum Vitae

Tamer Seckin, MD has been performing endometriosis surgery for over thirty years at Lenox Hill Hospital, New York. In 2009, Dr. Seckin co-founded the Endometriosis Foundation of America (EndoFound), the first advocacy foundation organized by a practicing physician to raise awareness on endometriosis. The EndoFound strives to increase disease recognition, provide advocacy, facilitate expert surgical training, and fund landmark endometriosis research. In 2012, he was elected as Top Endometriosis Doctor in US, and in 2019 he received Patients Choice Award for Best Endometriosis Surgeon. He currently practices in Seckin Endometriosis Center and continues his works in EndoFound.

The interview by Bahar Yuksel Ozgor, MD:

Hello, today we will talk with Dr. Tamer Seckin from New York.

Tamer Seckin is an endometriosis surgeon representing Turkey in the US for more than forty years. We have learned a great deal of information on endometriosis from him and now we would like to listen to him with his own words.

Hello and welcome. First of all, I would like to thank you for kindly accepting to do this interview.

When did you first meet Endometriosis? How did you decide? How has everything unfolded?

Today our topic in New York is Corona virus and it's a very different feeling to talk and put your focus on endometriosis. Thank you for giving me this opportunity. Hello everyone. First question, how did I start this? I am a general OBGYN specialist. I started residency with general and vascular surgery. I had a very long residency, 7 years in total. I can't forget the burn unit. Actually, you can look at endometriosis as a burn case. In order to understand surgery, you have to understand wound healing. Besides this, you have to have an empathy towards pain. You feel it. You feel the inability it creates. By social means, there is no other profession that makes you feel this way. My first encounter with laparoscopy happened through fetoscopy. First fetoscopy in Hacettepe University was done by me and Sinan Beksac. I'm not sure whether he remembers, but it was quite different to look inside at those times. At those times in the US, pain that women suffered was believed to be mental rather than organic. Later the biopsies revealed most of them to be endometriosis. Yes, at first very few biopsies were done, later on we excised radically. I started this by means of need. The patient feedback actually drew me into this. I especially realized non-pigmented lesions were actually active endometriosis. We learned from our patients that by radically excising they were feeling much better. Endometriosis surgery is prone to many complications, you can open up new windows by touching a single organ and even if you are one of the best surgeons you may end up with some complication in every 25-30 patients. That's why you have to be very careful, but with the complex cases when you see a good result it makes you very happy. This may not work for everyone, but it worked for me.

When you put science and surgery aside you said empathy, could you please tell us about Endofoundation?

There are many sides of this topic. One of which; after 1995 I started working with Dr. Harry Reich and I learned a great deal from him. One of our patients was wealthy and he donated to a research organization and he didn't ask for our opinion and I thought it should not be this way. At those times nobody was working on endometriosis because the insurance companies didn't accept endometriosis as a disease and this situation was hard to manage by the doctors. We decided to build a bridge between patients and doctors. Our first patients were twin lawyers and later on after the surgery both got pregnant. We decided to dive into this project with them and most of our patients wanted to support us. After the life changing surgery, Padma Lakshmi came and wanted to support as well. Her well-being and fame created a more influential awareness. For the first time a famous person announced that she is an endo patient and a foundation spokesperson. For the past 11-12 years we are advancing with our mission focused on patient, research and early diagnosis.



Dr. Tamer Seçkin

In the last 10 days US senate has started to discuss endometriosis and EndoFoundation was referred as well. How do you see this update, what do you think are the responsibilities you have to use this as an opportunity?

Two of the senators came to our office and announced that they will support us for research. Of course, this was before the novel coronavirus interfered. It is very important to tell the young women what is normal, what should be considered normal, to make an early diagnosis and to interfere timely. With our proposal, a law was enacted in New York which allows endometriosis to be taught in schools. It is a very important step to spread this all over US. It is a historic chapter for the book of endometriosis.

My advice to young doctors is to learn to ask the right and cardinal questions to patients without hesitating. When these questions are asked, the answers will lead you. I am supporting them if they are inclined towards surgery. Surgery is a fine work like weaving a silk carpet or playing a violin. You have to know how to handle each organ; a general surgeon or a urologist might come in, but you have to know how to repair each and every space that you create. Briefly, the standard law applies. Recognize, restore, repair, reconstruct and review.

Thank you very much

Thank you.

E- ARTICLES ON ENDOMETRIOSIS FROM OUR COUNTRY FROM THE LAST THREE MONTHS

1. The prevalence of endometrioma and associated malignant transformation in women over 40 years of age.

Oral, E., Sozen, I., Uludag, S., Demirkiran, F., Ilvan, S., Oncul, M., & Celik, H. G. Journal of Gynecology Obstetrics and Human Reproduction, 101725,2020

OBJECTIVE:

Endometriosis is an estrogen-dependent chronic disease, which is regarded as a disease of reproductive-aged women. Endometriosis is most frequently diagnosed during reproductive period. We aimed to determine the frequency of endometrioma in women over 40 years of age who were operated for adnexial mass.

MATERIALS AND METHODS:

A total of 1100 women over 40 years of age underwent surgery for adnexial mass were included in this cohort study between 2006 and 2016. Women who met the criteria were compared regarding the type of adnexial mass, age groups, menopausal status and malignant transformation.

RESULTS:

A total of 299 women (27.2%) with benign ovarian mass were determined to have endometrioma. Women with endometrioma were younger and nulliparous more frequently comparing women without endometrioma. Although 20% of the patients in the endometrioma group were postmenopausal, 70% of the patients in the control group were postmenopausal. Endometrioma-associated ovarian tumors were developed in nearly 11% of women with endometrioma.

CONCLUSIONS:

Even though endometriosis is accepted as a disease of reproductive-aged women, it can occur over 40 years of age. Detailed anamnesis and careful gynecological examination provide key information for differential diagnosis. Accurate information about the risk of malignant transformation should be informed.

2. The regression of endometriosis with glycosylated flavonoids isolated from *Melilotus officinalis* (L.) Pall. in an endometriosis rat model.

Ilhan, M., Ali, Z., Khan, I. A., Taştan, H., & Akkol, E. K. Taiwanese Journal of Obstetrics and Gynecology, 59(2), 211-219,(2020)

OBJECTIVE:

Melilotus officinalis (L.) Pall. is commonly used for treating bronchitis, painful menstruation, hemorrhoids, kidney stones, ulcers of the eyes, earache, and hardening and swelling of uterus. The European Medicines Agency reported the use of *M. officinalis* orally against stomach ache, gastric ulcer, and disorders of the liver and uterus in folk medicine. The present study aimed to appraise the activity of *M. (L.) Pall.* aerial parts in endometriosis rat model.

MATERIALS AND METHODS:

The endometriosis rat model was used to evaluate the potential activity of *M. officinalis* aerial parts based on its folkloric usage. The aerial parts of *M. officinalis* were extracted with n-hexane, ethyl acetate (EtOAc), and methanol (MeOH), respectively. The adhesion scores, endometrial foci areas, and cytokine levels were measured in all treated groups. After the biological activity studies, phytochemical studies were performed on the active extract and the fractions obtained from the active extract.

RESULTS:

The MeOH extract significantly decreased the endometrial foci areas and cytokine levels in rats with endometriosis. Fractionation was performed on the MeOH extract to achieve bioactive molecules. Following the fractionation, the fractions obtained from the MeOH extract were tested. Fraction C showed the highest activity in the rat endometriosis model. Phytochemical investigation of the active fraction (Fraction C) resulted in isolation and elucidation of some quercetin and kaempferol glucoside derivatives.

CONCLUSION:

Fraction C obtained from the MeOH extract of *M. officinalis* showed the highest activity, yielding four glycosylated flavonoids.

E- ARTICLES ON ENDOMETRIOSIS FROM OUR COUNTRY FROM THE LAST THREE MONTHS

3. The Effects of Micronized Progesterone and Cabergoline On a Rat Autotransplantation Endometriosis Model: A Placebo Controlled Randomized Trial.

Karslioglu, T., Karasu, A. F. G., & Yildiz, P. *Journal of Investigative Surgery*, 1-5. (2020).

Aim: The etiology of endometriosis is complex and various theories have been postulated. Endometriosis pathogenesis involves genetic susceptibility, immunologic alterations and inflammatory prerequisite pathways. In this pilot experimental animal study we wanted to investigate the effects of cabergoline and micronized progesterone on a rat endometriosis model. **Material and methods:** All rats were provided and housed in the animal laboratory of the Experimental Research Center of Bezmialem Vakif University. This was a placebo controlled randomized trial. The endometriosis model consisted of autotransplantation of endometrial tissue on 21 adult Sprague-Dawley rats. Endometriosis formation by second-look laparotomy was confirmed 8 weeks later. After measuring the endometriosis implant area the rats were randomized into three intervention groups: cabergoline treatment group, micronized progesterone treatment group and the control group. Four weeks after treatment, a third laparotomy was performed to remeasure implant volumes. Endometriotic implants were obtained for histopathological and immunohistochemical analysis. **Results:** After 4 weeks of treatment endometriosis implant sizes diminished in all groups. There was no statistically significant difference regarding implant size volume before and after treatment among the groups. The peritoneal histopathology and immunohistochemistry showed no difference with regards to IL-6 and TNF- α staining among groups. **Conclusion:** We conclude that oral treatment of cabergoline and micronized progesterone for 4 weeks was not statistically effective in endometriotic implant regression. However, we believe further studies are warranted. Treatment for longer durations or via different routes may be investigated in further studies. When ethically applicable other mammals may be considered such as baboons.

4. Iatrogenic endometriosis following apical pelvic organ prolapse surgery: a case report.

Cubuk, A., Ozkaptan, O., & Neymeyer, J. (2020). *Journal of Medical Case Reports*, 14(1), 1-4.

BACKGROUND:

Iatrogenic endometriosis is the presence of endometrial glands and stroma out of the uterus following certain surgical interventions. The rate of iatrogenic endometriosis after gynecologic surgeries due to benign uterine disease is 1-2%. Laparoscopic supracervical hysterectomy is also a part of frequently used surgical treatment of apical pelvic organ prolapse, which is followed by sacrocervicopexy. However, there are no data about iatrogenic endometriosis after apical prolapse surgery in the current literature. Herein, we present a case report of a patient diagnosed with de novo endometriosis 1 year after laparoscopic supracervical hysterectomy and sacrocervicopexy.

CASE

A 46-year-old parous Slavic woman who underwent laparoscopic supracervical hysterectomy and sacrocervicopexy secondary to grade 3 symptomatic apical prolapse 1 year earlier was admitted to the same clinic with pelvic pain that had started 6 months following surgery. Deep vaginal palpation was painful. Transvaginal ultrasonography revealed an area with hypervascularization on the sacral promontory. She was scheduled for diagnostic laparoscopy. A 2 x 2-cm solid, wine-colored, hypervascular hemorrhagic lesion was seen on the sacral promontory. The lesion and the peritoneal layer behind it were totally excised. The patient was discharged on the first postoperative day, without any complications. Pathologic examination revealed foci of endometriosis comprising endometrial glands and stroma within the connective tissue, along with hemosiderin-laden macrophages. The symptoms of the patient resolved after the surgery, and no further adjuvant treatment was needed.

PRESENTATION:

CONCLUSION:

Although the rate of iatrogenic endometriosis is low after laparoscopic supracervical hysterectomy and sacrocervicopexy, the possibility of the occurrence of iatrogenic endometriosis should be discussed with patients who are diagnosed with apical prolapse to determine the type of surgical intervention. Iatrogenic endometriosis should be kept in mind for differential diagnosis in case of pain after laparoscopic supracervical hysterectomy and sacrocervicopexy.

E- ARTICLES ON ENDOMETRIOSIS FROM OUR COUNTRY FROM THE LAST THREE MONTHS

5. Evaluation of the ocular surface by impression cytology in patients with endometriosis.

Turan, M., Turan, G., & Usta, A. Graefes Archive for Clinical and Experimental Ophthalmology, 1-7. (2020).

OBJECTIVE:

The aim of this study was to investigate the effect of endometriosis on the ocular surface.

METHODS

A total of 50 patients were included in the study and divided into two groups. Group 1 consisted of 25 patients with endometriosis. Group 2 had 25 control patients. All patients underwent complete ophthalmic examination, and the right eyes were included in the study. To evaluate the ocular surface, both groups were tested with the following: the Schirmer I test, tear breakup time (TBUT), the conjunctival impression cytology (CIC), and the Ocular Surface Disease Index (OSDI). The results were subsequently compared.

RESULTS:

The average Schirmer I test results were 8.40 ± 2.74 mm in group 1 and were significantly lower in patients with endometriosis ($P < 0.001$). The average TBUT test results were 9.04 ± 3.61 s in group 1 and were significantly lower in patients with endometriosis ($P < 0.001$). The average OSDI results were 24.04 ± 9.29 in group 1 and were significantly higher in patients with endometriosis ($P < 0.001$). The average CIC results were 1.76 ± 0.88 in group 1 and were significantly higher in patients with endometriosis ($P < 0.001$).

CONCLUSIONS:

Ocular surface changes, including squamous metaplasia, may be observed in the conjunctiva of patients with endometriosis.

6. Endometriomas with low-risk malignancy potential in ultrasonography with high human epididymis protein 4 and risk of ovarian malignancy algorithm: a cases series.

Karacan, T., Ozyurek, E., Yesiralioglu, S., Kiyak, H., Usta, T., & Oral, E. Gynecological Endocrinology, 36(2), 117-121. (2020).

Endometriosis is an estrogen-dependent disease that affects 5 to 15% of women of reproductive age. Data from large-cohort and case-control studies indicate an increased risk for ovarian cancers in women with endometrioma. Recently, as an ovarian cancer biomarker, human epididymal secretory protein E4 (HE4) has been increasingly investigated in the differentiating of endometrioma from ovary malignancy and in confirming the benign structure of the endometrioma. This case series study describes women who underwent surgery due to increased serum HE4 levels and higher Risk of Ovarian Malignancy Algorithm (ROMA) index, in whom the final pathology was reported as benign, although, ultrasonography and magnetic resonance imaging (MRI) findings showed features of "typical" endometrioma.

F- SOCIAL MEDIA

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SUMMARIES OF ENDOMETRIOSIS RELATED ARTICLES

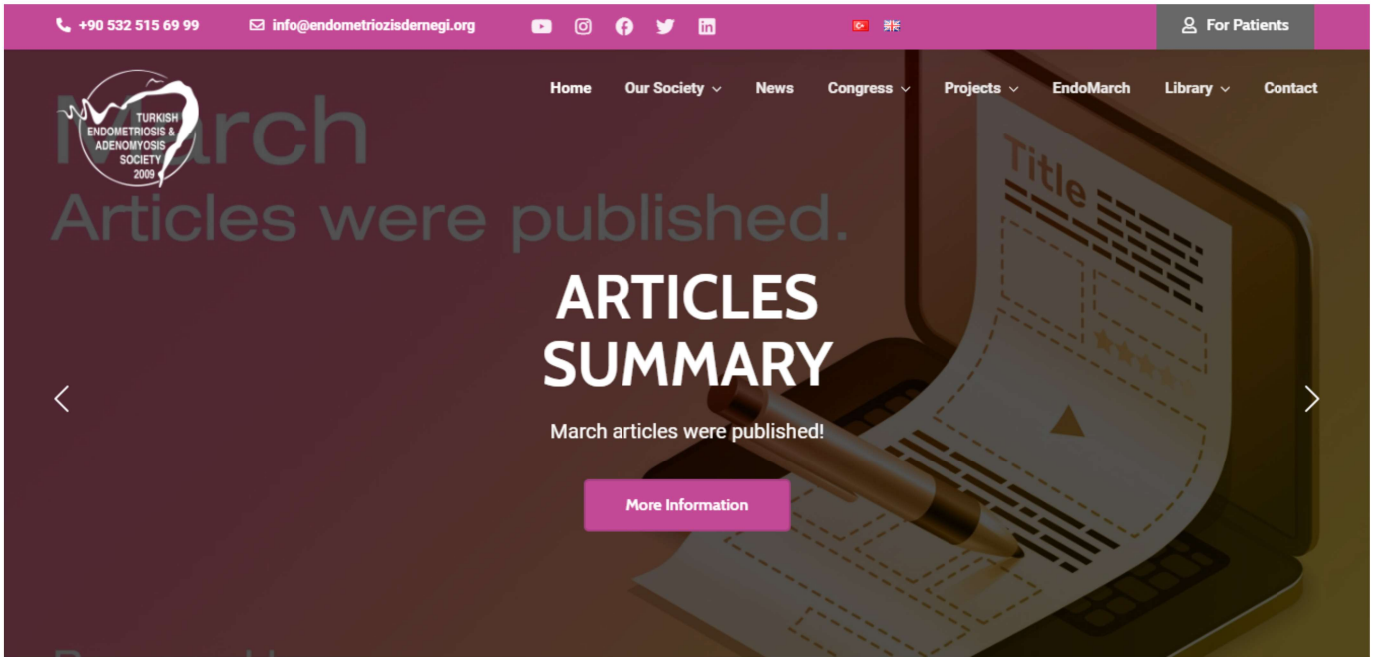
On our website's main page endometriosisturkey.com you can find monthly selected endometriosis related articles which are selected and summarized by **Prof. Fatma Ferda Verit, MD** You can find the most up-to-date publications on endometriosis under the following link
Article Full texts uploaded by **Assoc. Prof. Hale Goksever Celik, MD**

<http://www.endometrioizisderneđi.org/en/library/article-summaries>



OUR WEBSITES

You can use the following links for our websites.
**Endometriosis & Adenomyosis Society
Website**
(www.endometriozis.org)



ENDO AT



10th year
2009-2019

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healthier and more conscious
society with healthy young people
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