# International Journal of Health Science

# DRUG THERAPIES IN THE TREATMENT OF ENDOMETRIOSIS

### Amanda Lima Souza

Universidade Estácio de Sá Campus Città Rio de Janeiro-RJ http://lattes.cnpq.br/6701036411204991

# Myrellen Said de Almeida

Universidade Brasil Fernandópolis-SP

# Poliana Cappellesso

Universidade Brasil Fernandópolis -SP https://lattes.cnpq.br/8174680202665971

### Idalmir Barbosa dos Santos

Faculdade AGES Jacobina - BA https://lattes.cnpq.br/9161865618802728

*Elaine Moraes de Lima* Uninter - Paraguai

# *Bianca Neri Nunes* Universidad Autonoma San Sebastian Pedro Juan Caballero - Paraguai

# Antonio Alves de Morais filho

Universidade Brasil Fernandópolis-SP

Vinicius Oliveira Suckar Uninter - Paragaui

### Abas Kassem Zahwe

Universidad Autonoma San Sebastian Pedro Juan Caballero - Paraguai



All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0).

# Jair Maximiano da Silva Júnior

Universidade Estácio de Sá Campus Città Rio de Janeiro-RJ

Abstract: Objective Know how drug and non-drug therapies currently used for the treatment of endometriosis work, as well as their positive and negative effects. Methods: An integrative review was carried out, using as criteria the search in the National Library of Medicine (PubMed) and Scientific Electronic Library Online (SciELO) databases using the descriptors (i) endometriosis (ii) fertile age, (iii) treatment, with the Boolean operator "AND". Studies published from 2018 to 2023 were included. Results: The treatment of endometriosis must be an individualized treatment due to the variety of symptoms of each patient and the impact on the life of each patient and after analysis we realized that currently the standard therapy is the use of hormonal methods due to the fact that endometriosis is responsive to hormones, the Drugs for these conditions are progestogens and combined oral contraceptives (COCs).

**Keywords:** Endometriosis, childbearing age and treatment.

#### INTRODUCTION

Endometriosis is a clinical pathology where the functional endometrial tissue is outside the uterine and myometrial cavity, it is considered a benign disease but it can be accompanied by malignant endometrial tumors, it is currently considered a public health problem for affecting a large number of people. number of women and the physical, emotional and psychosocial impact of the affected patients (FERNANDO et al., 2021).

Endometriosis resembles malignant diseases in some aspects such as estrogendependent progressive and invasive growth, it appears to be the most common benign proliferation in women of childbearing age since this number reaches around 10% to 15% of women in reproductive age (Mehedintu et al., 2022).

Endometriosis is a debilitating disease

that reduces quality of life and regresses at the onset of less pause or after ovariectomy, suggesting that ectopic implants depend on ovarian steroids in a similar way to eutopic endometrium and, despite being so prevalent, it is a pathology that has its diagnosis delayed for years (TAYLOR et al., 2021).

The identification of appropriate treatment for endometriosis gives the patient great control of the symptoms, but this is still a difficulty encountered since the signs and symptoms are numerous and present in the most diverse ways, the presence of pelvic lesions is heterogeneous and the manifestations of disease outside the female reproductive tract remain poorly understood (SHIM et al., 2020).

Endometriosis is now considered a systemic disease rather than a disease predominantly that affects the pelvis. Endometriosis affects metabolism in the liver and adipose tissue, leads to systemic inflammation, and alters gene expression in the brain, which causes pain sensitization and mood disorders. The full effect of the disease is not fully recognized and goes far beyond the pelvis. Recognition of the full scope of the disease will facilitate clinical diagnosis and allow for more comprehensive treatment than is currently available.

# REVISION

#### INCIDENCE AND PREVALENCE

It is believed that 6% to 10% of women of reproductive age have endometriosis even if not diagnosed and 50% to 60% of adolescents and adults with pelvic pain and up to 50% of women with infertility are affected by the disease, however, in their early stages or in asymptomatic and oligosymptomatic infertile women, it may be underdiagnosed (NEZHAT et al., 2021).

What is a major health concern in the

adolescent, adult population and significantly affects daily physical and psychosocial functioning. Endometriosis can have different presentations in this population, and diagnosis often involves long delays and multiple specialist visits.

# **ETIOPATHOGENESIS**

In previous periods, several theories were believed on the emergence of endometriosis everyday based experiences on and experiments, which were grouped into three distinct groups: the theory of transplantation, coelomic metaplasia and metaplastic induction due to biochemical and endogenous factors of the cavity. peritoneal, however none of these theories can justify the entire clinic of the disease (NEZHAT et al., 2022).

Recently, hypothesis for а the etiopathogenesis of endometriosis has been studied, it is believed that it suggests that altered endometrial stem cells (called endometrial Mesenchymal Stem Cells or eMSC) reach the peritoneal cavity with retrograde menstruation and implant in the peritoneum; or that normal eMSCs could implant in the peritoneum with increased receptivity; or even both combined (KIM et al., 2021).

# **RISK FACTORS**

The pathogenesis of endometriosis is multifactorial, involving ectopic endometrial tissue, altered immunity, hormonal factors genetic factors. The risk factors and for endometriosis are: maternal family history increases the risk by 7%, uterine malformations, early menarche, short menstrual cycles, duration of menstrual flow, increased menstrual flow, cervical stenoses, low BMI, late pregnancy, nulliparity and white race and Asian (ILLUM et al., 2022).

#### SIGNS AND SYMPTOMS

Signs and symptoms involve dysmenorrhea, dyspareunia, chronic noncyclic pelvic pain, dysquesia, dysuria, changes in bowel habits and often infertility, but its clinical presentation is very varied and has no pathognomonic or characteristic signs of the disease, which makes diagnosis difficult. and consequently, its treatment (WARZECHAET al., 2020).

#### CLASSIFICATION

This disease has been classified into four stages based on the severity, quantity, location, depth and size of the growths, these stages being: stage I (minimal disease), stage II (mild disease), stage III (moderate disease) and stage IV (serious illness). The notion of deep endometriosis implies endometriosis infiltrating deeper than 5 mm under the peritoneum]. This classification, however, cannot predict clinical outcomes, including symptomatology, respectively pain (ZAKIHARI al., 2020).

#### DIAGNOSIS

The diagnosis is made through the clinic and complementary exams as non-invasive diagnostic alternatives by imaging such as transvaginal ultrasound and IDEA protocol, magnetic resonance imaging, which currently corroborate a lot for the diagnosis (HERMENS al., 2022).

#### THERAPEUTIC

The treatment of endometriosis must be an individualized treatment due to the variety of symptoms of each patient and the impact on the life of each patient, whenever possible these patients must be assisted by a multidisciplinary team capable of covering the psychosocial aspects of each patient (ZHENG al., 2020). Currently the standard therapy is the use of hormonal methods because endometriosis is responsive to hormones, the drugs for these conditions are progestogens and combined oral contraceptives (COCs), which lead to hormonal conditions similar to those observed during pregnancy, and androgens and GnRH agonists (GNRHa), which promote endogenous estrogen suppression (BAMBLE al., 2021).

Other routes of progestogen administration have been tested, such as the subdermal etonorgestrel implant and the levonorgestrelreleasing intrauterine system (LNG-IUS). Combined oral contraceptives are the first choice of clinical treatment in many centers and have been widely used to control pelvic pain associated with endometriosis. However, the mechanism by which this treatment regimen acts on endometriosis foci is still unclear (DESTEK al., 2020).

#### FUTURE PERSPECTIVES

The number of cases is very high, especially in patients with infertility and chronic pelvic pain, which is one of its clinical manifestations. The biopsychosocial impact of this pathology is high, both on a personal and public health level. Treatment must always be individualized, seeking a multidisciplinary team taking into consideration, not only the existing evidence regarding the effectiveness of different therapeutic regimens, but also all other variables that determine therapeutic success, aiming, ultimately, at promoting global improvement of the patients' quality of life (STUPARICH al., 2022).

# REFERENCES

1-Bray-Beraldo, Fernando et al. **"Evaluation of Bowel Function After Surgical Treatment for Intestinal Endometriosis: A Prospective Study."** *Diseases of the colon and rectum* vol. 64,10 (2021): 1267-1275. doi:10.1097/DCR.00000000001890

2-Mehedintu, C et al. "A endometriose ainda é um desafio." Jornal de medicina e vida vol. 7,3 (2022): 349-57.

3-Taylor, Hugh S et al. **"A endometriose é uma doença sistêmica crônica: desafios clínicos e novas inovações."** *Lancet (Londres, Inglaterra)* vol. 397,10276 (2021): 839-852. doi:10.1016/S0140-6736(21)00389-5

4-Shim, Jessica Y e Marc R Laufer. "Endometriose Adolescente: Uma Atualização." Jornal de ginecologia pediátrica e adolescente vol. 33,2 (2020): 112-119. doi:10.1016/j.jpag.2020.11.011

5-Rolla, Edgardo. **"Endometriose: avanços e controvérsias em classificação, patogênese, diagnóstico e tratamento."** *F1000Research* vol. 8 F1000 Faculdade Rev-529. 23 de abril de 2019, doi:10.12688/f1000research.14817.1

6-Nezhat, Camran, and Shruti Agarwal. **"Bowel endometriosis."** *Fertility and sterility* vol. 117,2 (2022): 384-386. doi:10.1016/j. fertnstert.2021.12.006

7-Rowlands, I J et al. **"Prevalence and incidence of endometriosis in Australian women: a data linkage cohort study."** *BJOG* : an international journal of obstetrics and gynaecology vol. 128,4 (2021): 657-665. doi:10.1111/1471-0528.16447

8-Nezhat, Camran, and Shruti Agarwal. "Genitourinary tract endometriosis." *Fertility and sterility* vol. 117,1 (2022): 228-229. doi:10.1016/j.fertnstert.2021.11.004

9-Kim, Hyunkyung et al. **"The Estimated Prevalence and Incidence of Endometriosis With the Korean National Health Insurance Service-National Sample Cohort (NHIS-NSC): A National Population-Based Study."** *Journal of epidemiology* vol. 31,12 (2021): 593-600. doi:10.2188/jea.JE20200002

10-Illum, Louise Ruby Høj et al. **"Temporal and regional differences in the incidence of hospital-diagnosed endometriosis:** a Danish population-based study." *Acta obstetricia et gynecologica Scandinavica* vol. 101,7 (2022): 737-746. doi:10.1111/ aogs.14364

11-Warzecha, Damian et al. **"The Impact of Endometriosis on the Quality of Life and the Incidence of Depression-A Cohort Study."** *International journal of environmental research and public health* vol. 17,10 3641. 21 May. 2020, doi:10.3390/ ijerph17103641

12-Zakhari, Andrew et al. **"Dienogest and the Risk of Endometriosis Recurrence Following Surgery: A Systematic Review and Meta-analysis."** *Journal of minimally invasive gynecology* vol. 27,7 (2020): 1503-1510. doi:10.1016/j.jmig.2020.05.007

13-Hermens, Marjolein et al. "Incidence of ovarian cancer after bilateral salpingo-oophorectomy in women with histologically proven endometriosis." *Fertility and sterility* vol. 117,5 (2022): 938-945. doi:10.1016/j.fertnstert.2022.01.030

14-Zheng, Y M et al. Zhonghua fu chan ke za zhivol. 55,6 (2020): 384-389. doi:10.3760/cma.j.cn112141-20191202-00654

15-Blamble, Tiffany, and Lisa Dickerson. **"Recognizing and treating endometriosis."** *JAAPA : official journal of the American Academy of Physician Assistants* vol. 34,6 (2021): 14-19. doi:10.1097/01.JAA.0000750940.47126.58

16-Destek, Sabahattin. **"Endométriose de la paroi abdominale."** *Journal of obstetrics and gynaecology Canada : JOGC = Journal d'obstetrique et gynecologie du Canada : JOGC* vol. 42,11 (2020): 1304. doi:10.1016/j.jogc.2019.07.013

17-Stuparich, Mallory A et al. **"Endométriose polypoïde imitant la carcinomatose péritonéale chez les femmes ménopausées** : perspective laparoscopique." *Journal of obstetrics and gynaecology Canada : JOGC = Journal d'obstetrique et gynecologie du Canada : JOGC* vol. 44,9 (2022): 943-944. doi:10.1016/j.jogc.2020.10.001