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Jessica Workman

jessica.workman@otterbein.edu

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Endometriosis

Jessica Workman BSN, RN
Otterbein University, Westerville, Ohio

Introduction

Many people have heard about endometriosis but not a lot is understood about the condition. Endometriosis is a condition where endometrium, tissue that lines the uterus, grows outside the uterus. This tissue can grow around the ovaries, fallopian tubes, bowels, and bladder. When this occurs, the surrounding tissue becomes inflamed, swollen and irritated which causes scarring. The resulting lesions impede the function of the organs that they surround. The inflammation and tissue damage can lead to bleeding and painful discomfort.

There is much debate over the exact cause of endometriosis and how to best treat the condition. It is also hard to determine the incidence or prevalence in a population because of limited means of diagnosing. This can lead to misdiagnosis and patients unnecessarily living with pain related to untreated endometriosis. Research continues to be as important as ever and healthcare professionals will need to stay up to date on current findings.



Image retrieved from <https://www.theodysseyonline.com/endometriosis-the-silent-killer>

Symptoms

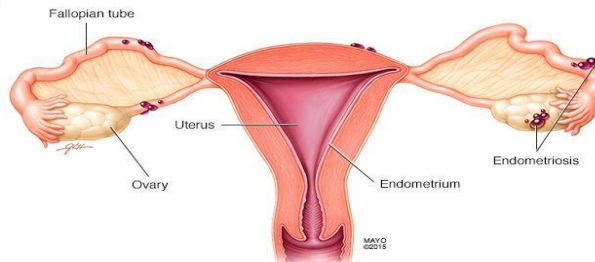
- Symptoms widely vary in both occurrence and severity, which is why "it takes an average of 11.7 years for endometriosis to be diagnosed in a woman with symptoms" (Schrager, Falleroni, & Edgoose, 2013, p. 109).
- The most common symptoms are: dysmenorrhea, abdominal or pelvic pain, menorrhagia
- Pain may also be present in lower back, rectum, bladder, and even in the legs
- Dyspareunia (pain with intercourse)
- Dyschezia (painful bowel movements)

Underlying Pathophysiology

- The exact cause of endometriosis is unknown. There do appear to be aspects of chronic inflammation, impaired immune response suppression and inadequate fibrinolytic mechanisms at play (Augoulea, Alexandrou, Creatsa, Vrachnis, & Lambrinouadaki, 2012).
- Retrograde menstruation occurs and endometrial cells travel through the fallopian tubes and into the peritoneal cavity (Macer & Taylor, 2012).
- Endometrial cells implant outside of the uterus where they establish a blood supply, respond to hormones, proliferate and invade surrounding structures. This elicits the inflammatory response and resulting pain and scarring (Tamaresis et al., 2014).
- Women may also have altered immunity that contributes to the proliferation of endometrial cells. There is reduced activity of cytotoxic T cells and natural killer cells (NK) which fail to kill the rogue tissue cells (Augoulea et al., 2012).
- Since endometriosis is a chronic disease, there are increased number of leukocytes and macrophages present around the implanted endometrial tissue. These cells secrete cytokines and growth factors that further enhance the multiplication of endometrial cells (Macer & Taylor, 2012).

Significance of Pathophysiology

- Comorbidities: infertility, ovarian cysts, pelvic inflammatory disease, irritable bowel syndrome
- "Infertility is due to ovulatory dysfunction, poor egg quality, abnormal uterine endometrium, and compromised embryo implantation" (Tamaresis et al., 2014, p. 4987)
- Gold standard diagnostic is laparoscopy. This procedure is the only way to definitely visualize and biopsy endometriosis.
- There is no cure. So treatment focuses on symptom relief.
- "Pelvic inflammation and nerve infiltration result in pain" (Tamaresis et al., 2014, p. 4987). Pain is often initially managed with nonsteroidal anti-inflammatory drugs.
- Pain can also be managed with hormone therapy and the use of combination oral contraceptives, estrogen and progestin. These prevent the ovaries from producing hormones and therefor slowing the growth of endometrial lesions.
- If NSAIDs and hormonal contraceptives are ineffective, gonadotropin-releasing hormone (GnRH) analogues may be beneficial in blocking the menstrual cycle (Schrager et al., 2013).
- Laparoscopic surgery can be used to remove or destroy endometrial lesions in order to restore the normal anatomy. This can relieve pain and help treat infertility due to endometriosis (Duffy et al., 2014). The goal is to stop progression but disease recurrence is still a possibility following laparoscopic surgery.



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Image retrieved from <http://www.mayoclinic.org/diseases-conditions/endometriosis/home/ovc-20236421>

1 in 10 women are affected by Endometriosis



Figure 3 retrieved from <https://theendotheworld.com/blog-2/>

Implications for Nursing care

- Obtain complete medical history.
- Assessment, monitoring, and management of the patient's pain.
- Ask about patient's family planning. Treatment options vary depending on if pregnancy is desired.
- Provide education on medication and treatment options. Advise that symptoms can recur with medication discontinuation.
- Encourage open communication and discussion about the effects the disease has on their life, sexual activity, and fertility. Refer to counseling as needed.
- In the presence of infertility, provide guidance on fertility options and refer to specialist if required.

Conclusion

Endometriosis affects women, usually in their 30s or 40s, and it is notoriously difficult to diagnose. This difficulty is due to the fact that women either do not display associated signs and symptoms or the symptoms they do present with are misdiagnosed. Physical symptoms associated with endometriosis include: chronic pelvic pain, dyspareunia (pain during sex), and heavy menstrual bleeding. The level of incidence is difficult to determine because, at this time, definitive diagnosis can only be achieved through surgery. Researchers are looking for less invasive approaches to diagnosing and there is exciting new research trying to stage and classify endometriosis based on genomic data.

"Endometriosis: Natural History, Diagnosis, and Outcomes"

Study found that 11% of a group of women who had not been diagnosed with endometriosis actually had the disorder. If this finding applies to all the women in the United States, the number of American women with endometriosis may well exceed previous estimates of 5 million ["Endometriosis," n.d.]. Since endometriosis is so misunderstood and underdiagnosed, it is up to healthcare professionals to stay informed on emerging data related to the condition. They also will need to be thorough in physical examinations and collecting health history. Hopefully this will lead to early diagnosis, treatment, and increased information gathering to guide research.

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