Abstract

Endometriosis is a disease that affects a woman's fertility for future pregnancies. Laparoscopic burn-off and hormone therapy have been used as both a method for pain management and as a method to improve fertility in endometriosis patients. With the use of laparoscopic burn-off, the endometrial tissue forms in the pelvic and abdominal cavity is destroyed and cauterized leading to less pain related to menstrual fluctuations and improved fertility. While laparoscopic burn-off improves fertility and pain, it does not stop the growth of endometrial tissue outside of the respective reproductive organs. Hormone therapy inhibits the growth of endometrial implants by suppressing menstruation, but does not destroy existing endometrial tissue. This scholarly project was conducted to synthesize and analyze current research to identify whether endometriosis patients ages 14 to 44 who underwent laparoscopic burn-off or who received hormone therapy had better outcomes in fertility. A review of current literature was conducted on scholarly, peer-reviewed articles. The literature included a systematic review of randomized controlled trials, qualitative research, an observational study, literature reviews and practice recommendations from the Journal of Obstetric, Gynecologic, and Neonatal Nursing. The evidence concluded that endometriosis patients who underwent laparoscopic burn-off have better fertility outcomes than patients who solely use hormone therapy. A scholarly project could also propose a planned test of change based on the Plan Do Study Act (PDSA) model to be used in the future as a foundation to implement evidence-based research into clinical care that could potentially increase fertility rates among endometriosis patients and increase patient satisfaction.

Needs Assessment

-Endometriosis is highly associated with infertility. In fact, infertility is the sixth fundamental symptom associated with the disease.
-Infertility is defined as the inability to conceive a child. In patients with endometriosis, infertility can also be defined as a woman's inability to carry a pregnancy to full term, resulting in miscarriage.
-According to the American Society for Reproductive Medicine, 50% of all women who are infertile are found to have endometriosis.
-In patients with a confirmed diagnosis of endometriosis, 30%–50% have problems with infertility.
-Treatment of endometriosis patients to preserve fertility is a widely debated topic amongst gynecologists and obstetricians.
-The implementation of a treatment protocol for endometriosis patients could potentially increase fertility rates and increase patient satisfaction.

Implementation of Evidence Based Practice: Laparoscopic Burn-off

- Laparoscopy is the only way to diagnose moderate to severe endometriosis with certainty.
- Laparoscopic burn-off is the surgery of choice for patients with superficial endometriosis. Laparoscopic burn-off of endometrial lesions is accomplished through the application of intense heat.
- The heat used in laparoscopic burn-off can be generated through cautery, harmonic scalpel or laser.
- With the removal of endometrial lesions and scar tissue that may have been formed, fertility can be improved or preserved.

Synthesis of Evidence

- The rate of fertility in endometriosis patients who underwent laparoscopic burn-off was 41.9%. The recurrence rate of endometriosis after laparoscopic burn-off is as high as 40% after a 10 year follow up period (Mettler, 2014).
- Because hormone therapy does not destroy existing endometriosis, hormone therapy alone is shown to have no enhancement of fertility in endometriosis patients (Bulletti, 2010).
- Hormone treatment alone did improve pain and quality of life in endometriosis patients (Lee, 2013).
- Combined therapy using both laparoscopic burn-off and hormone therapy had a 60% curative rate and a 65% fertility rate after treatment. Combined therapy also has the lowest rate of recurrence at 16.7% (Mettler, 2014).

References