Endometriosis and the benefits of Pilates

Freda S. Nunn

January 10, 2010

Winter 2010

Herndon, VA
Abstract

This paper has been prepared to assess whether or not the Body Arts and Science International (BASI) method of Pilates and specifically the block system thereof, is helpful in managing the pain associated with Endometriosis. I have chosen to work with Lee Selma, a 35 year old professional woman who was diagnosed with endometriosis at the age of 26. Desperately wanting to manage her pain without the use of harsh medications or surgery, she agreed to begin an extensive practice of the Body Arts and Science International method of Pilates in September 2009. Although balance of the entire body was paramount, attention was directed to specific exercises from the abdominal block, full body integration (1) block, the back extension block and the stretches block. As a result, Lee has seen a reduction in pain, and she’s also become stronger, and more cognizant of her entire body as a whole.
## Contents

Abstract..........................................................................................................................................................2  
Anatomical Description....................................................................................................................................4  
Introduction to Endometriosis.......................................................................................................................5  
Case Study........................................................................................................................................................7  
The BASI Method of Pilates .............................................................................................................................7  
Conclusion......................................................................................................................................................9  
Bibliography....................................................................................................................................................10
Anatomical Description

In the diagram below, endometriosis may be seen growing on the pelvic organs, such as the ovaries and fallopian tubes. Outside the uterus, endometrial tissue thickens and bleeds, just as the normal endometrium does.
Introduction to Endometriosis

The name Endometriosis, also commonly known as Endo, comes from the word endometrium, which is the tissue that lines the inside of the uterus and builds up and sheds each month during the menstrual cycle. In endometriosis, the tissue is found outside of the uterus in other areas of the body. The most common areas of endometrial growths are in the abdomen, the ovaries, the fallopian tubes, the ligaments supporting the uterus, the outer surface of the uterus, and the lining of the pelvic cavity. “Endometrial growths have also been found outside the abdomen, in the lung, arm, thigh, and other locations, but these are uncommon.” Typically, these growths are not malignant or cancerous- they are a normal type of tissue outside the normal location. While some women experience no symptoms, endometriosis is often accompanied by emotional stress, severe pelvic pain and also low-back pain which may result in the inability to work or carry on normal activities.

The cause of endometriosis is unknown. However, there are a number of theories, but no one of them seems to account for all cases. Some experts on the disease believe all women experience some menstrual tissue backup and that an immune system problem and/or hormonal problem allows this tissue to take root and grow in women who develop endometriosis. It has also been suggested that endometriosis is a genetic disease, or that it is...
an inflammatory disease. Other theories, nevertheless, are constantly being developed on an ongoing basis.

**Diagnosis** of endometriosis is not certain until proven by laparoscopy. Laparoscopy is a minor surgical procedure done under anesthesia. During this procedure, the patient’s abdomen is distended with carbon dioxide gas to make the organs easier to see with a laparoscope (a tube containing a light) which is inserted into a tiny incision in the abdomen. Further, by moving the laparoscope around the abdomen, the surgeon can check the condition of the abdominal organs and see the endometrial implants. Finally, by indicating the locations, extent, and size of the growths, this procedure may also help the doctor and patient make better informed, and long range decisions about treatment.

**Treatment** for endometriosis has varied throughout the years, but to date, no sure cure has been found. Some women have turned to surgery, painkillers, or even hormonal treatments in order to cope with the symptoms caused by this disease. Meanwhile, others have turned to alternative treatments such as Pilates to help strengthen the deeper transverse abdominal and pelvic floor muscles, as well as, the weakened back muscles that may have been compromised due to the disease. “It is of paramount importance that abdominal and back exercises are effective.” Indeed, there must also be a balance between the spinal extensors, rotators and lateral flexors.
Case Study

Lee Selma was diagnosed with endometriosis in the spring of 1990 after undergoing a Laparoscopy (see aforementioned surgical procedure). Receiving a prognosis, she was given several treatment options which included, having a radical hysterectomy, taking steroids and pain medication for the rest of her life, or taking an alternative approach to healing. Because a hysterectomy and steroids were out of the question for her, Lee decided to try Naproxen, a pain medication, instead. In addition to taking this drug to alleviate the severe and ongoing pain that she experienced daily in her pelvic area and lower back before, during and after her menstrual cycle, she often applied a hot water bottle to her abdomen and lower back. Nevertheless, noticing only temporary relief from the Naproxen, and becoming unable to work for days at a time, she was ready to look for an alternative form of healing. Having practiced yoga on her own for a year and seeing little to no results, she decided to give Pilates a try.

The BASI Method of Pilates

Lee began an extensive ten week practice of the Body Arts and Science International (BASI) method of Pilates in September 2009. Primarily, she wanted to see a reduction in the
severe pain caused by years of suffering from endometriosis, but she also wanted to feel stronger. Because in endometriosis the endometrium (*tissue lining the uterus*) may be found outside of the uterus in areas such as the pelvic cavity and abdomen, it was vital to develop a plan that specifically focused on strengthening her compromised or weakened core muscles, i.e. pelvic floor muscles, abdominals (particularly the transverse abdominus), and back extensors.

While scanning the client’s body during our initial session, it was noted that she tended to tilt her pelvis in an anterior direction while standing. Further, during this session, she mentioned that she felt soreness in her upper thighs after sitting for long periods of time; the anterior tilt of the pelvis was an indication that her abdominals were most likely weak, and her back muscles though tight, were also weak. Moreover, the soreness in her thighs seemed to indicate tight hip flexors that also needed to be addressed. “Although the lower back is often tight, it may still be weak, therefore, strengthening and stretching of the lower back is important, however, always in conjunction with good abdominal support.” Therefore, to correct her posture and to strengthen her weakened pelvic floor muscles, abdominal muscles (specifically transverse abdominus which works in conjunction with the pelvic floor muscles) and her back muscles, Lee was given specific exercises from the BASI Abdominal, Full Body Integration 1 (FBI1), and Back Extension blocks. Moreover, stretches from the Stretches block were also included to stretch her tight back muscles and hip flexors.
Initially, due to pain and weakness, Lee could only do a modified version of the Hundred Prep with her feet on the foot bar of the Reformer. However, as she progressed, she said exercises such as Coordination (Reformer) and Pike Sitting (Wunda Chair) greatly helped to minimize the pain in her pelvic area and abdomen. She further noticed that her abdominal muscles were becoming stronger after consistently doing the exercises from the Knee Stretch Series (FBI1). Moreover, doing Breaststroke Prep and Breaststroke (Long box series) helped to strengthen her weak back muscles, while Shoulder Stretch 1 and Hip Flexors (Ladder Barrel) proved to be extremely helpful for her tight back muscles and hip flexors respectively. Although specific attention was given to the areas mentioned above, it should be noted, the entire BASI block system was utilized to promote balance, strength and flexibility of the client’s total body.

**Conclusion**

Working with Lee Selma has proven that it is indeed possible to reduce the chronic and severe pain of Endometriosis by utilizing the complete BASI block system. At the end of our ten week session, Lee noticed an improvement in her posture, as well as, her hip flexors; she also indicated that she felt stronger, but most importantly, she noticed that she no longer needed pain medication on a daily basis. The client strongly believes that her consistent practice of the BASI method of Pilates has undeniably enabled her to lead a very productive and pain free life.


