Pilates for Diastasis Recti

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Abstract

Diastasis recti is a separation of the outermost abdominal muscles. The tissue which runs vertically down and joins the left and right abdominal muscles together is known as linea alba. Diastasis recti is caused by this connective tissue stretching sideways and becoming thin and weak. The abdominal muscles play a vital role in supporting the body’s internal organs and also the back. This separation of the muscles causes a weak core and minimal protection for the internal organs.

In some cases surgery is required due to the degree of separation; however, Pilates has proved to be an effective form of rehabilitation for diastasis recti. Because of its emphasis on core stabilization, the Pilates repertoire provides exercises that can assist in bringing the left and right sides of the abdomen back together, and allowing the connective tissue to begin the healing process. This paper will provide exercises and discuss why they are appropriate for a postnatal client who has diastasis recti.
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**Anatomical Description**

The separation of the outer abdominal muscles (rectus abdominis, internal and external obliques and the transverse abdominis), known as Diastasis recti, can occur in both males and females and at various ages. Everyone is born with a separation of the outer abdominal muscles; however, generally they come together around the age of 3.

Diastasis recti is also a common condition for postnatal women. During pregnancy the uterus expands and pushes against the abdominals and their connective tissue (linea alba). The tissue widens and becomes thinner due to hormones and the growing abdomen. The divide normally closes up again, at least within 1 inch. This can vary, depending on the number and size of the babies. If there is a large separation it reduces the ability of the abdominals to support and control the pelvis and the spine. Individuals who end up with diastasis recti often suffer from lower back pain due to the lack of support.
Case Study

Name: Philippa

Age: 37

Job: Pilates instructor

Physical fitness/Limitations: severe diastasis recti, still relatively flexible and strong from dance and pilates background.

Rehabilitation/treatments: under doctor supervision, due to have surgery in 3 years (approx.)

Philippa is an ex-professional dancer, pilates instructor of 16 years and a mother of three. Philippa’s children were all between 9-10 pounds when they were born, which has resulted in a severe diastasis recti (an 8 finger gap). She will be undergoing surgery once her youngest child is sufficiently independent.

Although Philippa has maintained some of her strength and flexibility she would like this increased. Philippa has a good awareness of her abdominals and is constantly aware of engaging her TA. This helps prevent lower back pain, however if her body is fatiguing this can be harder some days. Philippa is very careful to hold her children using upper body strength rather then holding them primarily on the hip, this has helped prevent one side of her body becoming tighter. The exercises I have listed below will provide Philippa with a routine for rebuilding her strength and flexibility while also protecting her diastasis recti. She has excellent muscle awareness and a strong understanding of effective lateral breathing which will assist in assuring protection of her abdomen.
Conditioning Program – BASI Block System

Warm up – Mat Work

- Pelvic tilts
- Pelvic curls
- Leg lifts
- Leg changes
- Leg circles
- Spine twist supine

Trunk flexion has been avoided in the warm ups so abdominal muscles do not bulge. I have focused on using the legs to work the abdominals.

Foot Work – Wunda Chair

- Parallel heels
- Parallel toes
- V-position toes
- Open V-position heels
- Open V-position toes
- Calf raises
- Single leg heels
- Single leg toes

Foot work on the Wunda Chair is an excellent group of exercises to cue trunk stabilization. They require the co-contraction of the abdominals and back extensors.
**Abdominal Work**

- Torso Press Sit

This exercise works the abdominals without going into trunk flexion. The back extensors are also required to keep alignment.

**Leg Work**

- Frog Front

The focus of this exercise is the legs however it still requires the client to be aware of their alignment. It is important the client continues to be aware of lateral breathing.

**Hip Work – Reformer**

- Circles Down/Up
- Extended Frog
- Extended Frog Reverse

Hip work requires a lot of pelvic lumbar stabilization as well as strengthening and stretching the hip adductors.

**Spinal Articulation - Reformer**

- Short Spine
- Long Spine

These exercises have the objective of spinal articulation but require a lot of awareness throughout the body. Short Spine also provides a hamstring
stretch and Long Spine requires significant control of the hip extensors. It is important to watch that the client does not lose control of the abdominals.

**Stretches - Reformer**

- Kneeling Lunge
- Side Split

Side Split is a great stretch with an emphasis on trunk stabilization. Care will need to be taken to ensure co-contraction of abdominals and back extensors is evident throughout.

**Full Body Integration - Reformer**

- Elephant
- Up Stretch 1
- Down Stretch

The Up Stretch Group exercises provide a beautiful hamstring and shoulder stretch as well as requiring stabilization through the trunk and shoulders. Down Stretch requires more control of abdominals and back extensors.

**Arm Work - Reformer**

- Arms Sitting Series
- Arms Kneeling Series

The two arm series I have listed involve trunk stabilization. The Arms Kneeling Series is another safe way of working the abdominals while avoiding trunk flexion.
Lateral Flexion/Rotation - Reformer

- Mermaid

Back Extension - Reformer

- Breaststroke Prep
- Pulling Straps 1 & 2

Both these exercise require a conscious effort of drawing in the abdominals while working the back extensors. It is important to cue abdominal engagement throughout these exercises – cueing the breathing can be helpful also.

Roll Down - Mat

Conclusion

Pilates provides a wonderful environment for rebuilding strength and body alignment, it also provides a variety of exercises that can be used and modified to suit the individual. Having a condition such as diastasis recti does not mean the client is limited to a couple of repetitive exercises. Instead there is a continuous array of new challenges, that when taught properly, are safe and very effective. The program I have written in this paper is suitable for a client who has had previous pilates experience. However the routine I have provided has exercises that can be modified or changed for a more suitable exercise.
Bibliography

http://www.diastasisrehab.com/what-is-diastasis-recti.php
Tupler Technique; 2013

http://www.befitmom.com/postpartum_exercise.html
BeFit – Mom; 2006 – 2014


BASI Student Movement Analysis Workbooks - Reformer and Wunda Chair