Pilates for Diastasis Recti
Abstract

Diastasis Recti is a condition where your rectus abdominal muscle (also known as, six pack muscles) separates between the right and left sides. Some of the causes of diastasis recti are pregnancies, poor posture and/or incorrect form while exercising. Some of the main issues caused by Diastasis Recti are as follows; pelvic, back and hip pain, digestive and breathing issues, and pelvic floor dysfunctions (i.e. organ prolapse, or incontinence). While this can happen to men, women and small children, it is most common in postnatal women. The Relaxin hormone, released during pregnancy, causes the tissue in the body to relax, allowing the belly muscles to stretch during pregnancy in order to accommodate a growing babe and uterus. This process leaves the tissue weak, vulnerable and prone to straining and overstretched. With the connective tissues being weakened, when the uterus pushes against the abdominal wall separation occurs. I will discuss how Pilates can help minimize the separation in a healthy and safe way.
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**Anatomical Description**

The rectus abdominal muscle runs parallel to each other and is the outermost abdominal muscle. When the rectus abdominal has internal pressure it starts to separate between the right and left side, this is called diastasis recti. When the connective tissues (Linea Alba) are weakened it can reduce the support of your organs and trunk stability.

The transverse abdominals and the pelvic floor are major areas of focus. They will be the biggest components to rehabbing Diastasis Recti.
Pilates has 10 principles: Awareness, Breath, Balance, Control, Concentration, Coordination, Centre, Effeminacy, Flow, Precision and Harmony. All of these principals will help with the goals to rehab Diastasis Recti. You need to use all of these principals during each and every exercise to target the right muscles to help close that separation of the rectus abdominal.

Case Study

Subject: Alex Lamitie
Age: 27

I have known Alex for a great deal of my life. It was a few months after her first baby was born that she realized some separations in her abdomen. I first gave her a test to confirm that she did have diastasis recti. I laid her on her back in the pelvic curl start position, I then placed 2 fingers below her belly button. I applied a little bit of pressure while I told her to activate her abs and come up to a chest lift position. I slowly moved my fingers up to her belly button and then 3 inches above her navel. There was more then 2 fingers width of separation. Not only was this an issue, but she had been complaining about back pain for years as well.

She also inquired about the use of bracing/binding/splinting devices, I then explained to her that there is little scientific evidence to support productive use of these devices. Some believe that such devices bring the abdominals together, thus allowing a faster healing process. In reality the muscles can weaken over time due to external support. Any type of bracing/binding/splinting device, if used at all, should be an adjunct to the overall treatment plan correcting Diastisis Recti.
I went home and researched Pilates exercises to help her. The next time I saw her, I did a session with her and gave her some specific exercises to complete and some to avoid, as certain exercises can make it worse. Functions to avoid include; any exercise causing the abdomen to bulge (i.e. plank/lifting heavy objects), heave (i.e. getting out of bed in the morning), excessive coughing/sneezing. In addition to these functions, I informed Alex to avoid having your trunk in a flexed position, and avoid rotations of the torso. I explained to her the importance of getting her her transverse abdominal working. I started her with basic small movements strengthening the transverse abdominals and pelvic floor slowly. I had her start off with mat work and floor exercises such as; leg lifts and leg circles. As she got stronger, I was able to start including apparatus. Here are some of her exercises from each block:

**Warm up on the mat:**
- Pelvic rocking
- Pelvic curl
- Leg changes

**Foot Work on the reformer:** Focusing on the transverse abdominal muscle will help to gain pelvic stability.
- Parallel heels
- Parallel toes
- V toes
- Open V heels
- Open V toes
- Calf Raises

**Abdominal work on the cadillac:** Once you have learned to activate the correct muscles, you can work your way up to trunk flexion being sure to use small movements so we don’t separate our abs anymore.

- Mini roll ups (warm up series)
- Mini roll ups with oblique (warm up series)

**Hip work on the cadillac:** Again, the main focus here is on working our deep abdominals to keep the pelvis stable.

- Frog (basic leg series)
- Circles Down, Up (basic leg series)
- Walking (basic leg series)
- Bicycles (basic leg series)

**Spinal articulation on reformer:**

- Bottom lift
- Bottom lift with extension

**Stretches on reformer:** Focus should be on really pulling up through the pelvic floor.

- Side split

**Full Body Integration on cadillac:**

- Thigh stretch with roll up bar

**Arm Work on the cadillac:**

- Chest expansion (arm standing series)
- Hug-a-tree (arm standing series)
- Circles up, down (arm standing series)
- Punches (arm standing series)
- Biceps (arm standing series)
- Butterfly (arm standing series)

***Only add butterfly when the client is strong enough to control rotation properly and activate the right muscles to prevent more separation.

**Leg Work on reformer:**

- Single leg Skating

**Lateral Flexion/Rotation on reformer:**

- Side overs

**Back extension on mat:** Be sure that the client is focusing on the posterior tilt of the pelvis, properly activating the abdominals.

- Swan dive prep
- Swimming

After just a couple months of focus, her rectus abdominals have come back together and the tissues have gotten stronger. Today, Alex is functioning properly with no pain and minimal rectus abdominal separation thanks to the help of Pilates.

I have worked at a Physical Therapy office for the past 4 years. I have since learned the importance of body awareness and function, which is the reason I became interested in Pilates and wanted to instruct. I decided to discuss this topic to help educate my friends and family who may very well suffer from this condition in the future.

In conclusion, approximately fifty percent of women will experience different levels of Diastasis Recti during their pregnancy years. Severe cases will result in surgery,
while mild cases can possibly heal on their own or with the help of Physical Therapy and/or Pilates. In order to prevent the occurrence of Diastasis Recti one must learn to engage the core properly, in conjunction with learning how to move with the proper posture. Pilates can be instrumental in avoiding this condition all together and/or contribute greatly in the overall treatment plan to fully recover from Diastasis Recti.
Bibliography

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