Diastasis of the rectus abdominus muscle

Information for patients
MSK Outpatients - Women's Health (Therapy)
Separation of the tummy muscles

Separation of the tummy muscles, otherwise known as diastasis of the rectus abdominus muscle (DRAM), is common during and after pregnancy. This leaflet explains what DRAM is and how physiotherapy can help its management.

What is diastasis of the rectus abdominus muscle (DRAM)?

Diastasis, or separation, of the rectus abdominus muscle is when the connective tissue (called the linea alba), which joins the tummy muscles together, widens to allow room for the baby to grow (see diagram below).

It can start in the second or third trimester of pregnancy and can continue after having your baby.
What causes DRAM?

The rectus abdominus muscles pass from the ribs and breastbone to the pubic bones of the pelvis (see diagram). The rectus abdominus are the outer layer of the tummy muscles. Underneath them are the oblique muscles. The deepest layer is the transversus abdominus muscle.

The rectus abdominus muscle is in 2 halves which are joined together in the middle by a strong band of connective tissue called the linea alba.

The linea alba stretches as the pregnancy progresses, which allows the tummy muscles to lengthen and separate to give room for the uterus to enlarge and the baby to grow. Hormones called relaxin and progesterone, which are produced during pregnancy help the tummy muscles and linea alba to stretch more easily.

Does anything increase the risk of getting DRAM?

Most women will have a 2-3cm separation of their tummy muscles by the end of their pregnancy and in the immediate postnatal period.

This risk of larger separation increases with:

- Large baby
- Multiple births e.g. twins
- Women who have previously had children
- Women who still have DRAM from a previous pregnancy

What are the symptoms of DRAM?

During and after pregnancy you may notice your tummy muscles bulging or doming up in the middle when you get in and out of the bed or bath. Most women do not have any discomfort in their tummy but some are more likely to have lower back pain as their tummy muscles are giving less support.
How will DRAM be diagnosed?

A midwife or physiotherapist can check for separation by feeling your tummy muscles.

If your midwife suspects you have DRAM she will refer you to a women’s health physiotherapist.

Is there anything I can do to help myself?

General advice

- Avoid sit ups and stomach crunches.
- When coughing, laughing or opening your bowels hold your tummy with your hands to stop the bulging.
- Avoid constipation by drinking plenty of water and eating a high fibre diet.
- When pushing a pram or trolley or using the stairs, practice good posture and pull in the tummy for support.
- When lifting your baby pull in and hold your tummy muscles. Bend your knees and hold your baby close to your chest.
- Take care when getting on and off the bed. Pull in your lower tummy muscles for support and roll onto your side to get on/off the bed.
Exercises

Exercising the pelvic floor muscles and deep lower tummy muscles will help the separation to close to a normal level of 1-2cm gap with no bulging of the tummy muscles.

1. Pelvic floor muscles exercises

Your pelvic floor muscles help prevent leakage from the bladder and bowels. They also help to improve control around the pelvis.

How do I pull in my pelvic floor muscles?

To tighten your pelvic floor muscle imagine you are trying to stop passing wind, then gently tighten your vagina, and then tighten at your front passage imagining you are stopping the flow of urine. You should feel the pelvic floor muscle lift up within your vagina.
There are two kinds of exercise:

i) **Gentle long holds**

- Lie or sit in a comfortable position
- Relax and breathe in. As you breathe out, gently pull in the pelvic floor muscles and continue to breathe normally.
- Hold the muscle for a few seconds and then release the muscle and feel the muscle let go
- Repeat this 5 times
- You may not feel much happening at first but keep trying
- Build up to a 10 second hold and repeat 10 times. Rest for 5 seconds between each squeeze

ii) **Quick, short squeezes**

- Pull up the pelvic floor muscles as quickly and strongly as you can and then let go immediately
- Rest for 2 seconds and then do it again
- Repeat this 10 times

Try to do these exercises 3-4 times a day. Later on you should be able to practice these exercises when you are in a standing position

It takes approximately 3 to 6 months to re-strengthen the pelvic floor muscles. Remember that it is important to do pelvic floor exercises for the rest of your life.

You could use a smart phone app such as the 'NHS Squeezy' app to remind you to do your exercises

**Pre-squeeze before you sneeze**

The pelvic floor muscles should not push down when you cough and to prevent this from happening, you should always tighten your pelvic floor muscles before you cough. You should also pull in the pelvic floor muscles before you sneeze, laugh or picking up your baby.
2. Strengthen your abdominal muscles (tummy muscles)

- Start doing this exercise in the most comfortable position for you – lying on your back or side with your knees bent or sitting with your back well supported
- Place one hand on the lowest part of your tummy
- Let your tummy relax completely as you breathe in through your nose
- Breathe out and pull in and tighten the lower tummy gently. Feel the muscle under your hand tighten or move in towards your back a little
- Hold this tightening while you breathe normally for 10 seconds. Then relax the tummy and feel it let go. Rest for a few seconds
- Repeat this tightening and holding 10 times
- Try to exercise the tummy muscles like this at least 3 times a day

As the muscles regain their strength you should be able to feel the tummy muscles and pelvic floor muscles tighten together.

You can do your exercises while feeding your baby.

If you notice any bulging of your tummy muscles while you are doing any of these exercises, get advice from the women’s health physiotherapist before continuing the exercises.
How will I know if I am improving?

You may be sent a letter inviting you to make an appointment to see a physiotherapist if the midwife or physiotherapist feels this would be helpful. The physiotherapist will re-assess for tummy muscle separation and progress your exercises if needed.

If you are concerned that your tummy muscles are still doming or bulging 6 weeks after your baby's birth and you are not due to see a physiotherapist, please telephone and ask to speak to a women's health physiotherapist:

- 0114 271 3090

Where can I find further information?

- http://pogp.csp.org.uk
- NHS Squeezy app