Physiotherapy for divarication of the abdominal muscles
Your abdominal muscles

The main muscles in your abdomen are the rectus abdominis, transverse abdominis and the internal and external oblique muscles. The rectus abdominis muscle is two bands of muscles (recti) which are held together by a long fibrous ligament called the linea alba. The main functions of these muscles are to support the internal organs (including the uterus), to support the back and to help with normal movement.

What is a divarication?

Divarication/diastasis recti (also known as abdominal muscle separation) is an increase in the gap between the two bands of recti muscles. This separation is a completely normal part of pregnancy, the two bands of recti muscles lengthen and the linea alba stretches to allow your baby to grow. This process is affected by the hormones progesterone and relaxin. The amount of separation varies from one woman to another.
How will I know if I have a divarication?

Women can have a divarication of their muscles whilst they are pregnant and or after the birth of their baby.

You may notice a bulge or doming on your abdominal muscles when you sit up from lying down or when trying to get out of the bath. This is an indication of the muscles starting to separate.

This isn’t anything to worry about but should remind you to be more mindful of your movements both antenatally and postnatally and to avoid the activities which cause doming.

You would only need to seek a physiotherapy assessment if you are having abdominal pain or if the muscles do not return to their correct position postnatally. This can take approximately eight to 12 weeks.

Antenatal advice

Be careful not to let your abdominal muscles bulge/dome.

- Try to avoid carrying heavy loads, if this is unavoidable, then ‘love your load!’ Hold whatever the item is as close to you as possible.

- When lifting heavy loads engage your abdominal muscles and pelvic floor and bend your knees to help take the load.

- Getting in to bed - sit down on the edge of the bed, lower the top half of your body onto the bed and head onto the pillows whilst lifting your legs on to the bed. Pull in your abdominals slightly whist doing this. Roll onto your side and lower yourself onto the bed using your arms.

- Getting out of bed - roll onto your side, using your elbow of the lowest arm and hand of the top arm to push your upper body up
whilst lowering your legs off of the bed to assist you into sitting, again pull in your abdominals slightly as you do this.

If your muscles are very uncomfortable or you feel you need additional support, close fitting or elasticated clothing, maternity bands or tubigrip (see ‘supports’ below) can be helpful to provide support and comfort.

If you choose to purchase or are provided with tubigrip, it is mainly for use when you are being active and best to be removed at night and when sitting or resting. Although if you find it too difficult to remove the tubigrip and it is not causing any issues it is safe to wear it all day and remove it at night time.

It’s important to remember that tight fitting clothing that covers your bump will not harm your baby.

Tubigrip – you can search for tubigrip (another brand is easygrip/Comfigrip) through major internet search engines. Some suppliers offer half or one meter strips. We would recommend one meter as you are able to wear doubled over or cut into two pieces.

Size K tubigrip would typically fit a size 6-8, size L would fit size 10-14 and size M would fit size 14+.

**Postnatal advice**

After the birth of your baby it is normal for your abdominal muscles to feel stretched and weak and not return to ‘normal’ straight away. The separation should reduce naturally within the first few weeks postpartum as the softening effects of the hormone relaxin on the linea alba will reduce. To facilitate this to happen it is important to be mindful about your abdominal muscles and take care not to let them dome when moving around or when doing your exercises.
Supports

Tubigrip is an elasticated band which can provide support for your abdominal muscles, wear it as much as you like for the first four to six weeks postpartum. As you feel you have increased control of your abdominal muscles, gradually reduce the amount of time you wear it. When wearing the support try to remember to keep your muscles active as it can be easy to rely on the support and not work the muscles.

Tubigrip can be purchased online

Home life

Think about your posture when completing normal household activities, make sure that you are not remaining in forward leaning postures for long periods and take regular breaks. Be mindful of your position when changing nappies – if possible keep your baby close you and use a surface which is a good height to ensure you are not stooping.
Lifting and carrying

Be mindful of activities such as lifting any other children or your baby’s car seat. If at all possible we would recommend that you do not complete any heavy lifting for the first two to four weeks – this will allow the healing process to get established.

Remember car seats are surprisingly heavy (3 to 4 kg) plus the weight of your baby. If it is practical to do so consider leaving the car seat in the car rather than using them as a carrying device.

Additionally to the car seat, your buggy/pushchair is heavy and awkward to lift. Wherever possible consider not lifting this in and out of the car more than is essential.

When using a sling, consider its use for short periods of time only; take regular rests to allow your muscles rest.
Postnatal self-assessment

The next section of this leaflet includes self-assessment of the stomach and basic exercises which can help to strengthen the abdominal muscles. This assessment should not take place until three to four weeks after the birth of your baby.

This assessment can offer guidance on whether you need to seek input from a physiotherapist or to help monitor your progress whilst independently rehabilitating your divarication.

To complete a self-assessment:

- Lie on your back with your feet flat on the floor and your knees bent.
- Place your fingers in a horizontal vertical line in the centre of your abdomen, just above the belly button.
- Tuck your chin down onto your chest and try to round your shoulders forward very slightly off the floor/bed. This will increase the tension in your abdominal muscles. This is not a sit up.
- Gentle try to feel the edges of your rectus abdominis muscles (it can be difficult to know what you’re feeling and if unsure, ask your midwife or GP for their assistance).
- With the increased tension, assess how many fingers fit into the gap between the two bands of recti muscles.

A separation of 2.5cm (two to three fingers) is a normal measurement. Immediately after having your baby this gap can be wider than this which is also completely normal. Try the exercises below and see if this improves after one to two weeks.

If you feel the gap is 5cm (four or more fingers) or if you notice that your stomach ‘bulges’ considerably please ask your GP or health visitor for advice and referral to physiotherapy.

Remember
This is a very basic assessment and should only be for guidance as to whether you need to seek professional assessment and support.
Exercises

These are safe to complete during pregnancy and as soon as you feel able to following the birth of you baby, unless you are advised otherwise by your physiotherapist or midwife. When completing these exercises ensure your muscles are not doming and there is no pain in your back.

Abdominal activation

This is a gentle exercise to help improve the activity of your abdominal muscles. You can complete this exercise in lying, sitting or standing positions. You can rest one hand on your tummy to feel the muscles activate.

- Take a deep breath in.
- As you exhale (breathe out) tighten your pelvic floor muscles and your abdominal muscles.
- Hold this contraction for a couple of seconds
- As you inhale (breathe in) relax your pelvic floor muscles and your abdominal muscles.
- Complete as many times as you are able to do it well, up to 10 times.
Pelvic tilts

This is a gentle exercise to help improve the activity of your abdominal muscles and to help your lumbar spine mobility. This exercise can be completed while sitting or lying with your knees bent. The technique remains the same in either position.

- As you exhale (breathe out), gentle draw in and tighten your abdominal muscles and pelvic floor and flatten your spine into the bed. This will tilt your pelvis towards your ribs.
- Do not lift your bottom off of the floor.
- Then as you inhale (breathe in) tilt your pelvis away from your ribs and relax your abdominal muscles and pelvic floor.
- Complete as many of these movements as you feel able to, up to 20 times.
Pelvic floor exercises

You may notice that your lower abdominal muscles tighten when you complete the pelvic floor contraction, this is normal because these muscles work together.

If you are unsure how to recruit these muscles, try starting in a sitting position leaning forwards, resting elbows on your knees. As you grow more confident you can progress to standing.

Tighten your pelvic muscles around your back passage, as if you are trying to stop passing wind.

• Feel this tightening continue forwards and upwards as if trying to stop the flow of urine.
• Hold the contraction if you are able to for two breaths in and out, and then relax for 10 seconds.
• Complete as many of these movements as you feel you are able to, up to 10 times.

Your aim is to work towards being able to hold for ten seconds and repeat ten times. After do ten quick pelvic floor pull-ups – make sure you relax the muscles in between each pull-up.

When exercising your pelvic floor, it is as important to fully relax your muscles before and after each exercise – this ensures that each muscle is allowed to work through the full range of movement and helps to prevent areas of increased muscle tension.

Pelvic floor muscle relaxation feels like an expansion and stretching of the muscles, it is not pushing or bearing down on the muscles – it happens most easily with the inhalation or in-breath during diaphragmatic (deep) breathing. As the diaphragm descends, the abdomen expands and relaxes and connective tissue supporting the pelvic floor also drops and promotes full relaxation of the muscles (the movement is a combined abdominal ‘flop’ and pelvic floor ‘drop’).
Four point kneeling

This exercise should be complete when you feel you have increased control of your muscles (potentially after three to four weeks of the first exercises).

This is a lovely position to exercise in as it allows you to have your baby on the floor and engage with them whilst you exercise.

The key points are the breathing and position of your back.

- On all fours make sure your knees are under your hips and your hands under your shoulders.
- Allow your tummy to fully relax.
- Take a big breath in, on the exhalation tighten your tummy muscles and draw your tummy muscles up towards your spine (this is a gentle movement).
- Complete a few breaths whilst holding this contraction and then fully relax.
- Complete as many of these movements as you feel able to, up to 10 times.

This movement should not be painful but you may be able to feel the muscles activating.
After four weeks consider progressing on the exercises in the ‘Postnatal physiotherapy advice’ leaflet – this is available on the UH Bristol website:

This information is also available on the My Pregnancy@St Michael’s app, available on both Apple and Android operating systems.

If you find you’re unable to control the doming/bulge then it is too soon. We recommend that you continue these exercises and wait another two weeks before revisiting them.

If you have ongoing concerns about your divarication and would like to be assessed by a physiotherapist, you will need to obtain a referral from your GP or health visitor.

Babies are very welcome to accompany patients to their appointments with the women’s health team.
Please note that if for any reason you would value a second opinion concerning your diagnosis or treatment, you are entirely within your rights to request this. The first step would usually be to discuss this with the doctor or other lead clinician who is responsible for your care.

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