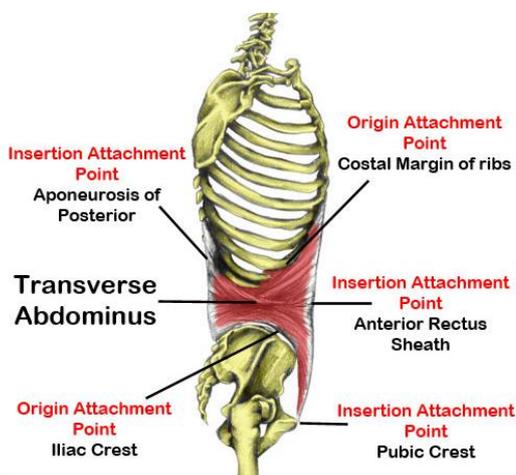


Back pain is a huge issue in today's population, affecting around 80% of people at some point in their lives. Physiotherapy plays a huge role in the treatment of spinal injuries and involves many different techniques which are tailored to each individual. What many people fail to realise is that the exercises that we prescribe for patients to perform at home are just as important as what we do while you are at the clinic! This article looks at a key component of back injury rehabilitation programs involving strengthening and improving the activation of one of the muscles in your core.



Core stability describes the ability to control the position and movement of the torso. Core stability training targets the muscles deep within the abdomen which connect to and help support and stabilise the spine, pelvis and shoulders. These muscles assist in the maintenance of good posture and provide the foundation for all back, arm and leg movements.



Transversus abdominis (TA) is the deepest of the abdominal muscles and is one of the key stabilisers of the lower back and pelvis. Your TA is like a corset, where it wraps around your lower abdomen and attaches to your lower back. It acts as a back brace to support and stabilise your spine. Many people with back injuries have trouble with activating or 'turning on' their TA. Strengthening and learning to activate your TA will help develop your overall core and abdominal muscles, give you more support and power in your movements and help to reduce back pain. It also plays a part in the activation of your pelvic floor muscles. Training of your TA is imperative in helping with issues such as incontinence and poor core stability that usually occurs after pregnancy.

### Palpation and Training of Transversus Abdominis

1. Place your left index finger and middle finger on the bony prominence at the front of your pelvis (hip bone). From that position move your fingers 1-2 inches to the middle and 1 inch downwards towards your toes and press down. Do the same on your right side. (see picture below)
2. To activate your TA muscle either: a) draw your belly button into your spine, b) pretend you are trying to do the zipper up on a tight pair of jeans or c) try to turn on your lower abdominal muscles.
3. You should feel tension under your fingers (like tightening the sheets) but your fingers should not be pushed upwards, as this means you are using the more superficial muscles (external and internal oblique).



If you are having trouble here is a link which may help you out:  
<https://www.youtube.com/watch?v=p8O04WLXFt8>

Activating your TA is not easy and may take some practicing. Once you are able to activate your TA in isolation to your other muscles you can incorporate it into specific exercises. Outlined below is a couple of basic exercises to help improve your core once you are able to activate your TA. These are commonly performed exercises used in Pilates classes which we run at the clinic. To find out more about the benefits of Pilates click on the link ([insert link](#)) or if you would like to be involved in our group Pilates sessions contact us at Narrabri Physiotherapy.

**STRAIGHTENING YOUR LEG** – Lie flat on your back with your knees bent and your feet flat on the floor. Breathe in as you activate your TA muscle using the above cues and let one knee straighten out with control. Breathe out and bend the knee back up so that your foot is again flat on the floor. Repeat with the other knee. Repeat 10 times.

**HUNDREDS** – Lie flat on your back with your knees bent and your feet flat on the floor. Breathe in. As you breathe out, activate TA using above cues and raise your arms slightly off the floor. Perform a small, controlled pumping motion with your arms going up and down. Continue to maintain your TA activation and make sure you keep your breathing is slow and controlled.