

## Physiotherapy Department

# Advice for patients with poor core control

### What is core control?

- Our bodies are a complex system of joints, muscles and ligaments. To work well it has to be looked after to maintain balance, function and support.
- To maximise efficient function of our limbs we need to have good central control. That means if our head, spine and pelvis are well supported in a neutral posture when we want to move our legs or arms, the power and control over the limbs will be most effective.
- Poor central control/posture leads to poor or less efficient function in our limbs resulting in stress and straining of joints or soft tissues.
- Our body's central core control is dependent on good functioning of the following muscles:
  - the lower abdominal muscles;
  - the deep back muscles;
  - the diaphragm;
  - the pelvic floor muscles;
  - the buttock muscles;
  - the main muscle at the shoulder blade;
  - the deep neck muscles at the top of the spine, under the skull.
- These muscles need to work in balance with one another, both front to back and from left to right.

### What are the causes of poor core control?

- A weakness of one or more of the muscle groups around the spine, pelvis and shoulder areas including the muscles listed above.
- Inequality in the strength of muscles of the torso (body) area, front to back and/or left to right. This can be due to poor fitness training practices and/or simply the tissue type we are born with, or differences in the rate between bone and muscle growth.
- Over long and lax or short and tight muscles can be equally as troublesome.
- Injury to these muscles.
- It is particularly likely to be reduced during pregnancy due to hormonal changes affecting the ligament support and hence there is a greater likelihood of developing LBP during and just after giving birth.
- Poor posture when standing, sitting and lying.
- Pain from injury to muscles, ligaments or spinal disc damage, which switches off the good deeper layers of controlling muscle activity, while the outer layers of muscle go into protective spasm.



## Patient Information

### **What are the effects of loss of, or poor, core control?**

- Poor control can lead to low back pain (LBP), hip and groin pains, neck, shoulder and arm pains.
- Increased susceptibility to injury.
- Damage to joints through weight bearing or loading in poorly aligned positions.

### **How can it be treated?**

- Increase and maintain the length of muscles as directed by your therapist.
- Increase and maintain the strength of muscles as directed by your therapist.
- Look at your posture. Maintain the natural curves of your spine. Maintain the alignment of your hips, knees and feet. Keep your shoulders the same height, level and not rounded down or forward. Keep your head over your shoulders, without your chin jutting forward or up.
- If you are in pain, take pain-killers/anti-inflammatory medication regularly as directed by your GP. Try to relax as much as you can to prevent any increase of muscle spasm. Heat packs or hot water bottles inside a towel, placed over muscle spasm areas for 10-15 minutes a couple of times a day can help switch off the excess muscle activity and help reduce the level of pain.
- **Follow regularly any stretches and strengthening exercises taught by your therapist.**
- Usually wearing a support is not indicated, however, if you are pregnant you may need some form of abdominal/pelvic support to wear, to assist you in improving stability, alongside exercises to maintain the strength of your lower spine, pelvic and hip muscles.

### **Further Information**

For further information please contact:

UHCW Physiotherapy Department: 024 7696 6013

Rugby St Cross Physiotherapy Department: 01788 663 257

For additional information contact the following links:

[www.pilatesfoundation.com](http://www.pilatesfoundation.com)

[www.csp.org.uk](http://www.csp.org.uk)

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