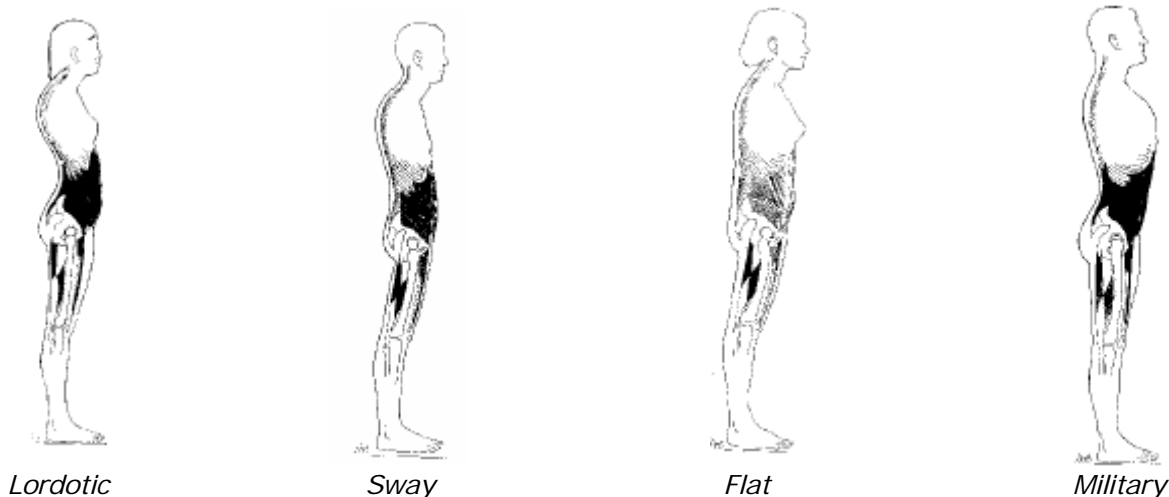


“POSTURE AND ERGONOMICS”

‘Sit up straight, stand up tall, shoulders back, chest out’. We have been given this advice for many years, and in many respects they are ‘words of wisdom’. As we have evolved we have become bi-pedal, and in addition to this we have increased the time that we spend sitting. This is due to the fact that more and more of us are working in environments which involve sitting in front of a computer for prolonged periods of time. The effects of these natural and social changes are seen in our posture, this is due to the spine being subjected to increasing loads and certain structures being placed under more stress for sustained periods. Spinal pain is one of the most commonly treated conditions by physiotherapists and awareness and correction of posture is one of the key areas which physiotherapy focuses on. Below are four of the most commonly observed posture types.

Types of Posture



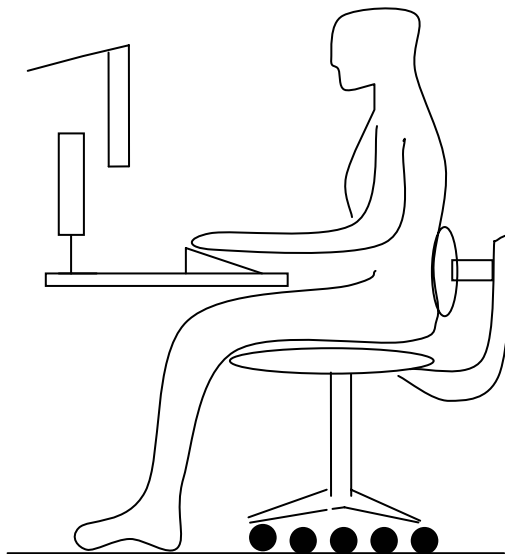
It is very difficult to determine what ideal posture is, as this can hugely vary between individuals. People with apparently ‘poor posture’ can live their life without ever complaining of spinal pain and deviations from the ‘ideal’ may be normal variations. From a physiotherapist’s point of view, it is important to highlight areas which may be contributing to ongoing spinal pain. It is then a matter of making changes to allow more efficient use of the body’s muscular system. A very slight change in sitting or standing posture can have a dramatic effect on spinal pain.

Bad habits

When people become tired or stay in one position for too long, they often fall into a slumped position. This adaptive position feels more comfortable as it is reliant on the body’s passive structures for support rather than the active structures. This means that the joints and ligaments (passive) in our body are placed under stress for prolonged periods of time and muscles (active) are not utilised to contribute to support. Research proposes that an upright posture has the effect of lessening the strain placed on joints and also activating the deep postural muscles on the cervical spine. More specifically, a recent study showed that these muscles were most efficiently recruited when a physiotherapist guided the patient to assume a better posture rather than when a patient corrected themselves without assistance.

Ergonomics

Ergonomics is the application of scientific information concerning humans to the design of objects, systems and environment for human use. When a physiotherapist uses the term ergonomics it is usually in relation to the working environment of the individual. A detailed assessment of an individual's workplace can provide valuable information and highlight certain problems which can often be very easily addressed. If we consider that we spend 8-10 hours a day in our workplace, it is crucial that the set up is as optimal as possible to ensure that the work done during physiotherapy sessions and home exercises is substantiated by a good working environment.



Picture 1. This picture has been adapted from Whiplash Injury Recovery – A self management guide, with permission from G.Jull, University of Queensland.

Practical tips for setting up your work-station

- Find a chair which has a back support which can be adjusted vertically and horizontally. The chair itself must also be adjustable.
- To set your chair at the correct height – start with the chair at its highest position and then lower it until your hips are at about 90-100°. At this point your feet should touch the floor – if they don't use a foot stool, small box, thick book.
- Elbows again should be at about 90-100°.
- The screen should be directly in front at about an arms length away. The top of the screen should be just below eye level.
- You should position yourself nice and close to the desk, with the keyboard close so that you don't have to reach. Similarly have the mouse or other key tools which you regularly use nice and close to avoid overstretching. Try alternating hands for using the mouse – you will be surprised at how quickly you will learn this skill.
- Use document holders to prevent looking down and placing excess stress on your neck and spine.
- Use a headset if much of your time is spent on the phone.

Practical exercise tips

- Take regular breaks! Avoid taking a large bottle of water to work so that you have to move to get a drink regularly. Even if just for a few seconds, try to stand every 20 -30 minutes.
- Try to correct your posture as often as possible. Use certain cues to prompt you such as, every time the phone rings, every time you email, every time someone speaks to you, every new customer you see. Find something you do every 15 minutes to act as the cue. Try placing a post-it note on your screen with 'POSTURE' on it to constantly remind you. It only takes a few seconds (see below on how to correct your posture) and the more frequently it is practiced, the easier and more automatic it will become.

How to correct your posture

- It is important to try and find the 'neutral' position of your pelvis. In most cases, the pelvis adopts a posterior position after a period of sitting. By tilting your pelvis forwards this is corrected. Imagine trying to gently pull your tailbone up towards your spine and subtly arching your lower back. Try sitting on a folded up towel at the back of the chair to help facilitate this.
- This should automatically put your shoulders in a better position, but you may also need to very gently draw your shoulder blades together as if trying to expand your chest.
- Finally perform a gentle nodding action of your head. Imagine that you are trying to lift the base of your skull of your neck, as if lengthening your neck.
- As you will have noticed, the emphasis is on 'gentle' movement and these are only rough guidelines. A physiotherapist would be able to explain these in greater detail and ensure that they are done correctly as over correction is common and may lead to further problems.

Summary

The points mentioned above are just a few of the tips which individuals can try to incorporate into their everyday life. They are only guidelines which may need to be varied for each person depending on size, shape, activity level and environmental factors. Try just taking a few of the points on board and it may go along way in improving your posture and reducing your everyday aches and pains.

Alex Manos

MPhty BSc

Specialist Musculoskeletal Physiotherapist

References available on request

For more advice on posture and ergonomics or any other medical treatment please contact us on **0870 2000 878** or info@puresportsmed.com

Clinics at:

Point West, 116 Cromwell Road
Kensington, London.

The Lodge, Parkside Hospital
53 Parkside, Wimbledon, London.