

## Using Postural Assessment

As a therapist you can probably picture the kind of clients who might be described as having poor posture. They sit or stand slumped, with medially rotated shoulders and hips, their necks often with an exaggerated lordotic curve. What you probably also know is that the imbalances in strength, flexibility and joint mechanics that result from such a posture often result in pain. What you may not know is that providing a postural assessment for your clients is actually very straightforward and a valuable tool you can use with almost anyone. The purpose of this question-and-answer article is to get you started in carrying out your own postural assessments.

### What is posture?

The relationship between different parts of the body.

### What is postural assessment?

Observing a client in an attempt to notice what these relationships might be.

### Why should I do a postural assessment?

- ... to get more information
- ... to save time
- ... to serve as a benchmark
- ... to demonstrate caring/professionalism

Certain relationships between body parts are very obvious when a client is standing but are less obvious when they lie down for treatment. For example, in standing it is easy to see whether a client has protracted scapula because we can observe their distance from the spine. However, lying in prone the shoulders protract naturally so it is less clear whether this is natural or whether the protraction is due to weak rhomboids. By gaining more information about the client we save time and can use our findings to see whether or not our treatments have been effective. Many therapists use pain as their benchmark measure of effectiveness: for example, a client comes to you with a painful or stiff neck and after your treatment hopefully they have less pain and less stiffness. But often the pain and stiffness result from poor posture so what we ought to be doing in addition to getting subjective feedback, is to notice whether we have made any impact on the client's upper body posture. After all, much of massage involves stretching soft tissues so if we are clear about which soft tissues to stretch we can be more effective and overall more professional, because we are offering a more complete/holistic service. We keep records concerning the clients state of health and physical activities so it seems logical that we could also keep a record of their posture.

### How long does it take?

To start with you may find you need around 20 minutes to do a full assessment. With practice you can assess very quickly, in five minutes or less. Also, it may not be appropriate to assess the entire body. You may decide that if the client presents with knee pain, you are going to assess the lower limbs only. Many therapists choose to practice on family and friends first, perhaps using body crayons to highlight key points such as the medial border of the scapula, the inferior angle of the scapula, the spinous processes of the spine, olecranon process of the elbow, knee creased, midline of the calf etc.

### How should I do postural assessment?

- ... with client consent
- ... in a warm environment
- ... with the client standing normally, in a relaxed position
- ... using a checklist

It is also a great idea to have a postural assessment done on yourself. This way you will notice what it feels like to stand for some time whilst someone "looks" at you.

### Suggested Checklist

Here are some ideas for items you may wish to consider when carrying out a postural assessment. It is by no means definitive but will help you glean some useful information about each client. As you can see,

knowing your muscle anatomy and actions is essential.

### Posterior

- 1) Head/neck tilt. If the cervical vertebrae are laterally tilted this indicates tightness in muscles such as upper trapezius, levator scapulae and sternocleidomastoid.
- 2) Head rotation indicates tightness in muscles such as sternocleidomastoid.
- 3) Shoulder level. Are the shoulders level? Levator scapulae is a prime elevator so if you suspect an imbalance you need to palpate this muscle. Be aware however that in many of us our dominant shoulder is naturally depressed.
- 4) Shoulder bulk. Is there an increase or a decrease in shoulder bulk? Manual workers often have an increase in upper trapezius and rhomboids due to a preference for carrying or lifting heavy objects on one side. People with frozen shoulder or who have had their upper limb immobilized often have wasting of supraspinatus and infraspinatus.
- 5) Scapula distance from spine. Is the medial border of the scapula the same distance from the spine on both left and right sides? Protraction of the scapula (indicated by a greater distance from the spine) is usually the result of weak rhomboids rather than tight serratus anterior.
- 6) What is the overall spinal alignment like? Are there any observable areas of scoliosis?
- 7) What is the distance of the clients arm from their body? A gap between the arm and the body indicates tightness in supraspinatus and deltoid, the two prime abductors. Many therapists have painful supraspinatus on palpation as we tend to carry our couches on one side predominantly, forcing supraspinatus to work exceptionally hard.
- 8) Skin creases. Are there more skin creases on one side of the waist than the other? If yes, this indicates lateral flexion to the side with the greater creases and suggests tightness in muscles such as quadratus lumborum. (Look for even the slightest crease as an indication of lateral flexion).
- 9) Elbow position. Imbalances in elbow position are often due to medially rotated humerus, one of the most common causes of shoulder pain. Are the elbows the same distance from the body?
- 10) Thigh/calf bulk. Is this equal? Greater bulk suggests greater weight bearing on that side. If there is less bulk, is this due to wasting/decreased use/underdevelopment?
- 11) Calf midline. Imagine a line running down the centre of the calf from the knee crease to the Achilles. Compare left and right sides. Lines which appear to be on the lateral side of the calf indicate medially rotated hips or that the tibia is medially rotated against the femur.
- 12) Genu varum/valgus. Is the client bow legged or do they have knock knees? This may explain knee pain as joints wear differently in these conditions.
- 13) Foot position. This can tell you about hip rotation as people with tight lateral rotators of the hip often stand like ballet dancers, with their feet turned out whereas those of us with tight medial rotators stand pigeon toed.

### Side view

- 1) Does the client have a forward head posture? This is associated with a lordotic cervical vertebrae and tight neck extensors.
- 2) Are the shoulders protracted? Protracted shoulders are associated with weak rhomboids and tight pectorals.
- 3) Is there noticeable kyphosis? Kyphotic postures are associated with lengthened thoracic extensors and tight pectorals, plus shallow breathing due to a depressed chest cavity.
- 4) Lumbar spine. Is this lordotic or flat? Lordotic curves are associated with lumbar pain and tight lumbar extensors.
- 5) Knee position. Are the knees normal, flexed or hyperextended? Flexed knees are associated with tight hamstrings whereas hyperextended knees are associated with tight quadriceps and lengthened hamstrings.

### What do I do with my findings?

Firstly, you may not need to do anything! Most of us are walking around with less than perfect postures and may be quite fit and healthy. However, certain findings may explain why a client has stiffness and/or pain. You might then want to investigate further and if you find that the associated muscles are tight you can treat them accordingly through deeper techniques to stretch and lengthen them. You may also choose to refer a client for strengthening exercises.

### **May I charge extra for carrying out postural assessment?**

Some therapists decide to make postural assessment an additional service which they provide to those clients who are interested and may charge extra for it, providing the client with a full report, for example. Others simply choose to include it as part of their ongoing treatment plan, or perhaps provide it only as part of the initial assessment when they meet a new client.

This article has focused on selected items for carrying out a static postural assessment from back and side views. I do hope this will encourage some readers to consider the value of this form of assessment. It is, after all, an additional source of information and a great skill to have. (It's also very easy to do!). Please feel free to contact me with any questions.

Jane Johnson MCSP, MSc, BSc, BA (Hons)

