

# Soft Tissue Release Programmes

This part of the book tells you all about the client consultation process, gives examples of the kinds of initial questions you might want to ask and provides examples of the types of documentation some therapists use. Examples of commonly used assessments are provided in the sections on using a body map, measuring subjective sensations, postural assessment, range of motion and other special tests. Reading through the rationale behind the different consultation forms and comparing information from four very different case studies will give you a feel for how data are used to help design a treatment programme. Two of the case studies focus specifically on the use of STR in the treatment of trigger points.

Although therapists use specific consultation forms to ensure they meet the requirements of their regulatory bodies and insurance agencies, those provided here are useful examples. How do they compare to your own forms? Do you ask similar questions to those listed in the Initial Questions section? Do you use a body map, for example, or a visual analogue scale? Overall, this section is intended to help you identify how a treatment programme might be put together. It is *descriptive* rather than *prescriptive*. Use it to help you incorporate STR into your own treatment programmes, amending the various sections of your consultation process as necessary.

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# Creating a Soft Tissue Release Programme

Every therapist knows the importance of consulting with his or her client. The therapist needs to find out the reason the client has sought treatment, what the client expects from the treatment and, perhaps most important, whether any factors exist that may contraindicate possible treatment. Therapists use all sorts of forms to document information about the client. These forms include body maps, on which the therapist (or the client) highlights symptoms, and visual analogue scales (VAS), which are used to record the intensity of pain, stiffness or some other sensation. Most governing bodies and insurance agencies insist that therapists document treatments in detail. In addition, these agencies require that clients have consented to particular treatments and therapists have taken reasonable steps to ensure that the treatment is not contraindicated. These requirements are beneficial for everyone involved; they protect therapists, protect the client and help maintain a standard of professionalism. Although you may already be familiar with this sort of documentation, it is useful to review the rationale behind each of the consultation forms as well as compare these forms with ones you may already use. You may find this review especially helpful if you are a newly qualified therapist or practise bodywork other than massage.

It seems hardly necessary to mention the need for *etiquette-based medicine*, a term first coined by Kahn (2008) to describe the relationship between a clinician and his or her patient, as Kahn was referring to doctors treating patients in hospital and not to a clinician providing soft tissue therapy. However, where clients are being treated in a busy clinic, or who receive treatment from a multidisciplinary team, Kahn's comments are a touching reminder of some basic principles that therapists can overlook when they are trying to keep their appointments running on schedule and have commitments in the form of increased documentation (which is extremely common in the UK's National Health Service). Kahn thought teaching general good manners to medical students was required in order to tackle the problem of patient satisfaction, and suggested using a physician etiquette checklist. For example, for the first meeting with a patient in hospital, '1. Ask permission to

enter the room; wait for an answer., 2. Introduce yourself, showing an ID badge., 3. Shake hands., 4. Sit down. Smile if appropriate., 5. Briefly explain your role on the team., 6. Ask the patient how she or he is feeling about being in the hospital.' (p. 1). It seems difficult to imagine a therapist not engaging with a patient (or client) this way, especially in a field where the environment is less medicalised and patient-centred care is highly regarded.

This chapter begins with some of the questions you might ask your client when he or she approaches you for the first treatment. As you read through these questions, you may want to tick off those you already ask and identify any that are new. Next, you can examine the body map chart and a visual analogue scale (VAS), two methods of recording information. In addition, you can also consider the value of carrying out a postural assessment and why range of motion (ROM) and other special tests might be used. Two case studies are provided, and you can examine how the information that was gathered affected the overall treatment programme. Also included are examples of the full documentation used for one of these case studies; the other is summarised. Finally, you can review two more case studies specific to the use of STR for the treatment of trigger points.

By the end of this chapter, you may have discovered some things you want to add to your own consultations. Perhaps you will simply feel reassured that the consultations you are currently carrying out are sufficient. Either way, with this knowledge you can start practising STR on yourself and your family, your friends and, of course, your clients.

## Initial Questions

Your initial questions form part of your client consultation. The initial questions in figure 9.1 help you identify the reason for treatment and help provide clues as to the kind of STR that might be used, whether it is likely to be effective or whether it should be used at all. Some therapists like to use guided questions; others prefer to allow the client to tell his or her story in a semi-structured way whilst the therapist identifies and attributes the answers. All therapists aim to ask open-ended rather than yes-or-no questions; open-ended questions tend to elicit more information. It is also good practice to record answers using the client's own words as much as possible and to avoid prompting. It is sometimes tempting to ask, 'Where's the pain?' when a client may not have come to you with pain but with what he or she called 'stiffness' or 'something pulling'.

Asking questions is a skill, and it is perhaps the most important part of the consultation process. Effective questioning sets the scene for what is to follow. Clients need to feel at ease enough to tell you their stories. As a therapist, you need the confidence to identify and clarify salient comments whilst keeping the initial consultation within manageable time limits without making the client feel rushed. You may have already discovered how these initial questions determine the professional relationship you have with a client. When asked sensitively, these questions can help you gain rapport; when asked brusquely, hurriedly or in an offhanded manner, they can alienate a client.

# INITIAL QUESTIONS

Client Name: \_\_\_\_\_ Date: \_\_\_\_\_

1. How may I help?
2. Where is the discomfort you described?
3. When did it start?
4. How was it caused?
5. Is it getting better, worse or staying the same?
6. Does anything make it worse?
7. Does anything make it better?
8. Have you had previous treatment for this complaint? Was it helpful?
9. Have you had this condition before?
10. Have you had any previous injuries to the same area?
11. Can you describe the type of discomfort you are feeling?
12. How does this condition affect your work and leisure?
13. Is there anything else you think I need to know?

**Figure 9.1** Use these initial questions to identify the reason for treatment and to glean clues as to whether and how soft tissue release might be used.

From J. Johnson, *Soft Tissue and Trigger Point Release*, 2nd ed. (Champaign, IL: Human Kinetics, 2019).

In cases where you have to process a lot of information, it is often a good idea at the end of the initial question session to summarise your perception of the situation and state this summary to the client. For example, 'So just to be clear, you never had any leg problems before. A month ago you took up jogging and have since noticed a gradual increase in *achiness* in the front of your thighs. This achiness is uncomfortable when you stand up or when you sit on your heels but seems to go away within 24 hours if you rest. You copied some of the post-exercise stretches you found in a textbook for runners, and you admit to not doing them very often. Now when you try to stretch, the front of your thighs hurts even more.' This summary gives the client the opportunity to clarify any points. Perhaps he or she was not clear in describing what happened, or perhaps you misunderstood something. Sometimes hearing the story read back reminds the client of something he or she had forgotten all about. This situation is very common: A client says, 'Oh, I did get kicked in the thigh once, but that was ages ago. I'd forgotten all about that! I was playing football, and a boot went in my leg. It didn't bleed or anything; there was just this really big bruise, but it went away after a while. Could that have anything to do with it?'

One of the reasons therapists tend to ask so many questions and aim to work holistically is that, whilst a client may present with a hip problem, for example, an injury in one area can affect other parts of the body. A client might not be aware of the relevance of an old injury and so may either have forgotten about it or may discount it entirely, thinking it not worth mentioning. If a client comes with shoulder pain, for example, the client may not think to mention that he or she has recently recovered from a whiplash injury. Unless the client knows about anatomy, he or she may not be aware that some of the muscles of the neck also affect the shoulder.

Therapists of all disciplines who work in hospital and clinic environments often become highly skilled in asking these initial questions because they are working with strict time slots. They learn to identify which answers require further investigation and which ones are less important. Often, therapists also learn what kind of client they are dealing with, informing how to treat him or her. For example, someone who exercises regularly and intensely and with the tendency to acquire overuse injuries will respond differently to being told he or she needs to rest than will someone who has only just started an exercise programme and is keen to take as much advice as possible to avoid injury. In rare cases, it sometimes becomes apparent during this early part of the consultation that a client needs to be referred to another professional such as a doctor, podiatrist, radiologist or nurse. However you structure your consultation, by the end of the initial question session you should have formed an opinion as to why the client has come to see you, what and where the problem is and whether any contraindications exist to you carrying out further assessment.

**TIP** Making accurate, succinct summary statements is a skill in itself. If you want to boost your confidence in this area, try this method: Practise asking questions of a family member or friend, summarising what the person says. You need to find someone who has something that they might come to you with for therapy treatment. Practise asking questions and timing yourself to see how quickly you can

identify the main problem, any contraindications and whether or not, after initial questioning, you may be able to help. Give yourself 20 minutes. Try again, giving yourself only 10 minutes. Can you identify any key questions from those you have asked that could have elicited the client's main issues in just 5 to 7 minutes had you asked them earlier in the interview?

In their paper titled 'Toward Patient-Centred Care: A Systematic Review of How to Ask Questions That Matter to Patients' Rosenzweig et al. (2014) say that patients' concerns must be elicited through direct questioning in order to establish the collaborative relationship between the patient and the clinician that forms the cornerstone to care. The authors carried out a systematic review of articles about the measurement of patient-reported outcomes that were designed to help inform patient-centred care and which did not include physical examination or performance testing. Measurements they found were about the patient's general health perception, stress, pain, fatigue, depression, anxiety and sleep. From their analysis of these measurements they created the visual analogue health state (VAHS) form, which contains clinically relevant, valid and reliable questions that one can use to structure conversations with patients. The VAHS contains seven questions, each ranked 0 (excellent) to 10 (poor); these questions are:

1. How would you rate your overall health?
2. How much distress are you experiencing?
3. How much pain are you experiencing?
4. How much fatigue are you experiencing?
5. How much depression are you experiencing?
6. How much anxiety are you experiencing?
7. How well are you sleeping?

Following are some of the questions you could use as part of your initial questioning session. They don't have to be asked in this order, and you may want to modify this list. As you can see, they are useful questions to ask when the client

## CLIENT TALK

A client in considerable pain came to me for back massage after experiencing a very unusual accident. He was taking part in an exercise programme that involved galloping on a horse in a circus ring. Whilst trying to grip the horse with his legs, a safety harness attached around his waist pulled him off the horse. Whilst telling me this story, he stood up with great difficulty and, lifting the back of his shirt, he said, 'Look at this.' There were two very large bruises on either side of his lumbar spine. Clearly, this was an acute injury for which massage of any kind was contraindicated, and he was immediately referred.

comes to you with a specific injury or problem in a particular body part. However, many could be skipped if the client is coming to you for something simple such as a general maintenance massage. These questions are likely to be included in a consultation carried out by a massage therapist. Sports massage therapists, sports therapists, physiotherapists, osteopaths and chiropractors may choose to expand and adapt these questions. For this text, assume that the client is likely to need some form of massage, perhaps including STR.

### 1. *How may I help?*

Unfortunately, two of the most common opening questions are *Where's the pain?* and *So, what's the problem?* Neither of these questions is advisable, even when said invitingly, because although they are specific, they are also prompts. First, a client may not have any pain; he or she may have stiffness or tightness or a niggle. It's best to let the client report how he or she feels before using the same terminology yourself (say, 'A pulling feeling? Does it also pull when you look to the floor?'). Second, the client may not perceive his or her condition to be a problem at all. Many clients come for massage as part of a general maintenance programme. For example, runners may use it prophylactically to reduce the likelihood of developing problems associated with the iliotibial band; some weight trainers believe it helps reduce the likelihood of getting delayed-onset muscle soreness.

Choose an opening question that works for you. If it feels corny to ask, 'What may I do for you?' or too harsh to ask, 'So, why are you here?' then try being deliberately vague and ask, 'Anna mentioned it was your knee. Is that right?' This first question does not necessarily lead to a protracted explanation; it could equally take you to the heart of the issue. The client might tell you, 'The physiotherapist says I have a frozen shoulder. She wasn't sure but said it was ok to try massage if I thought that might help.'

### 2. *Where is the discomfort you described?*

The opening question should help determine the client's main complaint and the part of the body it affects, or any other reason for seeking treatment. If the client is describing a problem relating to a muscle, you need to determine whether the whole muscle or part of it is the problem. Some therapists, therefore, like to have a separate question that specifically asks, 'Where is the discomfort you described?' You might reword it for the situation, for example saying, 'Can you show me where it hurts?' or 'Do you feel the discomfort in the front of your knee or the back of it?' Soft tissue release can be used in stretching specific muscle fibres. Therefore, knowing that an old hamstring tear is in the biceps femoris, for example, is useful because it means you can later palpate and perhaps focus more on that hamstring with your treatment. Often, therapists will link this question to a body map (see figure 9.3) by writing *See chart*, or will make a small sketch if there is space on the consultation form. After subsequent treatments, you can refer back to this section to see whether the initial site of discomfort (if there was one) has moved.



### 3. *When did it start?*

This question helps you establish whether the problem had a gradual or a sudden onset. Is the client describing an acute condition, perhaps an injury he or she has just received such as a strained muscle, or did this condition happen some time ago? A calf muscle that was strained yesterday, for example, would be treated differently from a calf strain that occurred a week ago and is still causing problems. The more acute the strain, the less likely you are to apply STR. This question also helps identify overuse injuries. Overuse injuries such as tendinosis come on gradually and may be aggravated by repetitive activity. Often, a client cannot pinpoint when a condition started, yet his or her answers still provide clues as to whether the condition might be treated with STR. For example, a client may say, 'It comes on at work, when I've been on the computer for 4 or 5 hours.'

### 4. *How was it caused?*

An injury often has a known cause (e.g., the client tells you, 'I was running and then suddenly felt this sharp pain in my leg, and I couldn't run any more'), but with conditions such as sore muscles resulting from postural stress or overuse, the onset is so insidious that the client may not be able to identify the aggravating factor. You may hear statements such as 'Nothing caused it. It just hurts when I drive. It's worse when there's lots of traffic, and I have to change gears a lot. Then my arm starts hurting as well as my shoulder.'

### 5. *Is it getting better, getting worse or staying the same?*

Knowing how the condition behaves is especially useful within the context of STR. If a condition is getting worse, it could indicate that the client has an overuse condition that needs to be rested or that the client needs to be referred to another professional. Neither of these conditions should be treated with STR. On the other hand, if the client presents with tight hamstrings that seem to be getting tighter, it could indicate that STR would be beneficial.

### 6. *Does anything make it worse?*

Knowing what aggravates a condition is very helpful. Overuse injuries are aggravated by using the affected part. The answer to this question helps the therapist identify whether advising the client to rest and refrain from using that part of the body may be appropriate aftercare advice.

### 7. *Does anything make it better?*

Knowing alleviating factors is also useful. Clients who report that stretching helps ease pain, stiffness or discomfort may benefit from STR. Some therapists ask, 'Is there is anything you can do yourself that alleviates the problem?' Sometimes the client will make a direct statement, (e.g., 'No. It only stops if I stop cycling; when I rub it, it feels better') or will demonstrate a movement that he or she uses but cannot easily describe ('If I sit up straight like this it takes the pain away; sometimes I want to go like this. That seems to make it feel better for a bit.'). Muscle tension is often alleviated by stretching and changing position, so clients who report that these movements help may be more likely candidates for STR than those whose conditions may not be related to soft tissues.

8. *Have you had previous treatment for this complaint? Was it helpful?*

Sometimes you will not need to ask this question because the client will already tell you, 'Massage helps' or 'When I saw the osteopath it was fine for a while' or 'The woman in the gym fixed it last time.' You then can explore what the previous massage entailed, what the osteopath did or whether strengthening or stretching was used in the gym. If the client reports that he or she has had massage before and that it made the condition worse, you may be less likely to apply massage again. Conversely, the client may have had STR before and be able to tell you exactly where the therapist put his or her locks and how much it helped at the time.

9. *Have you had this condition before?*

If a client constantly experiences a particular condition, it may mean he or she needs more regular treatment, or it may suggest that an underlying condition needs addressing. Perhaps the client needs to alter his or her training routine. Surprisingly, clients sometimes repeat activities that bring about pain. Your client might say, 'I always get shin splints when I run on hard ground; I only get the neck pain when I drive for 4 hours without a break and forget to do my stretches.'

10. *Have you had any previous injuries to the same area?*

Although not always relevant, this question sometimes helps get to the bottom of long-standing problems. For example, a buildup of new scar tissue on top of an old injury that already has its own scar tissue may lead to an area of stiffness that requires a longer and more specific period of STR treatment.

11. *Can you describe the type of discomfort you are feeling?*

Some therapists like to ask this kind of question early in the interview, and sometimes the client describes his or her pain, stiffness or discomfort long before you ask about it (e.g., 'It just aches all the time when I'm writing'). Remember to document the client's own words. For example, if a client says, 'When I turn my head, it feels like something's getting squashed near my neck, here', this information is useful and quite different from your recording a statement that says, 'I have pain when I turn my head.' One of the best questions you can ask is 'How does it feel?' If you treat the client, you will probably want to check in with him or her to see if you have been effective. You can then ask, for example, 'Does it still feel like something's squashing when you turn your head?' Some therapists like to use a visual analogue scale (VAS; see figure 9.4) that measures the intensity of the client's feelings.

12. *How does this condition affect your work and leisure?*

This question provides all sorts of clues as to how quickly the client wants to recover if the STR is being used as part of rehabilitation (e.g., 'Once I can fully bend my knee, the doctor says I can go back to work'), how stressed he or she may be feeling (e.g., 'Everyone else is going. I feel like I'm letting the team down; If I could just do Thursday's match that would be great.') or whether the problem is limiting performance (e.g., 'I get worried that if I start to feel my hamstrings getting tight that I'm going to pull something. That happened last

time, and I had to stop training for two weeks.'). Overall, this question may help identify how the client is likely to respond to treatment and what his or her treatment expectations are.

### *13. Is there anything else you think I need to know?*

This is a vital ending question. You cannot possibly know everything about your clients. A client may respond with something very basic, such as 'Yes, I can only stay 30 minutes today because my child's minder is sick'; or he or she may say something that could have a direct impact on treatment but might not be picked up by the medical questionnaire, such as 'I want to try this again, but when I had treatment from that other practitioner, I felt a bit dizzy when I got up.'

The ways clients respond to your initial questions provide a wealth of information that is not necessarily the result of direct questioning. For example, their answers may reveal how they feel about therapy, medical professionals or their own body, and their responses often highlight yet more questions you need to ask. How a client answers opening questions provides hints as to how you might proceed with other parts of the consultation.

## **Client's Medical History**

The client's medical history is of great importance; it not only helps you identify possible contributing factors to the problem for which the client hopes to be treated, it also helps you screen for contraindications to massage. Figure 9.2 provides a sample medical history form. Remember that contraindications to STR include easy bruising, thin skin and hypermobility syndrome. Other possible contraindications to massage or STR include recent physiological trauma, long-term steroid use, excessively high or low blood pressure, varicose veins, contagious skin disorders, heart problems, diabetes, osteoporosis and pulmonary oedema. In some of these situations, massage may be performed on some other parts of the body but not on the affected part. It is also important to remember that massage of any kind, including STR, is contraindicated in the first 12 weeks of pregnancy.

## **Using a Body Map**

A body map (figure 9.3) is a useful, quick reference to which the therapist may refer before providing further treatment and for recording changes. It is simply an outline of the body, showing front, back and sometimes side views, onto which you record the area of your client's symptoms. It is helpful because you can see quickly whether tightness in the calf extends down the length and breadth of the muscle, or whether it is localized to a particular region, such as the Achilles. Some therapists use different types of shading to indicate differences in sensation. Darker shading might represent increased pain or increased stiffness, for example. Body maps may also be used to indicate areas where there were old injuries or local contraindications (such as athlete's foot, for example). When symptoms relating

## MEDICAL HISTORY

Name:	Tel. No. (home) :	Tel. No. (work):
Address:	Mobile No.:	Date of birth:
Dr's name/tel no:		
Address:		
Occupation:	Weight:	Height:
Current medication:	Referred?	
Recent operations/illnesses:	Pregnancy:	
Circulation problems: (heart, pulmonary oedema, high/low blood pressure, poor circulation)		
Respiratory system: (asthma, bronchitis, hayfever)		
Skin disorders: (dermatitis, eczema, sensitivity, fungal infections)		
Muscular or skeletal problems: (fibromyalgia, previous fractures)		
Neurological problems: (sciatica, epilepsy, migraine)		
Urinary problems: (cystitis, thrush, kidney problems)		
Immune system: (prone to colds, reduced immune status)		
Gynaecological problems: (PMT, menopause, HRT, irregular periods)		
Hormonal problems: (diabetes)		
Digestive problems: (indigestion, constipation, IBS)		
Stress-related or psychological problems: (depression, anxiety, panic attacks, mood swings)		

INDEMNITY: I confirm to the best of my knowledge that I have not withheld any information relevant to my treatment and that I understand and accept full responsibility for the treatment that I am given. I also agree that I have given the correct information as detailed on this form, and shall inform the therapist should these circumstances change.

Client signature: \_\_\_\_\_

Therapist signature \_\_\_\_\_ Date \_\_\_\_\_

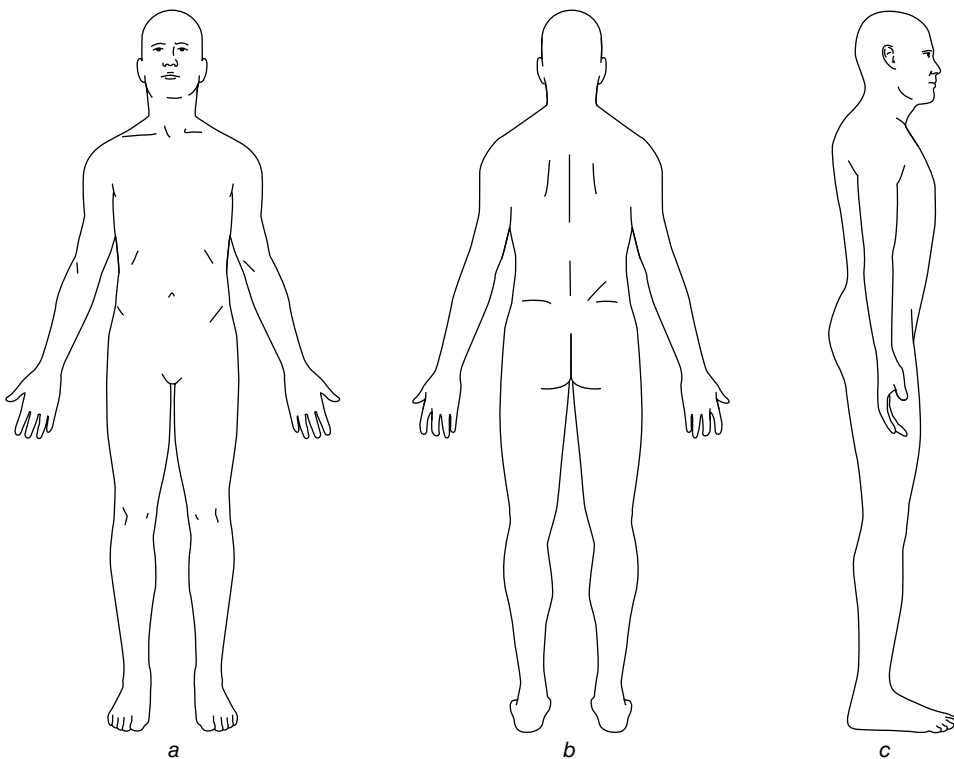
**Figure 9.2** Every client should complete a medical history. From this form you will learn important information about the client, especially regarding contraindications for soft tissue release.

From J. Johnson, *Soft Tissue and Trigger Point Release*, 2nd ed. (Champaign, IL: Human Kinetics, 2019).

to several body parts need to be documented, some therapists like to indicate which is the main area, perhaps by using circled numbers 1, 2, 3 and so on, with 1 identifying the main area to be treated. As experienced therapists know, a body map does not always show the area of treatment, for the area where symptoms are being felt is not necessarily the area at fault.

Sometimes it is helpful to fill in the body map whilst showing it to the client and having the client confirm that you have marked the correct area. Some therapists decide to mark their body maps during the initial questioning phase of the consultation to get an overall picture of where problems are and where they have occurred in the past. This approach is especially helpful if there are many areas to be treated or a complex history of injury. Others prefer to complete the map either whilst palpating the client or after an initial massage treatment during which tissues are assessed. Recording information as the client gives it to you obviously documents what the client says and is regarded as part of a subjective assessment, whereas recording your own findings from palpation or massage is a form of objective assessment. It may not matter which method you use, as long as you remain consistent.

Another useful way to use the body map is to record the sites of trigger points. In this way you can refer back to the map during later consultations to determine whether your treatment has been effective at resolving any trigger points.



**Figure 9.3** Use body maps such as this one to record the area of your client's symptoms.  
From J. Johnson, *Soft Tissue and Trigger Point Release*, 2nd ed. (Champaign, IL: Human Kinetics, 2019).

**TIP** It is not always advisable to show your body map to the client after treatment if you are documenting your own objective findings. You have marked places all over the map, indicating where you found tissues to be particularly tight or areas of heat or increased sensitivity, and seeing so many markings could alarm some clients. They may away thinking that they have all sorts of things wrong with them, when in reality the map simply represents the subtle findings you have documented in a comprehensive manner.

## Measuring Subjective Sensations

Figure 9.4 shows a visual analogue scale (VAS), which you may use to document subjective measures such as pain, stiffness, pulling sensation, or soreness. The scales are quick, easy and effective. Simply draw a line on a piece of paper. At the far left end write ‘no pain’ or ‘no stiffness’; at the far right of the line, write the opposite—‘worst pain ever’ or ‘maximum stiffness’. Show the line to your client, and ask him or her to mark it to indicate symptom intensity. After treatment, you may want to ask the client to mark the line again, using a fresh VAS. If the aim of your treatment was to reduce pain, for example, the client’s new mark should be more to the left of the line. It is not always necessary to retest your clients in this way immediately after treatment. Sometimes it will be obvious that the treatment has helped by what the client says and does. Also, long-standing conditions do not necessarily resolve in just one treatment session. Several may be needed before you want to retest your client using a VAS. Gift (1989) makes the interesting point that not all patients can convert subjective feelings to a straight line. It is especially so when using VAS to ask about previous pain sensations, where a patient may not actually be able to remember the sensation.

The McGill Pain Questionnaire (Melzack, 1975) is one of the many methods for measuring pain. If you are working with a special population, such as children, the elderly or clients with whiplash, it would be worth exploring scales that have been used to measure sensations in that particular population. For example, Hawker et al. (2011) provides an overview of pain measurement systems used in rheumatology.

**TIP** Do not put numbers on your VAS. Clients remember numbers and may have a preference for a particular number. Or they may think that they should feel a lot less stiff, for example, and so mark a 3, remembering that their previous mark was a 6. If you were to test a client using a blank VAS, you may discover that whilst he or she did feel less stiff after treatment, this number was reduced to a 5 or even a 4 but not to a 3.



**Figure 9.4** Visual analogue scale (VAS).

From J. Johnson, *Soft Tissue and Trigger Point Release*, 2nd ed. (Champaign, IL: Human Kinetics, 2019).

## Postural Assessment

A quick postural assessment provides further information that may be relevant to the application of STR. Look for which of your client's muscles are short and tight and which are long and weak. Use STR to target the short, tight muscles, aiming to lengthen them, and avoid stretching the muscles that are already too long. Generally, when chest muscles (e.g., pectoralis major) are tight, muscles of the thoracic spine (e.g., middle fibres of trapezius) are longer and weaker; when abdominals are weak, muscles of the lumbar spine (e.g., erector spinae) and hip flexors (e.g., psoas muscles) are tight. For more information on postural assessment, look at *Postural Assessment* by Jane Johnson and *Muscles: Testing and Function with Posture and Pain* by Florence Peterson Kendall, Elizabeth Kendall McCreary, Patricia Geise Provance, Mary McIntyre Rodgers and William Anthony Romani.

## Range of Motion and Other Special Tests

If STR is being used to increase range of motion (ROM), then it may be useful to complete a chart highlighting the ROM of the joints relating to the area and muscles being treated. For example, if a client is being treated for tight or painful shoulders, knowing the ROM at the glenohumeral joint would be useful to assess limitations and to gauge the effectiveness of treatment. Other special tests include the straight-leg raise for hamstring length (figure 2.2), the prone knee bend test for the length of the quadriceps (figure 2.3), the sit-and-reach-test for hamstring and spine length (figure 2.4), the Thomas test (for hip flexor length), the Ober test (for tightness in the iliotibial band) and differentiation tests for tightness between the soleus and the gastrocnemius.

## Programme for Treatment

Once you have gathered all the data, you are ready to prepare a programme for treatment. You can use a form such as the one in figure 9.5 to create your programme. Following is an explanation of the various fields on the form.

- *Subjective*: This section documents how the client feels and what he or she reports to you before treatment; it also documents that the client consents to treatment.
- *Objective*: This section is about your observations as a therapist, including observations noted on the body map as well as data from the postural assessment, ROM, special tests and whatever you discover through palpation.
- *Treatment*: This section includes a list of what you did and how you did it.
- *Assessment*: This section describes your assessment of the treatment carried out. Here you note plans to retest if necessary to see if you have met your treatment goals.
- *Plan*: In this section, you can respond to questions such as *What do you intend to do for the next treatment session, and when is it to be?* and *Is there any aftercare advice you need to give your client?*



# PROGRAMME FOR TREATMENT

Client Name: \_\_\_\_\_ Date: \_\_\_\_\_

Main problem:

Special notes:

Aims of treatment:

Subjective

Objective

Treatment

Assessment

Plan

Signature of client: \_\_\_\_\_

**Figure 9.5** You can use a form such as this one to design a treatment programme for your client.

From J. Johnson, *Soft Tissue and Trigger Point Release*, 2nd ed. (Champaign, IL: Human Kinetics, 2019).



## Case Studies

Following are assessments for four different clients, Client A, Client B, Client C and Client D. Look through them and then refer to their corresponding treatment plans. Can you see how the assessments helped influence the type of STR provided for each?

### Client A

Client A presented with pain, stiffness and reduced ROM in the knee 2 weeks after being discharged from hospital following total knee replacement surgery. Client A's intake forms are shown in figures 9.6 to 9.9 at the end of the chapter.

#### CLIENT A'S INFORMATION

The following is a summary of Client A's intake forms:

- *Initial questions* (see figure 9.6): From these initial questions, vital information was gained that helped shape the treatment programme. For example, the problem clearly affected the client's daily activities. She had difficulty going down stairs and was unable to walk her dog. Nevertheless, she may not have wanted to do her physiotherapy exercises because they aggravated her pain. However, she is determined to get better; she is massaging her own knee and doing some of the mobilization exercises. It could be inferred that she wants some help increasing her knee flexibility, perhaps by doing something less painful than the exercises she has been prescribed. It is certain that she likes walking and is used to regular exercise with her dog, which may prove to be an important motivating factor. The fact that she has had this operation before on the other knee suggests she is familiar with the rehabilitation process for this particular condition, although she may be frustrated at not recovering as quickly as last time.

- *Medical history* (see figure 9.7): The main finding is that she has unmedicated high blood pressure. This finding is significant because after such surgery, there is often a period of recovery when the client is less active than usual and may gain weight. It often occurs with previously active clients, as in this case. Weight gain can increase blood pressure. It is therefore quite important that this client regain her mobility as soon as possible without too much exertion (exercise also increases blood pressure). Although the client has not reported feeling stressed, she shows a hint of anxiety concerning the fact that her previous recovery seemed to be quicker. Stress can also increase blood pressure, because tense muscles restrict capillary flow. The good news is that massage is believed to lower blood pressure, so it may be useful to use STR with massage.

Also significant is that the client had successful total knee replacement surgery to her left knee 2 years ago. This finding suggests that she is aware of the rehabilitation process and may understand the importance of carrying out the physiotherapy exercises (despite not liking them). Even though massage therapists don't usually prescribe exercises, a massage therapist can sometimes play an important role in encouraging clients to carry out the exercise programme that

has been set by the physiotherapist or clinical exercise trainer. Knowing that the client has been receiving treatment from another practitioner (a physiotherapist), it is important to gain approval for massage and STR. In certain cases, stretching could be counterproductive to an existing treatment, so it is always best to get permission and advice if necessary before starting a treatment. As you know, it is also a professional courtesy.

Current medications include analgesics for knee pain. This finding is also important, for you need to know that a client can feel the depth of pressure of your locks, even when they are gentle, and any form of massage is contraindicated for clients who are taking painkillers of any kind. It also means that you need to warn the client that she should not take painkillers before treatment. It gives the client the opportunity to decline treatment should she feel the need to take painkillers. Nothing else was significant, and there were no contraindications to massage.

- *Body map* (see figure 9.8). The client has a longitudinal anterior scar on each knee. Using the map and medical history, it is easy to identify that the knee is the main problem area (though not necessarily the area to be treated), and that the scars represent surgical intervention. The right knee is visibly swollen. In addition to pain, this is likely to be a factor limiting flexibility.

- *Visual analogue scale* (see figure 9.8). The client's main problem is pain, and she has marked a point corresponding to level 7 on a pain scale of 0 to 10, where 10 is the worst pain. This pain score is quite high. It suggests careful management is needed, for although you do not know how irritable the knee is (that is, how quickly the pain comes on), you know that it is aggravated by weight bearing, so helping the client on and off the couch and not moving her about too much once she is on it may be important.

- *Postural assessment*: Client appears overweight. Scars show that the client has had knee operations; both knees have anterior longitudinal scars. Swelling to the right in anterior, posterior and lateral views indicates that the inflammatory process is active and that it may limit treatment.

- *Range of motion and other special tests*: Active and passive knee flexion were tested in sitting, supine and prone. All were uncomfortable, with flexion—both actively and passively—being the worst. The client preferred to have the ROM tests in prone despite having an anterior knee scar. This finding was interesting and useful because it indicated that STR to the hamstrings could be performed with the client in the prone position.

- *Palpation*: The client had slight soreness close to the scar but no other pain on palpation of the surrounding tissues.

## CLIENT A'S PROGRAMME FOR TREATMENT

Figure 9.9 shows the treatment programme that was designed for Client A. The main aim was to help the client gain an increase in right knee flexion and extension. Notice that although STR to the quadriceps could have been used, this was inadvisable due to the recent surgery. Therefore, STR was only applied to the hamstring muscles, increasing extension of the knee joint. As part of the treatment, the therapist gently increased the point to which the knee was flexed, distracting

the client by gently shaking the limb. The overall effect was to gain 5 degrees flexion to the knee in prone and reduce feelings of discomfort at the back of the knee when the client was sitting with her legs outstretched, knees in extension.

The client was seen each day for 5 days initially, then once a week for 3 weeks. It is unusual for clients to come for treatment daily. However, this client was particularly keen to progress through her treatment quickly; because the treatment was light, not of long duration and resulted in an increased range of motion, albeit small, regular sessions seemed appropriate in this case. After five sessions, the client was advised to abstain from treatment, continue with self-massage and the physiotherapy exercises and apply cold to the knee if necessary.

## Client B

Client B was a runner who came for treatment because his hamstrings and calves were feeling increasingly tight. Now that you have seen an example of different aspects of consultation, compare the Client A example with the information for this second client. The treatment programme (figure 9.10) and summaries of the findings from the initial questions, medical questionnaire and assessments have been provided. Can you see how all the assessments help determine not only whether you use STR at all, but which form of STR might be used and how frequently?

### CLIENT B'S INFORMATION

The following is a summary of Client B's intake forms.

- *Initial questions:* This client had started running 4 weeks before and had experienced increasing tightness in his hamstrings and calves. The feeling of stiffness came on gradually, as might be expected, and was getting worse. It is aggravated by running and sitting for long periods, and although initially alleviated by hot baths, now seems to be constant. Importantly, the client does not report any pain. The client may have pulled his hamstring muscle in a football match 2 years ago but cannot remember exactly when this happened. He has tried some stretches he found in a book, but they gave him a backache. This seems like a straightforward case, with the treatment likely to be localized to the lower limbs. It may be worth taking a look at what sorts of stretches the client has been doing.

- *Medical history:* Client B experiences tension headaches (possibly related to his use of a computer for long hours), but there was nothing else significant and no contraindications to massage. Neck and shoulder tension can be treated with STR; this was noted for future reference but is not intended as part of this first treatment.

- *Body map:* The posterior of both lower limbs was shaded on this map, showing clearly where the main problem was. The fact that the client experiences tension headaches could have been noted on this map as a secondary problem.

- *Visual analogue scales:* Four VASs were used with this client to represent each of the lower limb muscles where he was experiencing stiffness (the hamstrings and calf on both the right and left leg). Interestingly, he reported a greater sensation of stiffness in the left hamstrings (5 on the scale), possibly where he

had experienced a previous injury, and in the right calf (6 on the scale), perhaps because he is bearing more weight on his right side to compensate for the decreased functioning of the left hamstring. The VAS was 4 for the right hamstring and 4 for the left calf. It was noted, too, that the client's sensation of stiffness went all the way down to his Achilles tendon on both sides.

- *Postural assessment:* This assessment revealed that Client B stood slightly slumped, possibly with a mild degree of knee flexion on both sides. Assessment was difficult because the client reported feeling 'uncomfortable' standing in an upright posture; standing with straight legs seemed to aggravate tension in the hamstrings. Because the client reported that he was seated at work all day, an observation of his seated posture was carried out. This observation revealed that he liked to sit with his knees flexed, his ankles hooked onto the base of the chair in a position he reported as 'very comfortable'.

- *Range of motion and other special tests:* The straight-leg raise was used in testing the length of the client's hamstring muscles. Findings were 70 degrees on the left leg and 65 degrees on the right leg, with the client reporting an almost immediate increase in tension on both sides during the test. It was expected given that the client sits in knee flexion for about 6 hours a day at work. A differentiation test was carried out with the client standing to test the gastrocnemius and soleus muscles. There was decreased dorsiflexion on both sides and a shortened soleus on the right.

- *Palpation:* This assessment was done without oil. There was increased tension in the hamstrings and the calf muscles on both sides. There was a palpable mass of what may be scar tissue in the belly of the left biceps femoris muscle, which supports the client's report of a possible earlier injury.

## CLIENT B'S PROGRAMME FOR TREATMENT

Based on the information provided, a programme for treatment was designed for Client B (see figure 9.10). The main aim of treatment was to decrease feelings of tension in the client's hamstring and calf muscles. Although a straight-leg raise test was used in assessing hamstring length, and it improved disproportionately after treatment of both sides, increasing hamstring length was not the main aim of the treatment. The VAS was used to help the client report his feelings of muscle stiffness. His main concern was not to have longer hamstrings but to feel less stiff; he was worried that stiffness might prevent him from continuing with his new running programme.

This case is a good example of how active STR might be applied effectively in addition to weekly massage. In this case, it was important to explain to the client the importance of avoiding active STR before running because active STR might decrease his muscle power. It was also important for him to be cautious about applying active STR too deeply immediately after a run, because there may be initially masked micro tears in the muscle that could be made worse with the deep pressure of the tennis ball. Active hamstring and calf stretches were applied as an alternative to post-exercise STR.

The client was then seen once per week for 4 weeks, and similar treatments were carried out. Feelings of stiffness decreased in both lower limbs. Post-exercise

stretching was encouraged, and it was suggested that the client take advice on his seated posture at work. Although findings for the straight-leg raise did not alter much, there was a marked increase in ankle dorsiflexion, indicating increased flexibility in calf tissues.

The following two case studies, Client C and Client D, illustrate how STR might be used to help deactivate trigger points.

## Client C

Client C presented with pain and reduced ROM in the upper trapezius and posterior shoulders.

### CLIENT C'S INFORMATION

The following is a summary of Client C's intake forms.

- *Initial questions:* This client had been a call centre operative for over 3 years and was stationary at a desk, wearing a telephone headset. In the last 12 months he had begun to experience periods of neck and shoulder pain, which he was able to alleviate by moving the head and shoulders. However, the frequency and duration of pain episodes had increased and was getting worse. Pain was initially of a low level, described as 'uncomfortable', lasting only a few minutes and not coming on until the end of the day, alleviated by movement. At the time of the consultation pain was 'intense', came on within typing for 60 minutes and could not be alleviated with movement or stretching. The client had tried using a hot pack, which initially eased symptoms but now made little difference and he was worried he may have a serious neck and shoulder problem.

- *Medical history:* Client C had fusion of his L4/L5 vertebrae 10 years ago following a road traffic accident and used a rise-fall desk at work as prolonged sitting or prolonged standing of over 30 minutes caused low-back pain. There are no contraindications to upper-body massage.

- *Body map:* The client used the body map to shade in where he was feeling pain. Pain was noted to be in the upper part of trapezius radiating down the medial border of the scapula and into the back of the shoulder.

- *Visual analogue scales:* This client was unable to convert his pain sensation to a VAS, so it was not used.

- *Postural assessment:* This assessment revealed that Client C had a marked forward-head posture. An observation of both the standing and seated posture of this client was carried out. Standing posture revealed no issues, but it was observed that when seated at his work station the client's monitor was too high and the top of the monitor was not at the level of his eyes, causing the client to hold his head tilted back slightly.

- *Range of motion and other special tests:* Active neck ROM was carried out and revealed no restrictions in flexion or extension, although both were accompanied with 'bad' pain that felt 'muscular', whilst there was a limitation of at least 30 percent in both right and left lateral flexion. Right and left rotation range was

normal but accompanied with 'pain and pulling'. Active shoulder range was full on both left and right sides, but elevation above 90 degrees caused pain in the upper trapezius on both sides with the client flexing his head as he attempted full elevation.

- *Palpation:* Palpation revealed an active trigger point in levator scapulae, which reproduced the client's pain on both left and right sides. He had some tenderness at the base of the skull.

### CLIENT C'S PROGRAMME FOR TREATMENT

Based on the information provided, a programme for treatment was designed for Client C (figure 9.11). Aims of the treatment were to (1) increase the time by which pain came on at work from 60 minutes to anything above this time, (2) reduce the severity of pain, (3) reduce the length of time the client experienced pain during a pain episode, (4) reduce the frequency of pain episodes and (5) improve lateral ROM in the neck and for rotation to be less painful with less of a pulling sensation.

## Client D

Client D presented with pain in the left arm radiating into the left thumb and forefinger.

### CLIENT D'S INFORMATION

The following is a summary of Client D's intake forms.

- *Initial questions:* This client was a bariatric client who was housebound. She was unemployed, awaiting surgery as part of a weight management programme and under the supervision of a local doctor who was present at the time of the initial consultation; the doctor had ruled out angina or heart issues as being the cause of the left arm pain, believing it to be muscular in origin. The doctor recommended massage as a possible solution. Left arm pain was preventing the client from doing crochet, a hobby about which she was passionate.

- *Medical history:* Client D reported her weight to be '27 stones' (171 kilos; 377 lb) and they were taking aspirin daily. She also took thyroxine daily for hypothyroidism.

- *Body map:* The client used an enlarged image of the upper limb from a body map to shade in where she was feeling pain. Pain was noted to be in the front and back of the arm primarily, sometimes with sensations in the forearm, very occasionally right-sided chest pain. This client was noted as left-handed.

- *Visual analogue scales:* This client reported pain as 'constant burning' and around 6 out of 10 on the VAS but rising to 8 to 9 when crocheting.

- *Postural assessment:* This client was assessed when resting in her usual chair at home, a purpose built recliner. The chair was reclined to around 45 degrees from vertical, causing the client to adopt a position of marked neck flexion.



- *Range of motion and other special tests:* Range of motion in the neck and shoulder were not possible as the client was unable to sit upright. Active and passive ranges were performed for the elbow, wrist and finger of both hands. Supination was reduced and 'sore' in the left wrist; wrist and finger extension in the left wrist was full but described as 'tight' as was left thumb extension.
- *Palpation:* Palpation of the upper limb revealed mild tenderness throughout the anterior surface. It was not possible to palpate the posterior surface. Palpation did not reproduce the client's symptoms. However, palpation of the left scalenes did.

#### CLIENT D'S PROGRAMME FOR TREATMENT

Based on the information provided, a programme for treatment was designed for Client D (figure 9.12). Aims of the treatment were to reduce the frequency and intensity of pain in the left upper limb from 6 to 9 out of 10 on the VAS to below this number.

## Closing Remarks

You should now have a good understanding of the importance of asking initial questions, and you have learned how a variety of different assessments can be used to help inform your treatments. The case studies illustrate different situations in which STR could help. Can you think of any of your own clients for whom STR might be appropriate? This chapter has given you some insight into the variety of assessments you could use with your clients; you are encouraged to try some of them.

## Quick Questions

1. When asking your initial questions, what could you say instead of 'Where's the pain?'
2. If a client presents with more than one part of his or her body needing treatment, how might you quickly indicate in your records which area is the main area of treatment?
3. What does VAS stand for?
4. In the programme for treatment, what does the subjective information tell you?
5. In the programme for treatment, what does the objective information tell you?

## INITIAL QUESTIONS

### 1. How may I help?

Looking for pain relief. Hoping massage therapy will help.

### 2. Where is the discomfort you described?

Pain in right knee.

### 3. When did it start?

Following recent total knee replacement surgery to that side.

### 4. How was it caused?

As above.

### 5. Is it getting better, worse or staying the same?

Better—slowly.

### 6. Does anything make it worse?

Doing the physiotherapy exercises to encourage flexion/extension!

### 7. Does anything make it better?

Not doing the physiotherapy exercises! For self-management, the client uses painkillers; self-massage to whole of knee avoiding anterior wound; mobilization within pain-free range.

### 8. Have you had previous treatment for this complaint? Was it helpful?

No. However, left knee replaced 2 years ago and seemed to recover more quickly.

### 9. Have you had this condition before?

n/a

### 10. Have you had any previous injuries to the same area?

Severe osteoarthritis, hence total knee replacement operation.

### 11. Can you describe the type of discomfort you are feeling?

Pain (level 7 VAS) on active and passive movement of knee, especially flexion; stiffness.

### 12. How does this condition affect your work and leisure?

Unable to walk dog; difficulty in all daily activities involving walking and stairs.

### 13. Is there anything else you think I need to know?

Client reports pain as 'burning' when attempting physical therapy exercises; this changes to 'aching' after exercise and may last several hours.

**Figure 9.6** Client A's initial responses to questions.



## MEDICAL HISTORY

Name: Client A	Tel. No. (home) :	Tel. No. (work):
Address:	Mobile No.:	Date of birth: May 1936
Dr's name/tel no: Address:		
Occupation: retired school cook	Weight: 70 kg   Height: 5 ft 6 in. (168 cm)	
Current medication: analgesics for postop pain	Referred? No	
Recent operations/illnesses: total right knee replacement	Pregnancy:	
Circulation problems: (heart, pulmonary oedema, high/low blood pressure, poor circulation)	Unmedicated high blood pressure	
Respiratory system: (asthma, bronchitis, hayfever)	None	
Skin disorders: (dermatitis, eczema, sensitivity, fungal infections)	None	
Muscular or skeletal problems: (fibromyalgia, previous fractures)	Stiffness and swelling in right knee following recent operation, with decreased range of motion	
Neurological problems: (sciatica, epilepsy, migraine)	None	
Urinary problems: (cystitis, thrush, kidney problems)	None	
Immune system: (prone to colds, reduced immune status)	None	
Gynaecological problems: (PMT, menopause, HRT, irregular periods)	None	
Hormonal problems: (diabetes)	None	
Digestive problems: (indigestion, constipation, IBS)	None	
Stress-related or psychological problems: (depression, anxiety, panic attacks, mood swings)	None	

INDEMNITY: I confirm to the best of my knowledge that I have not withheld any information relevant to my treatment and that I understand and accept full responsibility for the treatment that I am given. I also agree that I have given the correct information as detailed on this form, and shall inform the therapist should these circumstances change.

Client signature: \_\_\_\_\_

Therapist signature \_\_\_\_\_ Date \_\_\_\_\_

**Figure 9.7** Client A's medical history.

## ASSESSMENTS FOR CLIENT A

### Visual Analogue Scale



### Body Map

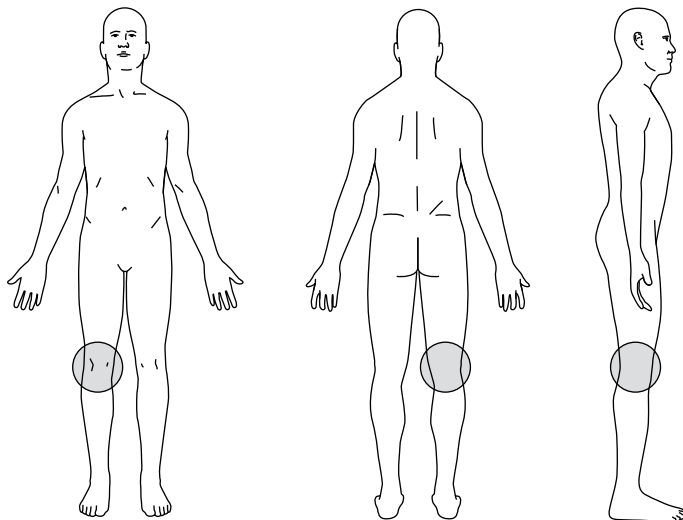


Figure 9.8 Client A's VAS and body map.

# PROGRAMME FOR TREATMENT

Client Name: Client A

Date: / /

Main problem: Pain and stiffness in right knee following total knee replacement surgery.

Special notes: Consent for treatment given by physiotherapist; pain worsened following physiotherapy treatment to encourage ROM at knee.

Aims of treatment: Assist client in achieving flexion/extension at the knee as recommended by physiotherapist, beginning with flexion.

## Subjective

Client well and consents to treatment plan. No pain in knee at present.

VAS for previous pain (see consultation).

## Objective

Swollen right knee.

Longitudinal anterior scars both knees.

Limited active and passive flexion and extension when tested in sitting, supine and prone positions, with localized pain reported most on flexion.

Client has difficulty getting onto and off treatment couch. In prone, knee flexion limited (by pain) to 80 degrees.

## Treatment

Gentle passive flexion and extension of knee joint in prone.

Passive STR through clothing to left hamstrings in prone to demonstrate technique.

Approx 2 min.

Passive soft tissue release to right hamstrings in prone. Approx 4 min (initially was uncomfortable to anterior knee, so continued with bolster beneath knee, just superior to scar).

Technique repeated for 4 more min whilst gently shaking client's leg during knee extension. Each time, the knee was flexed passively a degree more.

Client advised to rest with legs raised to encourage lymphatic drainage to aid reduction in swelling.

## Assessment

Demonstrating on client's left leg helped me gain her confidence.

Using a bolster to prevent the knee from touching the treatment couch worked well.

Client much enjoyed the gentle shaking of the leg during the application.

Knee flexion increased by 5 degrees due to passive flexion.

Client reported being 'amazed' at her increase in flexion. In supine, resting knee extension was reported as 'more comfortable'.

## Plan

10 min STR daily as previously noted. Client to rest in position shown. Client to continue with daily physiotherapy exercises.

Attempt muscle energy technique to quadriceps whilst sitting as adjunct to STR.

Signature of client: \_\_\_\_\_

**Figure 9.9** Client A's programme for treatment, which incorporates subjective and objective information as well as information related to treatment, assessment and the plan.

# PROGRAMME FOR TREATMENT

Client Name: Client B

Date:        /        /

Main problem: Tight calves and hamstrings.

Special notes: Client wants to continue with running programme 4 times per week.

Aims of treatment: Decrease feelings of stiffness in hamstrings and calves.

## Subjective

Client well and consents to treatment plan.

## Objective

Decreased passive straight-leg raise (SLR) both sides (70 degrees L, 65 degrees R).

Decreased ankle dorsiflexion both sides.

VAS for stiffness (see consultation).

Small, palpable, nonpainful mass left biceps femoris.

## Treatment

Basic warm-up massage to posterior of both lower limbs prior to treatment with STR approx 5 min each side.

In prone, feet off couch, 5 min active-assisted STR to hamstrings and 5 min active-assisted STR to calf on each side through towel. Further, deeper massage to posterior lower limb (2 min) then STR repeated through towel 3 min hamstrings, 3 min calf each side. Massage again 2 min each side.

In supine, massage to quads and tibialis anterior both sides, approx 10 min each side.

Active STR for hamstrings and calves demonstrated to client and client given hard tennis ball to use for this purpose. Caution regarding pre- and post-exercise use of STR explained.

Active post-exercise hamstring and calf stretches demonstrated to client.

## Assessment

SLR following treatment = 75 degrees L, 75 degrees R. Increased dorsiflexion when tested actively.

Client perceives less tension both legs.

Overall initial treatment appears effective in decreasing client's feelings of stiffness in hamstrings and calves.

## Plan

Massage as noted once per week.

Client to practise active STR and stretches as advised.

Client to consider treatment to whole of lower limb both sides as maintenance/prophylactic massage whilst on running programme.

Signature of client: \_\_\_\_\_

**Figure 9.10** Client B's programme for treatment, which incorporates subjective and objective information as well as information related to treatment, assessment and the plan.

# PROGRAMME FOR TREATMENT

Client Name: Client C

Date:        /        /

Main problem: neck and bilateral posterior shoulder pain.

Special notes: Client unable to sit for more than 30 minutes without low-back pain.

## Subjective

Client well and consents to treatment plan.

## Objective

Decreased active cervical lateral flexion by 30 percent both L and R sides.

Active cervical rotation full L and R but painful with pulling.

Active cervical flexion and extension full with pain on extension.

Active triggers found in levator scapulae L and R.

Active shoulder range full with upper trapezius pain above 90 degrees abduction bilaterally.

## Treatment

Client seated on inclined massage chair in therapy room at work. Basic warm-up massage to posterior of both shoulders and neck for approx 5 min each side.

STR to deactivate trigger points treated on both left and right levator scapulae interspersed with effleurage and light petrissage massage for a total of 20 minutes.

In standing, client taught active neck stretches for levator scapulae.

Client advised re positioning of monitor when standing at work station. Advice given regards levator scapulae stretching.

## Assessment

Active cervical ROM: Minor improvement in lateral and rotation ranges but client reports much reduced sensation of pain and pulling. Active shoulder ROM uncomfortable past 90 degrees of abduction but no longer painful.

Overall initial treatment appears effective in decreasing client's feelings of pain and pulling neck muscles, and pain in posterior shoulder.

## Plan

Treatment as noted twice per week at work.

Client to practise levator scapulae stretches as advised.

Client to adjust standing work station posture. (Check this next appointment).

Client to be taught neck retraction exercises.

Signature of client: \_\_\_\_\_

**Figure 9.11** Client C's programme for treatment, which incorporates subjective and objective information as well as information related to treatment, assessment and the plan.

# PROGRAMME FOR TREATMENT

Client Name: Client D

Date:        /        /

Main problem: pain in the left upper limb.

Special notes: Client is bariatric, unable to sit upright and needs to be treated in chair in client's home.

## Subjective

Client's doctor confirms left-sided pain is of muscular origin. Client consents to treatment plan.

## Objective

Active and passive elbow, wrist and finger of both hands. Supination mildly reduced and 'sore' in the left wrist; wrist and finger extension in the left wrist full but 'tight' as is left thumb extension.

## Treatment

Client seated at home in specialized chair. Incline of the chair was altered to enable client to sit more upright and facilitate treatment to scalenes but note full upright position is not possible for this client. STR to deactivate trigger points in left scalenes was attempted but unsuccessful as this made client feel nauseous. Active STR trigger points in scalenes was taught to client. Client advised to maintain more upright position where possible and explanations given with regards head posture and referred pain from scalenes. Active stretches for the wrist and finger flexors was taught. 10 minutes effleurage to anterior of left arm and anterior and posterior of left forearm followed by a total of 10 minutes of passive stretches of wrist pronators and wrist and finger flexors. Diary given to client to record active trigger point release to scalenes and symptoms. Reduced intensity of crocheting advised, interspersed with other sedentary activities.

## Assessment

Only minor improvement in symptoms, but client education went well. Client understood how to identify trigger points in scalenes and agreed to work these during the week.

## Plan

Revisit client once per week to monitor effect of active STR to scalenes and active wrist and finger stretches.

Client to practise deactivation of trigger points in scalenes as advised.

Client to practise wrist and finger stretches as advised.

Signature of client: \_\_\_\_\_

**Figure 9.12** Client D's programme for treatment, which incorporates subjective and objective information as well as information related to treatment, assessment and the plan.

# Answers to Quick Questions

## Chapter 1

1. STR targets specific areas of tension within a muscle, whereas general stretching works on the whole muscle.
2. You can lock a muscle using a forearm, fist, elbow or massage tool.
3. When applying a lock, start at the proximal end.
4. STR should be used cautiously in a pre-event setting because stretching temporarily decreases muscle power.
5. STR may be applied post-event but should not be too deep because there may be microtrauma, the sensation of which may be masked by an increased level of natural endorphins.
6. Muscular problems associated with trigger points:
  - Tight and weak muscles
  - Decreased muscular strength
  - Muscle pain
7. Joint problems associated with trigger points
  - Stiff joints
  - Joint pain

## Chapter 2

1. You could use your palm to lock tissues when you need a gentle lock, such as when applying STR as a pre- or post-event treatment.
2. STR is not appropriate for the following kinds of clients:
  - Someone for whom general massage is contraindicated
  - Someone who bruises easily
  - Someone with hypermobility syndrome
3. The three types of STR are passive, active-assisted and active.
4. You do not hold a lock at the end of a stretch; once the tissues have stretched, you remove your lock.
5. To measure the effectiveness of STR you could
  - ask for feedback from the client regarding pain sensation before and after treatment;
  - use a visual analogue scale; and
  - do movement tests, such as the straight leg raise or prone knee bend.

## Chapter 3

1. When a muscle is in a neutral position, the fibres are neither shortened too much nor stretched.
2. The therapist performs the stretch in passive STR.
3. Yes, a lock is maintained whilst a muscle is being stretched.
4. Clients are most likely to feel the stretch as you approach the distal end of the muscle.
5. You need to be careful when applying passive STR with oil massage because working through a towel onto skin that has been oiled provides an extremely firm lock.

## Chapter 4

1. Both the client and the therapist work together to achieve active-assisted STR: The therapist provides the lock whilst the client moves to produce the stretch.
2. Active-assisted STR is useful for treating clients who find it difficult to relax during treatment and for those who like to be engaged with their treatment.
3. Active-assisted STR is a useful form of rehabilitation after joint immobilization because it increases joint range and helps strengthen surrounding muscles.
4. The biggest difference between passive and active-assisted STR is that in passive STR, the relaxed muscles are being stretched; in active-assisted STR, the muscle being stretched is often contracting eccentrically.
5. Some clients get confused if the therapist swaps between passive and active-assisted STR because one requires them to move and one does not.

## Chapter 5

1. You concentrically contract the muscle you want to work on in order to shorten it.
2. You contract the muscle first, then lock the soft tissues.
3. You place your first lock nearest to the origin of the muscle and work towards the distal end.
4. It is best to avoid STR if you bruise easily. Because it is necessary to apply fairly strong locks, these could induce unintentional bruising.
5. When you are first learning the technique, apply STR for only two to three minutes on the same area.



## Chapter 6

1. In passive STR to the rhomboids, the scapula needs to protract in order to bring about the stretch. The arm, therefore, needs to be positioned off the couch at the start of the treatment.
2. To dissipate the pressure of any lock, work through a folded towel or facecloth.
3. Active-assisted STR is a safe method of stretching tissues of the neck because the stretch is performed by the client himself or herself, and it is likely the client will stretch only within his or her pain-free range.
4. Be aware of the clavicle and acromion process and avoid pressing into these when applying active-assisted STR to the upper fibres of the trapezius.
5. Once you have locked the tissues to the erector spinae with the client in extension, the client flexes forward, thus bringing about a stretch.

## Chapter 7

1. When treating hamstrings passively, avoid locking into the popliteal space behind the knee.
2. Ankle plantar flexors are very strong muscles, so it requires more force to dorsiflex the ankle passively and stretch those muscles. Using your thigh provides greater force and is safer for you than using your hand.
3. Never stand on a ball when performing active STR because doing so could be dangerous. Always apply the technique sitting down.
4. Clients with flat feet (that is, those whose ankles are everted) often feel STR to the peroneals more acutely than do other clients.
5. STR to the iliacus is applied with the client in side lying.

## Chapter 8

1. STR to the triceps is felt particularly after activities that involve elbow extension, such as tennis, doing shoulder presses and polishing.
2. Passive STR to the triceps is performed with the client in prone and with his or her forearm off the couch.
3. When performing active STR to wrist extensors, start with your wrist in extension.
4. When performing active-assisted STR to wrist flexors, you lock in near the elbow.
5. Activities such as typing, driving and golf require wrist and finger flexion, and anyone who performs these activities is likely to benefit from STR to the wrist flexors.

## Chapter 9

1. As an alternative to *Where's the pain?* you might ask *How does that feel?*
2. When a client presents with more than one part of the body needing treatment, one way to quickly indicate which area is the main area for treatment is to use a body map and mark the areas as (1), (2), (3) and so on, with (1) as the most important or main area.
3. VAS stands for visual analogue scale.
4. In the programme for treatment, the subjective information tells you what the client has said and how the client feels.
5. In the programme for treatment, the objective information records your observations as a therapist and includes information from the body map, postural assessment, ROM testing, special tests and whatever you discover on palpation.

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# About the Author

**Jane Johnson, MSc**, is a chartered physiotherapist and sport massage therapist specializing in musculoskeletal occupational health. She has been using and teaching soft tissue release (STR) for many years and has a thorough grounding in anatomy, which she uses to explain STR in straightforward terms. She has worked with numerous client groups, including athletes, recreational exercisers, office workers, and older adults; this experience has enabled her to adapt STR for various types of clients and provide practical tips for readers.



Johnson has taught continuing professional development workshops for many organizations in the United Kingdom and in other countries. This experience has brought her into contact with thousands of therapists of all disciplines and informed her own practice. She is passionate about supporting and inspiring newly qualified or less confident therapists so they feel more self-assured in their work. She frequently presents STR at conferences and exhibitions for therapists.

Johnson is a member of the Chartered Society of Physiotherapy and is registered with the Health and Care Professions Council. A member of the Medico Legal Association of Chartered Physiotherapists, she provides expert witness reports on cases involving soft tissue therapies.