

“The first step in diagnosis is to rule out all the serious diseases.”  
—Sir William Osler, Canadian physician

Medical diagnostic criteria are often used to rule out serious diseases. Clinical massage therapy assessment criteria are also used to rule out serious conditions. However, clinical massage therapy assessment criteria are not used to rule out serious conditions. Instead, they are used to rule in specific conditions.

*“One must always think of everything.”*  
—Eugene Ionesco, *The Bald Soprano*



# Approaching Assessment

The purpose of any system of clinical assessment is to describe pathology or dysfunction in a way that suggests effective treatment. The term *clinical* massage therapy is more accurate than *medical* massage therapy because clinical massage therapists view the body from a different perspective from that of the physician. We do not treat conditions according to medical diagnostic criteria, but according to clinical massage therapy assessment criteria.

For example, a physician might diagnose a patient as having tendinitis. This diagnosis implies an inflammation of a tendon, indicating a prescription for anti-inflammatory medication, rest, and application of ice. The same person might be assessed by a clinical massage therapist as having persistently contracted muscle tissue with referred pain from trigger point activity, indicating deep tissue therapy and trigger

point compression. The physician and the clinical massage therapist are addressing the same complaint in the same patient from two different perspectives. Neither is wrong, and each perspective may inform the other. Therefore, it is important for the clinical massage therapist to develop a familiarity with medical diagnostic terms and concepts, and learn to consider them when assessing the client.

The first priority in relaxation (Swedish) massage is the client's comfort. Within appropriate limits, the wishes and personal preferences of the client take precedence, and the objective is to give the client a pleasant and relaxing experience. The first priority in clinical practice, however, is to offer effective treatment, with all procedures subject to the informed consent of the client. The first step in treating clients effectively is to correctly identify the areas that need treatment. For this reason, a systematic and intelligent approach to examination and assessment is essential in clinical massage therapy.

Good assessment requires that we look for the following (after Leon Chaitow, DO):

- Patterns of misuse
- Postural imbalances
- Shortened postural muscles
- Weakened muscles
- Problems in specific muscles and other soft tissues, such as trigger points, tender points, and areas of persistent shortening
- Restrictions in joints
- Dysfunctional patterns in coordination, balance, gait, respiration

The epigraph to this chapter, "One must always think of everything," may seem daunting at first, but it emphasizes the comprehensive nature of effective examination in clinical massage therapy. The body is a system of interdependent elements, and all of those elements must be considered when determining how to solve problems of pain and dysfunction.

The primary methods used to gather information about a client's problem include taking the client's history (both written and oral), observing the client informally, measuring the client's body, formally observing or measuring certain activities, and manually examining the tissues. It is important to remember that examination and assessment do not end in the initial session; it is an ongoing process. This constant reexamination and reassessment is a particular feature of clinical massage therapy, since the hands-on nature of the

work involves sensory feedback that regularly informs the direction of treatment.

## CLIENT HISTORY

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### Designing a Form for Client Information

Practitioners usually need to gather certain client information for business purposes, such as the client's name, address, phone number, and so on. This information is most easily acquired by having clients fill out a form at the initial visit. It can also be helpful to use the same form to gather information about the client's circumstances and history. The form can serve as a starting point for the gathering of more information in the history interview.

In designing a form, think about what information is best obtained in writing and what information requires a more personal, in-depth exploration. Personal data, family information, occupation, and names of primary health care practitioners (or current specialists) are best acquired on a form. These items are fairly easy to decide on.

It is more difficult to decide, however, what to ask about health history on a form. On the one hand, it's best not to leave all health history to the interview, because it's too easy to digress and overlook important issues. On the other hand, an overly lengthy and complicated history questionnaire may seem tedious and irrelevant. The object is to compose a form that both is succinct and accounts for most possibilities.

In addition to the form itself, clients may be given a drawing of the human form on which they can mark the areas where they are feeling pain or have felt pain recently. On the following sample form, this information is sought both in words on the form itself (Fig. 2-1) and on the accompanying figures (Fig. 2-2). This duplication serves as a double-check to make sure all the possibilities are covered.

Remember that clients have their own points of view. They may consider the information to be irrelevant that we see as important, and not think to mention it. It is our job to collect all the data that we may need for our purposes, while clarifying the relevance of this data to the client.

### Conducting the Interview

Although the primary purpose of the history interview is to gather information and establish rapport, it is also a good time to begin educating your

## INFORMATION FORM

Name: \_\_\_\_\_ Height \_\_\_\_\_ Weight \_\_\_\_\_

Address: \_\_\_\_\_

Home phone: \_\_\_\_\_ Work phone: \_\_\_\_\_ Cell phone: \_\_\_\_\_ E-mail: \_\_\_\_\_

Date of birth: \_\_\_\_\_ Sex: M F Living status: Coupled Uncoupled

How did you hear of The Pain and Posture Clinic? \_\_\_\_\_

Name, sexes and ages of children in the home:

History of injuries, illnesses and/or surgeries:

Regular physical activities/sports:

Circle any of the following that you have or have had within the past year:

PAIN: Headaches Back Chest Abdomen Hip Leg  
Shoulder Neck Arm Pelvis Groin  
Buttock

DISORDERS: Digestion Cramps Seizures Asthma Fibromyalgia/CFS  
Scoliosis Depression Anxiety

Other:

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Present medications:

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Family or general physician:

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Specialist:

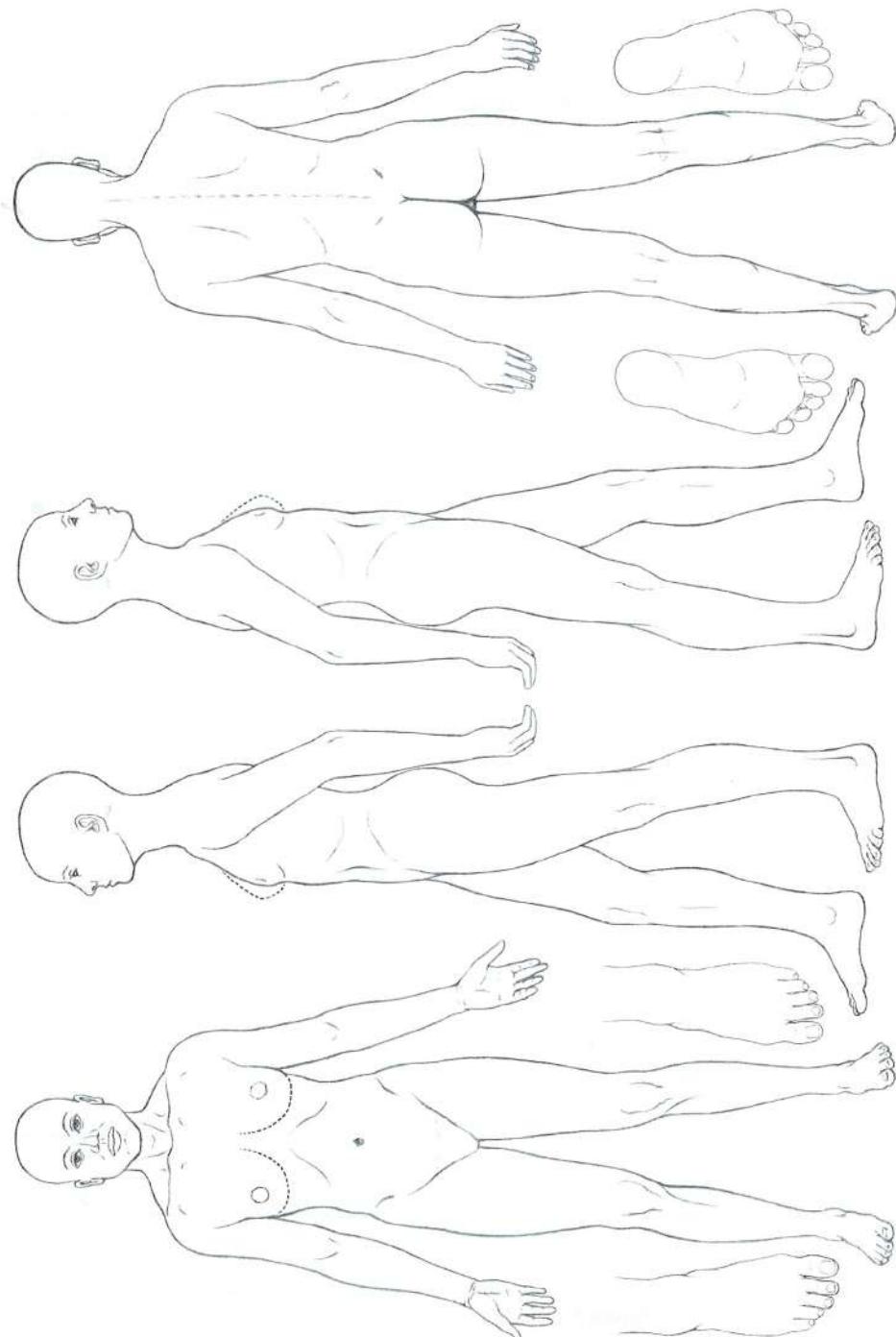
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Figure 2-1 Intake form

client. For example, clients with possible work-related problems may need to consider ergonomics, repetitive motions, or other problems, such as holding the telephone with their shoulders or working at a poorly set up computer station.

Some people undertake exercise programs without proper advice. The initial interview provides an opportunity to introduce these issues.

During the interview you may find yourself "thinking out loud"—that is, sharing your



**Figure 2-2** Body drawings to show areas of pain

thoughts with the client as the interview progresses. Including the clients as you process their information may encourage them to think about their muscular system in a new way. It also builds a team approach to therapy.

Like other aspects of the assessment process, the interview has a dual purpose—both holistic and reductionistic. On the one hand, you are seeking to build a broad picture of the client and the circumstances of his or her life to determine what may be causing problems and what kinds of solutions may be most effective. On the other hand, you must remain alert to clues to the cause of the specific complaint. In some cases, the injury may have occurred at a specific time when performing a precise movement (e.g., “I lunged after the ball and felt a sharp pain in my groin.”) Most of the time, however, the onset and origin of the presenting problem will be much more vague, and will require some detective work on your part. The key to the solution will often lie hidden in the information gathered in the interview.

Ideally, taking a history should be a warm, human encounter, rather than a mechanical process in which the therapist sits with pen poised, reading questions and taking down answers. You should develop the ability to hold a relaxed, conversational interview while also keeping a mental checklist of important areas to cover. In the beginning of your practice, you may want to have a written checklist to consult. This checklist will vary somewhat, of course, from one client and one problem to the next, but the overall territory will remain the same. Above all, do not assume that the client will volunteer important information. Remember that what is important to you may seem trivial to the client. Be thorough.

Your checklist should include the following items:

#### Presenting Problem:

- What brought you here?
- Where do you hurt?
- What doesn't work right?
- How long has it been this way? When did it start?
- If the pain is the result of a specific injury, exactly how did the injury occur? What physical position were you in when the injury occurred? What was the course of the rest of the day, and of the next couple of days? Describe the pain, swelling, limitation of motion, and treatment

(including self-treatment) that occurred over the course of the rest of the day, as well as the days following the injury.

- Have you ever had this problem before? When, and under what circumstances? When was the first time?
- When is the pain worse? When is it better?
- What makes the pain worse? What makes it better? In what physical position does it feel worst and best?
- Whom else have you consulted? What did they say and do?

#### Health History:

- How is your general health?
- Have you had any recent illnesses, injuries, surgeries?
- Have you ever had any major illnesses, injuries, surgeries?
- Do you have a history of heart problems or neurological problems?
- Is there any history in your family of brain or neurological disorders, such as stroke?
- Are you under a doctor's care for any condition? If yes, what condition? Are you taking any medications?
- Who are your regular caregivers? Do you see a chiropractor, osteopath, naturopath, or any other sort of physician? Any other kind of health professional?

#### Athletic History:

- Do you play any sports? Work out? Have you ever?
- As a child or teenager, did you take dance? Were you a cheerleader? What were your activities?

#### Personal/Family/Social History:

- Are you married? Single? Any children?
- Describe any recent stressors in your home environment.
- What do you do for recreation?
- What are your primary sources of stress?

#### Occupational History:

- What is your occupation? What does it involve—i.e., what do you do all day? How much do you sit, stand, move about? Is there any heavy lifting? Repetitive motion? Does any work activity cause pain?
- How often do you take breaks, and for how long? What do you do during breaks?

- What types of work have you done in the past?
- Have you ever had any work-related injuries?

Feel free to add to this checklist; your own knowledge and imagination will find questions to ask and leads to pursue that lie beyond these boundaries. You should certainly follow up on any questions in your mind.

## WHOLE-BODY ASSESSMENT

Most of our clientele is accustomed to thinking in terms of traditional medical approaches. If they present with a specific injury, then they expect the examination and treatment to focus on the injury and its immediately surrounding area. In many cases this expectation may be appropriate: it is certainly possible to suffer an isolated injury at a precise site that can be specifically treated. In most cases, however, a broader approach is needed. Most myofascial pain or dysfunction results from alignment problems of long duration, and most local injuries, if left untreated, will eventually affect other parts of the body. For this reason, it is usually appropriate and desirable to evaluate the alignment of the body as a whole before initiating treatment.

Some clients will refuse such an evaluation and insist on strictly local treatment. The need for informed consent requires that therapists share their assessment of the problem with the client and propose a course of examination and treatment, including possible alternatives. One of the alternatives is, of course, palliative treatment. As long as therapists are honest with clients about what they believe is wrong and what they believe to be the ideal course of action, it is appropriate to work with such clients to alleviate their symptoms on a short-term basis. For such clients, the therapist may perform a more abbreviated interview, confined largely to the circumstances that seem relevant to the chief complaint, then skip directly to examination of the area of the presenting problem.

For those clients, however, who agree to pursue a whole-body approach, an examination of body alignment can be crucial to forming the clinical picture. The extent of such an examination can vary according to the skills and judgment of the therapist and the specific situation. A description of the basic requirements for an assessment is presented in the following sections.

### Informal Observation

In this first step in the whole-body assessment, the therapist observes the client carefully, beginning with the first encounter in the waiting area. How does the client sit? Stand? Walk? Sit down again in the treatment room? The clinical massage therapist should cultivate this observational habit, which can easily be practiced in any public place.

### Formal Alignment Examination

A thorough, formal examination of body alignment, or posture, should be carried out with the client wearing as little clothing as possible, since it involves not only global observation but fairly precise scrutiny of surface landmarks and their movements. A complete examination is most commonly carried out with clients wearing underwear, but individual therapists can establish their own protocols.

#### Photographs

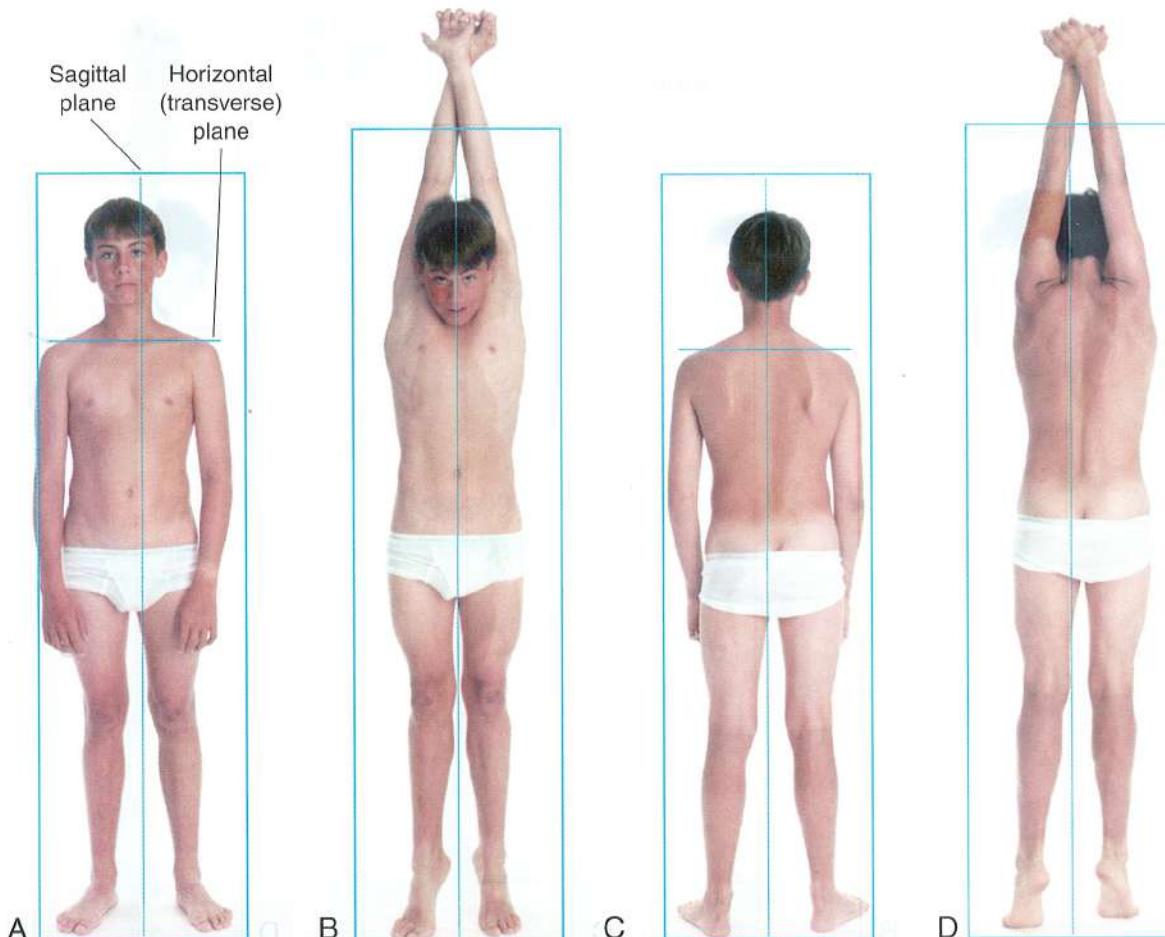
Many therapists take photographs of clients as part of a complete alignment examination. Advantages of this practice include:

- The client is able to see what the therapist sees.
- The therapist has access to the photographs in the absence of the client for treatment planning purposes.
- If the therapist has a computer, then photographs can be scanned in (or taken initially with a digital camera), and lines or grids can be drawn to help analyze deviations. Copies can be printed for the client.
- Photographs taken before and after treatment can provide documentation of changes.

*Note: Photographs should be taken either with a digital camera or a Polaroid camera, since sending film out to be processed compromises client privacy and confidentiality.*

Whether being photographed or observed without photography, clients should be asked to stand in a way that feels reasonably straight, but relaxed and normal, with the hands at the sides. Clients whose hair falls below the shoulders should be asked to push it back for a front view and forward for a back view.

The client should first be photographed full front, full back, left side, and right side. Then the client may be asked to cross the wrists and stretch the arms overhead as high as possible. This stance



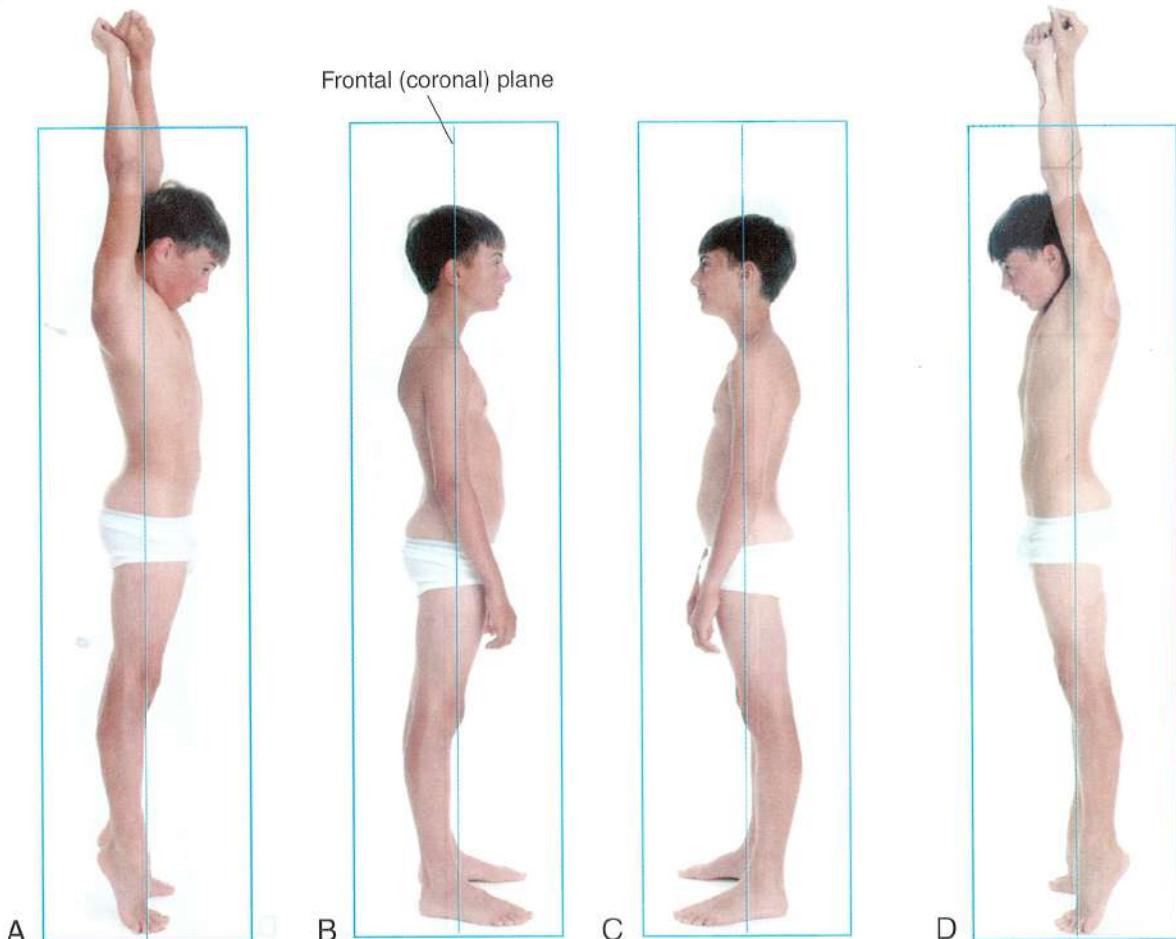
**Figure 2-3** Posture evaluation: (A) Front view normal with sagittal midline and horizontal (transverse) plane. (B) Front view stretched with sagittal midline. (C) Back view normal with sagittal midline and horizontal (transverse) plane. (D) Back view stretched with sagittal midline

shows the corrections or exaggerations that take place in a stretched position. Crossing the wrists guides the arms directly overhead, and their position in relation to the midline shows which side is more flexible and which is more constricted. Once the photographs are taken, the normal and stretched views can be placed side-by-side for comparison (Figs. 2-3 and 2-4). If the client has **scoliosis**, it is helpful also to take a close-up of the back, from head to coccyx, and to photograph the client bending over with arms hanging straight down to document rotation of the ribcage (Fig. 2-5). It is useful to routinely examine children and early teens in this way for scoliosis. The presence of a **rib hump** (Fig. 2-6) is evidence of the vertebral rotation of **idiopathic scoliosis**, and the parent should be encouraged to consult the child's physician.

Some clients may prefer not to be photographed, or some therapists may choose not to use this technique. In these cases, the therapist can still observe the client in all of the above positions.

Some additional positions and movements that are helpful for observation, but need not be photographed, include bending to each side from the waist, and bending backward with the arms stretched overhead.

The goal of asking the client to assume these various positions and stances is to observe the dynamic structure of the body. Even when the client is in a normal resting position, we are actually observing muscles at work. Just as a bird's leg muscles are always working, even in sleep, to keep it on the perch, our muscles must always respond to gravity. The ideal posture of a person standing at rest demands minimal muscle activity to maintain



**Figure 2-4** Posture evaluation: side views with frontal (coronal) midline—normal (A and C) and stretched (B and D)



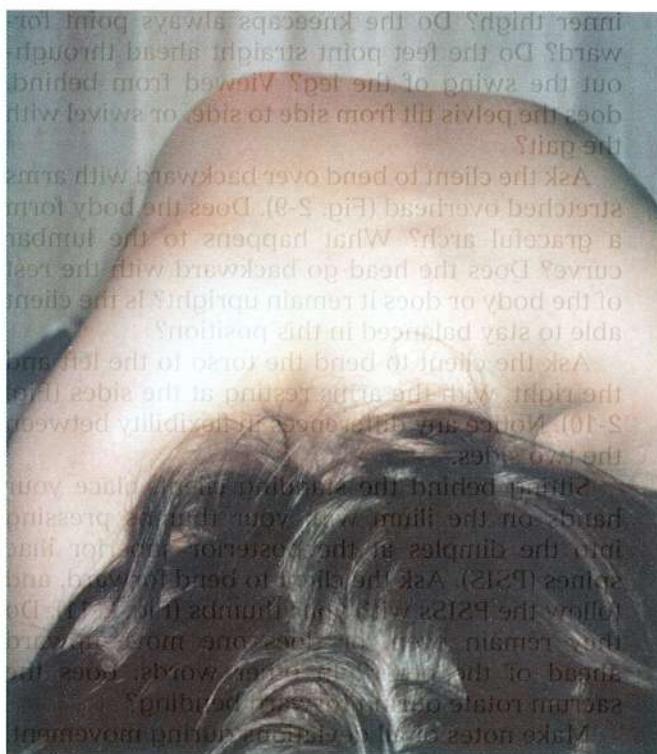
**Figure 2-5** Scoliosis screening: side and front views

an upright posture. The ideal functioning of the body of a person in motion uses minimal muscle activity to accomplish any task, and will use larger and stronger rather than smaller and weaker muscles whenever possible.

### The Body at Rest

When we observe a client standing at rest, we view the body in relation to certain planes. Although we work with these planes as lines, it is important to remember that they are planes, or we will be deceived.

Looking at the client from the front, the sagittal plane (Fig. 2-3A and B) is a midline that begins at a point midway between the feet (since that is the resting point for the weight) and passes through the pubic symphysis, the navel, the xiphoid process, the manubrium, the center of the chin,



**Figure 2-6** Rib hump in idiopathic scoliosis

and the nose. Note any deviation from that line. Also observe the kneecaps and feet. Do they point forward, or do either of them deviate inwardly or outwardly?

Viewing the client from behind, the sagittal plane (Fig. 2-3C and D) is a line that again begins midway between the feet and passes through the gluteal cleft and the coccyx, straight up through the spinal column, and through the middle of the head.

Comparing these two views can teach you how to think in planes rather than lines—in other words, how to see a client in a three-dimensional, rather than two-dimensional, view. Often the upper body of the client appears to lean to one side when viewed from the front, but lean to the opposite side when viewed from behind. This illusion is created by seeing lines rather than planes. In reality, the client's upper body is slightly rotated, placing the landmarks on the torso to one side of the midline in front and to the other side in back.

Viewing the client from each side, the frontal plane (Fig. 2-4) is a line passing just in front of the ankle through the knee, the greater trochanter, the glenohumeral joint of the shoulder, and the ear. Again, note any deviation from this line.

Therapists who do not take photographs or use a computer may find a plumb line helpful in making these observations. A long string weighted at one end (a two- or three-ounce fishing sinker works well) can be suspended in a place where the client can stand behind it to be observed. The plumb line gives the therapist a visual reference point for observing alignment deviations (Fig. 2-7).

In addition to the sagittal and frontal planes, the horizontal plane (Fig. 2-3A and C) should be considered in relation to the shoulders and hips:

- Are the shoulders level?
- Are the shoulders rotated medially and pulled forward in a slump?
- Is the pelvis tilted to one side or the other?
- Is the pelvis rotated forward?

You can make these same observations with the client's arms stretched overhead, with the wrists crossed in order to see if the shoulders yield evenly on both sides. Notice various body landmarks in a stretch: do the deviations you may have already observed correct themselves, worsen, or reverse themselves? The breasts or nipples move with the tissue overlying the ribcage, and the po-



**Figure 2-7** Using a plumb line

sition of the breasts is normally visible even if covered: how do they change in relation to each other in a stretch?

You may want to make notes of all your observations, particularly if you do not take photographs. And remember that no individual view is sufficient to yield significant information. Each view is merely one piece of a three-dimensional puzzle. Merely viewing the body at rest is insufficient to give a full assessment of the client's body. There are still more pieces of the puzzle to consider.

### The Body in Motion

The first step in assessing the body in motion is to observe the client's gait (Fig. 2-8) from the back, front, and side. Do the legs swing straight forward, or do they deviate from that course, even slightly, along the way? Notice individual aspects of the legs: is there a medial pulling motion on the

inner thigh? Do the kneecaps always point forward? Do the feet point straight ahead throughout the swing of the leg? Viewed from behind, does the pelvis tilt from side to side, or swivel with the gait?

Ask the client to bend over backward with arms stretched overhead (Fig. 2-9). Does the body form a graceful arch? What happens to the lumbar curve? Does the head go backward with the rest of the body or does it remain upright? Is the client able to stay balanced in this position?

Ask the client to bend the torso to the left and the right, with the arms resting at the sides (Fig. 2-10). Notice any differences in flexibility between the two sides.

Sitting behind the standing client, place your hands on the ilium with your thumbs pressing into the dimples at the posterior superior iliac spines (PSIS). Ask the client to bend forward, and follow the PSISs with your thumbs (Fig. 2-11). Do they remain even, or does one move upward ahead of the other? In other words, does the sacrum rotate during forward bending?

Make notes of all deviations during movement, just as you did for the body at rest. These findings contribute to the solution of the puzzle.

### Measurements

For many therapists, the observations described above will suffice for an analysis of the overall alignment of the body. Others, however, may



**Figure 2-8** Gait assessment

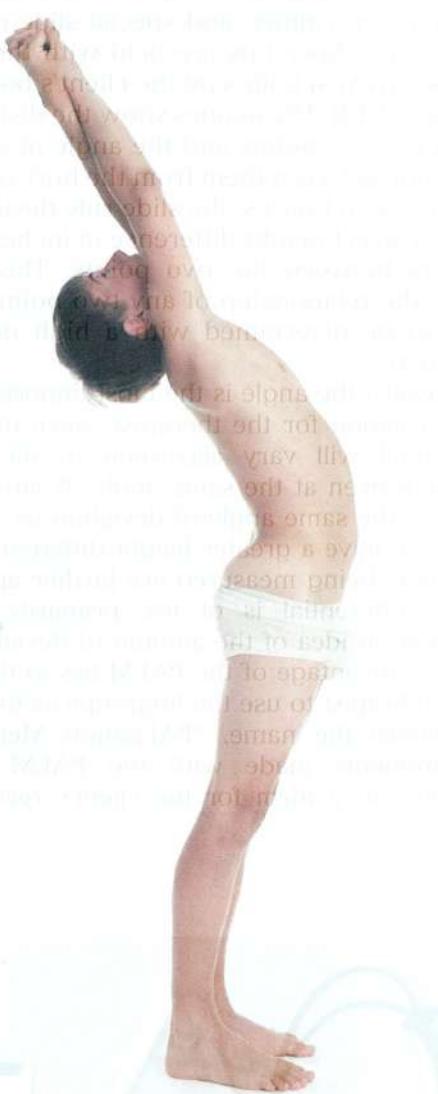


Figure 2-9 Assessment of client in backward bend

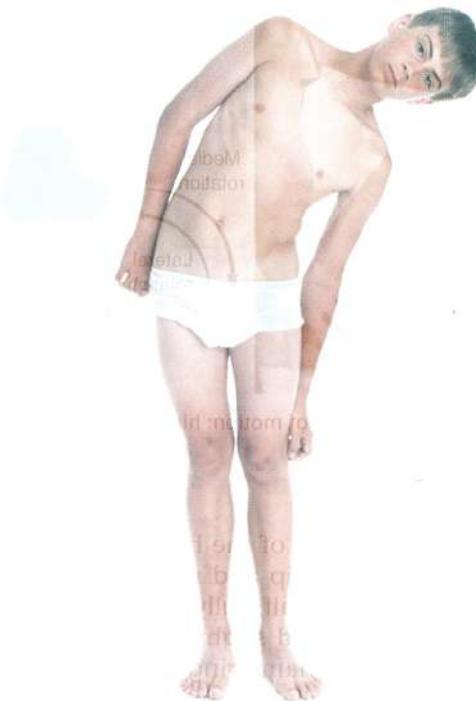


Figure 2-10 Assessment of client in side bend

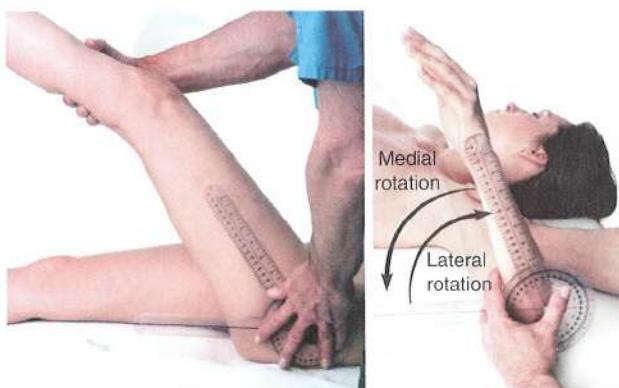


Figure 2-11 Examination of PSIS movement

want to take specific measurements, either to document change for the client's records or medical reports, or for formal or informal clinical research. Such measurements are easy to take, depending on the measurement tools used.

### Range of Motion

A complete examination includes measuring the range of motion (ROM) of the hips and shoulders. These measurements are normally taken with a goniometer, a widely available and fairly inexpensive instrument for measuring the angles of joints. These measurements should be made with the client lying supine (Fig. 2-12).



**Figure 2-12** Measuring range of motion: hip flexion, shoulder rotation

To determine the ROM of the hip, stand at the side of the client at the hip and raise the client's leg by holding it by the calf, fully extended, until the knee attempts to bend slightly to accommodate the stretch of the hamstrings. Measure the angle of the joint in relation to the horizontal plane.

To determine the ROM of the shoulder, the shoulder should be abducted 90° and the elbow flexed 90°, so that the fingers point to the ceiling. Stand beside the client at the level of the shoulders. Place your hand nearest the head of the client on the shoulder with your fingers lying over the superior border of the scapula. Rotate the forearm toward the table (medial rotation of the shoulder) until it lies flat, or until movement is felt in the scapula. If the forearm does not lie flat without movement of the scapula, the angle should be measured and noted. Then rotate the arm upward (lateral rotation of the shoulder) until it lies flat or movement is felt in the scapula, and again measure and note the angle. Feeling for movement in the scapula is necessary to determine actual glenohumeral rotation, rather than rotation that may be accommodated by movement of the scapula.

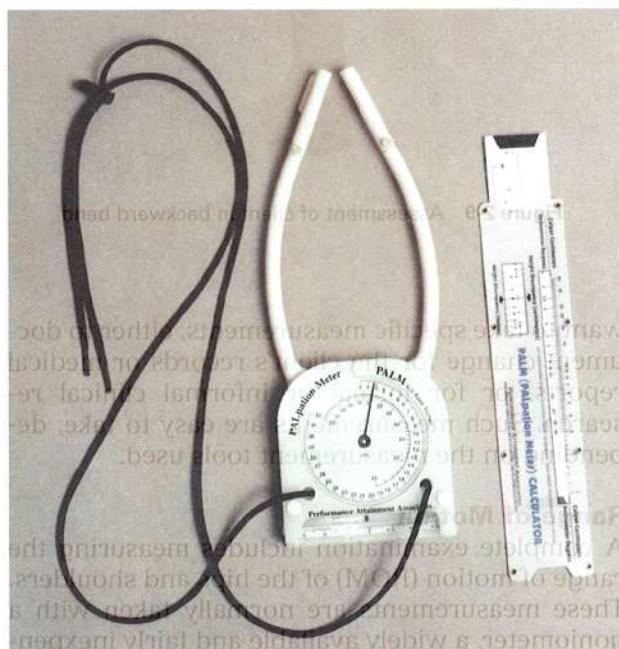
### Body Alignment

The most useful device for measuring body alignment is the inclinometer, which is the equivalent of the carpenter's spirit level adapted for body-work purposes. The inclinometer indicates the relationship of a given line, such as the line of the hips or shoulders, to the horizontal plane.

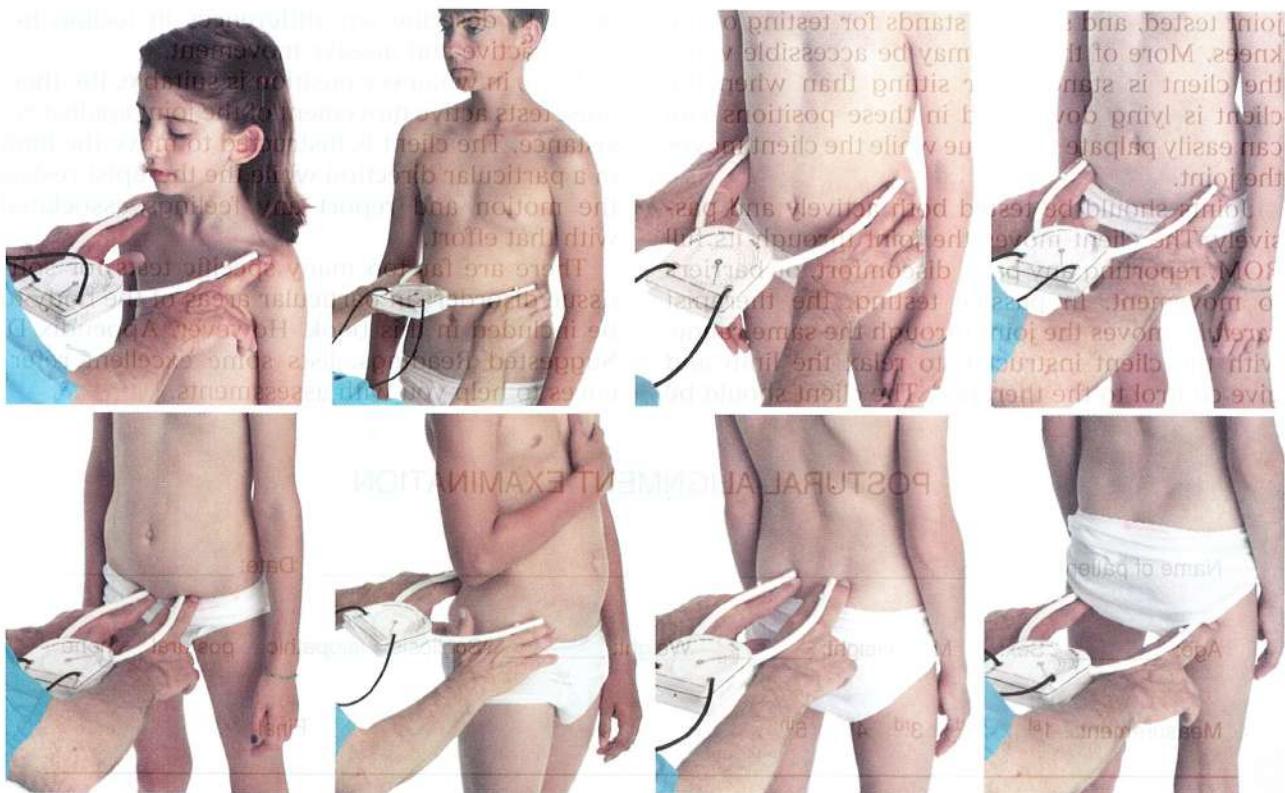
One of the most useful devices on the market for this purpose is the PALM (PALpation Meter), made by Performance Attainment Associates

(Saint Paul, MN). The PALM is a combination inclinometer, caliper, and special slide rule (Fig. 2-13). The caliper tips are held with the fingers against any two points on the client's body (Figs. 2-14 and 2-15). The gauges show the distance between the two points and the angle of deviation of the line between them from the horizontal. Using these two figures, the slide rule device calculates the exact height difference in inches or centimeters between the two points. This system allows the relationship of any two points on the body to be determined with a high degree of specificity.

In reality, the angle is the most important piece of information for the therapist, since the height differential will vary according to the size of the client even at the same angle. A larger client who has the same angle of deviation as a smaller client will have a greater height differential, since the points being measured are farther apart. The height differential is of use primarily to give the client an idea of the amount of deviation. The primary advantage of the PALM lies in the ability of the therapist to use the fingertips as the caliper tips, hence the name, "PALpation Meter." The measurements made with the PALM can be recorded on a form for the client's record (Fig. 2-16).



**Figure 2-13** The PALM (PALpation Meter) from Performance Attainment Associates (Saint Paul, MN)

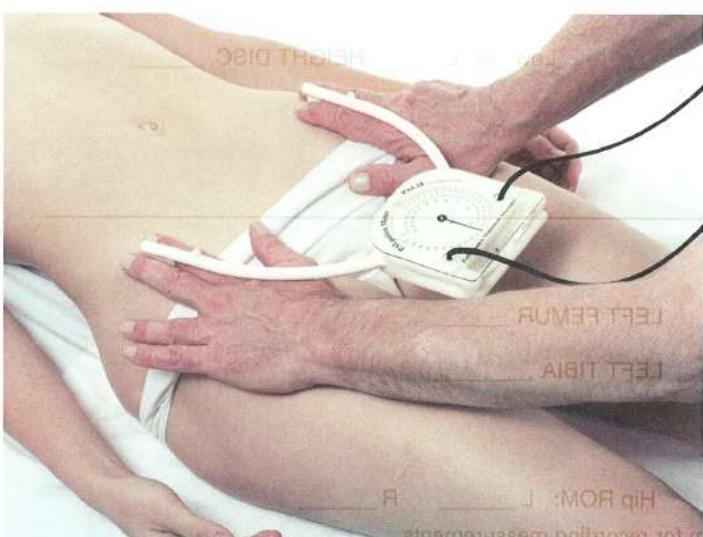


**Figure 2-14** Measuring anatomical landmarks with PALM: (from top left) AC joints, rib cage, iliac crests, ASIS, pubis, pelvic rotation , PSIS, gluteal folds

### Testing Areas Specific to the Complaint

By carefully noting and analyzing the type and location of discomfort produced by the following combination of tests, the therapist can gain val-

able information about the likely nature of the dysfunction. Therefore, the next step in assessment is to test the area or areas specific to the complaint. First, determine the position that best suits this purpose. Usually, the client stands to have the hip joint tested, sits to have the shoulder



**Figure 2-15** Measuring anterior iliac crest height differential supine with PALM

joint tested, and sits and stands for testing of the knees. More of the area may be accessible when the client is standing or sitting than when the client is lying down, and in these positions you can easily palpate the tissue while the client moves the joint.

Joints should be tested both actively and passively. The client moves the joint through its full ROM, reporting any pain, discomfort, or barriers to movement. In passive testing, the therapist carefully moves the joint through the same range, with the client instructed to relax the limb and give control to the therapist. The client should be

asked to describe any differences in feeling between active and passive movement.

Then, in whatever position is suitable, the therapist tests active movement of the joint against resistance. The client is instructed to move the limb in a particular direction while the therapist resists the motion and report any feelings associated with that effort.

There are far too many specific tests for soft-tissue disorders in particular areas of the body to be included in this book. However, Appendix D, Suggested Readings, lists some excellent references to help you with assessments.

### POSTURAL ALIGNMENT EXAMINATION

Name of patient: \_\_\_\_\_ Date: \_\_\_\_\_

Age: \_\_\_\_\_ Sex: F M Height: \_\_\_\_\_ Weight: \_\_\_\_\_ Scoliosis: idiopathic postural none

Measurement:	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	Final
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AC joints	DISTANCE _____	ANGLE _____	Low R L	HEIGHT DISC. _____
Iliac crests	DISTANCE _____	ANGLE _____	Low R L	HEIGHT DISC. _____
ASIS	DISTANCE _____	ANGLE _____	Low R L	HEIGHT DISC. _____
PUBIS	DISTANCE _____	ANGLE _____	Low R L	HEIGHT DISC. _____

Inferior angle of scapulae	DISTANCE _____	ANGLE _____	Low R L	HEIGHT DISC. _____
PSIS	DISTANCE _____	ANGLE _____	Low R L	HEIGHT DISC. _____

ASIS/PSIS angle	RIGHT _____	LEFT _____
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#### AS APPLICABLE

Leg lengths	RIGHT FEMUR _____	LEFT FEMUR _____
	RIGHT TIBIA _____	LEFT TIBIA _____

Glenohumeral ROM: L \_\_\_\_\_ R \_\_\_\_\_ Hip ROM: L \_\_\_\_\_ R \_\_\_\_\_

**Figure 2-16** Form for recording measurements

## The Breathing Examination

An essential element in assessment is examining the client's breathing technique. Many, if not most, older children and adults have developed the habit of "paradoxical breathing," i.e., expanding and raising the upper rib cage while keeping the abdomen and lower rib cage constricted.

Paradoxical breathing is detrimental to muscle health and posture for a number of reasons. Inappropriate use of neck and shoulder muscles in breathing causes chronic tightness in those areas, which can result in forward positioning of the head and the development of trigger points or nerve entrapment. Tight chest muscles pull the shoulders forward and rotate the arms internally. Inflexibility in the muscles of the chest and abdomen can pull the anterior rib cage forward and down, exaggerating a thoracic kyphosis. Finally, good diaphragmatic breathing techniques use the full capacity of the lungs, optimize the exchange of blood gases, and enhance relaxation. Therefore, if your examination indicates that the client breathes paradoxically, it will be important to incorporate training in diaphragmatic breathing technique. The complete procedure for assessing and teaching breathing will be found in chapter four.

## The Manual (Palpatory) Examination

This part of the examination begins with the client sitting or standing, according to the circumstances. Throughout the examination, the client will sit, stand, or lie successively supine and prone on the table in whichever order the therapist finds most useful and efficient. It is often best to perform the palpatory examination of the area of complaint before or during the specific testing described above. If the client chooses to be examined and treated only for relief of the specific complaint, then you should limit your palpitory examination to those areas likely to be contributing to it. In any case, finding and treating the immediate source of pain or dysfunction is one of your primary objectives.

You may find it useful to refer to Appendix C (Index of Pain Referral Zones by Location) in choosing the range of muscles to examine to determine the source of the client's pain. Thereafter, each muscle description in Part II presents a list of "Other Muscles to Examine." Do not stop with a single positive finding: a trigger point that reproduces the client's pain may not be the sole source of the problem. Thorough exploration of the mus-

cles in a particular body region will increase the accuracy, efficiency, and effectiveness of your treatment.

Broadly speaking, the palpitory examination has two parts: (1) general assessment of the tissues in each area, and (2) precise palpation for taut bands in the muscles, and tender or trigger points. Both parts are continuous and contiguous with therapy: as you treat, you examine. In the initial evaluation, the information you gain through palpation is an essential adjunct to the information you obtain through observations and measurements.

The palpitory examination begins again with observation: look at the area you are about to examine. Notice its color, especially in comparison with other areas of the body. Is it pale or pasty? Does it have the angry redness of inflammation? Or does it appear gently flushed (as healthy tissue should be), without radical contrast to other areas?

Begin with a broad, gentle, general touch. Lay your hand on the area you are examining and just let it rest there for a moment. Feel the temperature of the area. Is it cold? Cool? Hot? Warm? Does it feel damp or sticky, or is it unpleasantly dry? Healthy skin should have a subtly moist feeling to it, without dryness, dampness, or stickiness. Allow your hand to press a bit deeper, and move the skin around over the underlying layers. Does it seem stuck, or does it seem loose? Or does it feel firm but mobile, as if connected to the layers underneath but not adhered to them? Draw your finger across the skin, noting whether there is "drag" in the tissue that impedes your motion. Such palpable phenomena at the levels of the epidermis, dermis, and superficial fascia often reflect underlying tissue dysfunction.

Note any marked differences in an area. Differences in temperature and moisture can be signs of sympathetic nervous system activity in response to problems in the underlying tissue. Fascial tightness and tissue congestion are usually signs of a myofascial problem. Remember also the classic signs of local inflammation: heat, redness, pain, and swelling. This combination is a contraindication for local massage work.

At this point you can move deeper still, and begin to use your fingers and thumbs in whatever sort of palpation suits the shape of the tissue. You are feeling the muscle tissue, and you want to learn whether it is flabby or firm or hard or contracted. Move your hands, palpating different parts of the muscle to feel for taut bands and knots in the tissue. Ask the client to let you know

what areas are tender, ticklish, numb, or feel in any way “strange.” Also be aware of the client’s nonverbal responses: clients will not always verbally communicate to you about everything they feel. Be alert to wincing or face-making or intakes of breath that indicate that the client is feeling something significant.

You can certainly palpate at this point for trigger points or other sensitive points, but you should also be careful not to press too deeply into trigger points. Arousing them before you are prepared to treat them will only cause needless pain for the client.

Obviously it is impossible to do a focal examination for tender points or trigger points over the entire body in a reasonable amount of time. However, a general assessment of the principal muscles of posture and movement is possible. As you gain experience, you will know the most likely spots to explore more carefully for sensitivity. Also, your awareness of the client’s complaint and history will guide your choices about areas to examine more closely.

One rule to remember when examining muscular tissue is to *always examine the antagonists*. If there is a problem in a particular muscle, there is a problem in its antagonists. This rule is one more reason why a thorough knowledge of anatomy and kinesiology is needed in clinical massage therapy.

The information that you gain from the palpatory examination should be recorded for easy reference. One way to keep this information organized is to design a form like the one suggested earlier for clients, with four body views, on which you can make notations according to your own style.

## SUMMATION AND DETECTIVE WORK

You now have the following sets of data to work with:

- The chief complaint
- The history
- Informal and formal observations of body alignment and movement
- ROM assessment
- Palpitory examination

Table 2-1 shows some questions to ask in your mind, with sources of information about each.

As you think in problem-solving terms, the first question you should consider is,

*What is the likelihood that the cause and treatment of this problem lie outside my scope of practice?*

This issue is extremely important, both for the client’s health and your own legal protection. Al-

**TABLE 2-1**

QUESTION	SOURCE OF INFORMATION
What muscles may refer pain to the area of complaint?	Charts, your knowledge of referral zones
What muscles seem shortened or tight? Where are tender points or trigger points?	ROM assessment, palpitory examination, body alignment
What are the antagonists of the muscles in the area of complaint?	Presenting complaint, your knowledge of anatomy and kinesiology
If there was a specific injury, then what muscles were stretched and what muscles were shortened?	Presenting complaint, your knowledge of anatomy and kinesiology
What muscles are regularly challenged by this client?	Occupational and athletic history, alignment examination
What was the client doing around the time the problem started?	Personal, occupational, and athletic history
What activities in the client’s past could have injured these muscles?	Personal, occupational, and athletic history
Could this problem be related to a compensation for some other injury?	Health history, observation of movement
To what degree might stress in the client’s life be activating a dormant tissue problem?	Personal, athletic, and occupational history

ways keep in mind that your assessment may be wrong.

Although clinical massage therapists should become highly adept at examination and assessment of the musculoskeletal system and work towards mastery of the process, this system is only one aspect of the whole person. Thus, our scope of examination and treatment is necessarily limited. It is always safest to assume that, since we are working within a limited range, our knowledge and awareness may be incomplete. We should never discourage clients from seeking the opinions of other professionals, including their physician. In fact, we should encourage it.

In some cases, the therapist should defer treatment of a client until a physician has evaluated and cleared the client for massage therapy. Such clients include those with internal pain (chest, abdomen, or pelvis), or any client with suspected musculoskeletal injuries such as a dislocated or broken bone or torn muscles, tendons, or ligaments.

Otherwise, the therapist may continue with treatment. When the problem is likely to be myofascial in origin, and direct manipulation of the tissue clearly represents no danger to the client, it is normally safe to proceed. However, the therapist should continue to consider the possibility that other factors may be involved, and be prepared to refer the client at the slightest suspicion that another form of treatment might be called for.

## SYNTHESIZING YOUR FINDINGS

Correctly assessing a client's problem and developing a treatment plan depends on recognizing that problems in the body do not occur in isolation. *A problem anywhere in the musculoskeletal system compromises to some degree the integrity of the entire system.* Therefore, you must think simultaneously at both the local and whole-body levels. The longer you are in practice, the more seamless this process will become, because all the pieces of the puzzle will fit themselves into place as you gather them.

When thinking through muscular problems, keep these two frameworks in mind:

- Think of muscles in terms of groups that work together (myotatic units) and consider agonist/antagonist relationships.

- Think of joints as well as muscles, since the primary function of muscles is to move or stabilize joints.

At this point, all of the information you have gathered needs to be synthesized in a view of the whole person. Here is a useful order for considering and synthesizing this information:

- In your observation of the whole body, what are the differences in the front and back sides? How do these differences mesh? Add the two side views to let your mind build a hologram of the body. Do you see deviations in a single plane, or is there a spiral effect to the deviations that would indicate twisting?
- Consider any measurements you have taken. Do the measurements support the three-dimensional picture you have built? For example, if the measurements show that the right anterior superior iliac spine (ASIS) is lower than the left in front, but the right PSIS is higher than the left in back, does your picture indicate a spiral effect or twisting of the torso?
- How does the pain and/or dysfunction reported by the client fit into the picture? Does the pain or restriction occur in an area where muscles appear to be chronically shortened or lengthened? Could the pain be causing compensatory posture or movement?
- Consider your palpatory examination. Where are tender spots, and how do these areas compare with areas of pain reported by the client? Compared with your holographic picture of the client, are they in areas where muscles are chronically shortened or lengthened?
- Did you encounter trigger points that reproduce the client's pain?
- Now add the history. What does the client do now, either at work or in recreation, that might affect the problem areas? What about past activities, injuries, surgeries?
- Finally, what recent stressors might be causing an already existing problem to surface?

## COMMUNICATING WITH CLIENTS

When the examination is completed, it's time to share your thinking with the client. Since most people are naturally curious, it's a good practice to share your observations with the client throughout the examination. It's annoying

to have someone who is examining you say nothing but, "Hmmm." But now you can let the client know how the information is coming together for you, what your working assessment is, and what sort of work you propose to do. For example:

"I think that when you sprained your ankle last year, you favored your right leg for a while. That got your left hip muscles working overtime, and shortened the muscles supporting your pelvis on the right. Since you're young and in good shape, you didn't feel the effects at first, but your new job pressures have made you tense and lowered your pain threshold, so now those muscles are finally making themselves felt. I'd like to work on your left hip to give you some immediate relief from the pain in your leg, but I think we also need to work on your low back and abdominal muscles, since they're pulling your pelvis out of balance."

Clients may sometimes question why the examination and proposed treatment wanders so far afield from the specific area of their complaint. For this reason, it is important to educate them about the nature of myofascial pain. This education need not be highly technical. Metaphors are often useful in explaining what seems to be going on. For example, one might describe the relationship of agonists and antagonists as being like two people in bed fighting over the covers, or characterize the gradual spreading of muscle cell involvement in an injured area as a revolution or a labor dispute.

This educational process is another good reason for documentation such as photographs and recorded measurements. These concrete bits of information support your assessment.

The most important aspect of communication with the client is to establish a relationship in which the client becomes an active and informed participant in the overall process. You are the authority, that's why the client consulted you; however, it is your job to help clients become more knowledgeable and take greater responsibility for their own health and well-being.

## APPLYING YOUR SYNTHESIS TO TREATMENT

Your first responsibility is to give the client relief from the presenting complaint as quickly as is feasible. Therefore, in most cases, begin treatment

eliminating trigger points, tender points, and tightness in the area where the pain is and those areas that appear to be causing it or contributing to it. In Chapters 3 through 10, the pain referral zone is listed for each muscle, as well as a list of other muscles to examine that may refer pain to similar areas.

In the case of multiple trigger points, there will be a **primary trigger point** accompanied by **satellite trigger points**. The only way to distinguish them is to treat them and observe the results. Resolving a primary trigger point will eliminate referred pain, while resolving satellite trigger points will not.

Once the presenting problem has been treated and alleviated, it is appropriate to address the issues of postural alignment and other mitigating factors that are responsible for the client's pain. A detailed discussion of postural analysis is beyond the scope of this book; however, most of the postural misalignments that result in myofascial pain are a matter of common sense, good judgment, and a thorough knowledge of musculoskeletal anatomy. Clinical experience and additional study and training will round out your skills in this area.

The general order of treatment should proceed:

- From the areas specific to the complaint to the overall body alignment
- From superficial to deep
- From general to specific
- From bottom to top

## COMMUNICATING WITH OTHER HEALTH PROFESSIONALS

Communicating effectively with other health professionals is important for three reasons:

- It is potentially helpful in the care of specific clients.
- It affects your image as a health professional, and helps create the degree of respect you will be accorded in the present and future.
- It affects the image of the bodywork profession as a whole, and will ultimately determine the degree of acceptance we all achieve.

The first requirement in effective professional communication is to master your terminology. On the one hand, do not go out of your way to use the most technical language you can, because it will simply be seen as an attempt to impress. On the other hand, you should know anatomical terms

and be able to spell and pronounce them properly, or it will be assumed that you don't know what you're talking about. Keep a medical dictionary handy and use it regularly. If you use a computer, get a medical spell-check program.

Some good policies to follow regularly:

- Ask clients to tell their other health care providers to feel free to contact you.
- With the client's consent, write letters to other health care providers to inform them about your assessment and treatment of the client and the results.
- If another health care provider refers a client to you, then write a letter of thanks that includes your report, with your client's consent.

You will find your own style, but two sample reports are included here as examples.

#### SAMPLE 1

Name: Amanda P. Fundlethwaite  
Chief Complaint: Pain in neck and left shoulder, radiating into left arm to hand.  
Treatment Dates: Jan. 23; Feb. 1, 7, 10, 17, 28; March 6, 17

I saw the above-named patient on the indicated dates for complaints of pain resulting from an automobile accident in which her car collided with another car while her left arm was resting on the car's windowsill.

I treated her for severe trigger point activity in the scalene muscles, particularly the middle scalene and scalenus minimus, and related spasms and trigger point activity in pectoralis minor, rhomboids, levator scapulae, and rotator cuff muscles. Techniques employed consisted primarily of trigger point compression and deep tissue therapy.

Some temporary relief was achieved, but her problem is complicated by two factors: (1) treatment did not begin until 8 months after her accident, and (2) the constant weight of the ribcage on the scalenes continues to irritate the muscles.

Ms. Fundlethwaite informs me that she has been told by her physicians that she has nerve damage. I can't comment directly on that, but I do believe that improvement can be achieved with additional work on the muscles themselves. This treatment would necessarily be long-term because of the time that has passed since the injury.

#### SAMPLE 2

Patient: Esther Megillah  
Date of Birth: 8/24/85  
Complaints:

Measurements:

- Left shoulder (AC joint) .1" lower than right
- Left shoulder blade (inferior angle of scapula) .4" lower than right
- Left iliac crest .4" lower than right
- Left ASIS .3" lower than right
- Left PSIS .2" lower than right
- Left gluteal fold .4" lower than right
- Pelvic rotation: 16° left, 19° right

Photographs:

Photographs show significant rotation of torso from hips counterclockwise (from above). Tightness in chest muscles is indicated by difficulty in raising arms fully overhead and in pulling forward of shoulders, particularly on the right. Lumbar lordosis indicates excessive pelvic rotation, which is confirmed in measurements.

Manual Examination:

Excessive tenderness found in chest, back, abdomen, buttocks, and legs.

Conclusions:

Measurements indicate landmarks on left side to be consistently 3° to 1° lower than on right side. Photographs confirm this and indicate rotation of torso and pelvic rotation. Manual examination confirms muscular constriction in legs, abdomen, buttocks, back, and chest.

Recommendations:

Alignment therapy (neuromuscular and connective tissue therapy) is recommended to correct the above imbalances and mis-

alignments and could eliminate or alleviate headaches and back pain. This procedure is also likely to increase her flexibility for gymnastics and other activities.

## SPECIAL POPULATIONS

### Pregnant Women

Pregnant women can certainly benefit from massage therapy, since the added weight and imbalance in their bodies can cause considerable soft-tissue pain, especially in the low back, hips, and legs. Certain precautions must be taken, however, and special requirements need to be considered.

A pregnant woman may not be able to lie on her stomach, and may be uncomfortable lying on her back for any significant period of time. Depending on the area being treated, she may be in a seated position or she may lie on her side. The use of pillows may enable her to lie on her stomach. She should be allowed to arrange these herself, as she can determine her needs better than the therapist. Commercial systems are also available, such as the Body Cushion (Polymer Dynamics, Inc., Allentown, PA), which can be arranged to allow a pregnant woman to lie prone. Any problems can usually be solved in collaboration with the client.

There are certain points on the body that many acupressure practitioners believe induce labor.

Although there is little in the literature to support this assumption, you may find it preferable to avoid these points (Fig. 2-17). In addition, the following guidelines have been established by the American College of Obstetrics and Gynecology. A woman in any of these categories should obtain a release from her primary care provider before receiving massage.

- The pregnancy is high risk, i.e., the mother has used fertility methods to get pregnant or has had difficulty getting pregnant naturally.
- She has miscarried in the first trimester of previous pregnancies.
- She has a cardiac disorder (heart or pulmonary problems).
- She has a history of problems in pregnancy.
- There is a multiple pregnancy (twins, triplets, etc.).
- The mother is under age 20 or over 35.
- The mother has asthma.
- The mother has been exposed to illegal drugs.

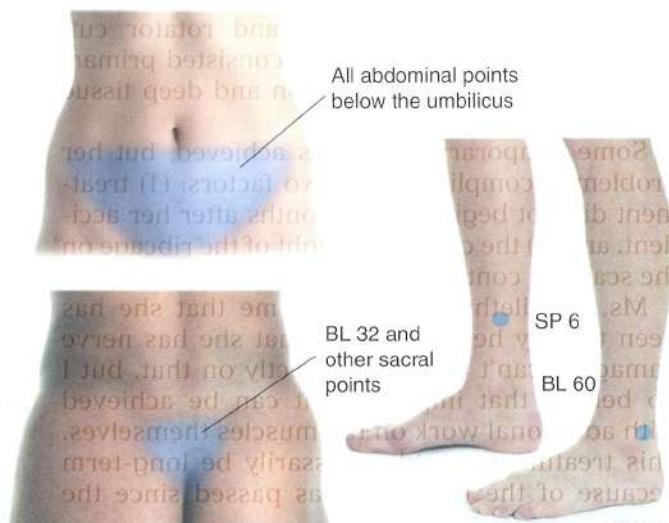
### The Elderly

The work described in this book is appropriate for the treatment of older clients, with the following specific cautions:

- Be sure to take a thorough medical history, and be aware of any problems such as stroke, heart disease, blood clots, surgeries, medications, etc.
- Osteoporosis occurs frequently in older adults. Ask about this condition in the client's history.



**Figure 2-17** Acupressure points to be avoided on pregnant women



Avoid intense pressure on any bones, particularly the ribs, in therapy.

- Avoid treatment directly over implanted devices, such as pacemakers.
- Older people tend to have thinner skin that is more apt to tear. Exercise caution in pulling the skin during treatment.

## Children and Adolescents

Adolescent clients may be treated essentially as adults. This work is also appropriate for children, with certain cautions and considerations:

- Most children have not developed a perspective that allows them to deal well with pain in treatment. They therefore have a lower pain tolerance than adolescents or adults.
- However, the soft tissues of children tend to be more responsive and resilient, so that the work usually does not need to be as deep or intense as may be required in adult clients.
- Children tend to be more ticklish than adults, and palpation that elicits pain in adult clients will often elicit ticklishness in children. You will need to learn to distinguish between superficial ticklishness (evoked by light touch) and deep ticklishness (evoked by deep touch). The latter should be seen as equivalent to a pain response in an adult.

Posturally-oriented bodywork can be done very effectively with school-age children, depending on their cooperativeness. An ideal time for this work is from the ages of 8 or 9 through puberty. The child is old enough to understand and participate in the work, and it will provide some preventive advantage as the child progresses through the adolescent growth spurt. It may also help the growing child in dealing with body issues at that sensitive age.

## CONCLUSION

Effective examination and assessment are the keys to good clinical work. Intelligent assessment of the problem is essential to gaining the trust of the client and working with confidence. In the beginning, the process may seem artificial and mechanical, but as you gain experience and self-assurance, it will develop a natural flow. You will

master it by touching many bodies, again and again and again, and by using your eyes, hands, and brain to put together coherent concepts of the whole, individual human being. Soon, the dialogue between you and your clients, both physical and verbal, will become as natural to you as breathing.

## CHAPTER SUMMARY

1. The priority of clinical massage therapy is effective treatment. Effective treatment requires effective assessment.
2. The client's history is taken, both on a brief form and in an interview, including
  - Presenting problem
  - Health history
  - Athletic history
  - Personal history
  - Occupational history
3. The client is examined in these areas:
  - Observation
  - Alignment examination
  - Photos, if desired
  - The body in motion
  - Measurements
  - ROM
  - Testing of affected muscles
  - Breathing examination
  - Palpatory examination of the area of complaint
  - Palpatory examination of the rest of the body
4. The information must then be summarized, and a synthesis and working hypothesis made.
5. Your thoughts, reasoning, and recommendations must be communicated effectively to the client.
6. You must be able to communicate with other health professionals who may be involved in the client's treatment.
7. Some special considerations may apply to particular kinds of clients:
  - Pregnant women
  - The elderly
  - Children and adolescents

the right side of the page. The first two columns of text are in a light gray font, while the third column is in a dark blue font. The text discusses the importance of addressing mental health issues and the availability of resources for treatment.

Addressing mental health issues is crucial for overall well-being. There are many resources available to help individuals seek treatment and support. It's important to remember that seeking help is a sign of strength, not weakness.

If you or someone you know is struggling with mental health issues, please don't hesitate to reach out for help. There are many professionals who can provide support and guidance.

Remember, you are not alone. There is hope and there is help available.

For more information on mental health resources, please visit the National Alliance on Mental Illness website at [www.nami.org](http://www.nami.org).

Take care and stay safe.

With love and support,

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P A R T



# Approaching Treatment

By Dr. John Smith  
Clinical Psychologist

Approaching Treatment

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