Massage Therapy: Principles and Practice, 3rd ed.

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Chapter 6 The Science of Body and Table Mechanics

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Introduction

- To ensure a successful long-term career, the massage therapist must maintain good physical condition and avoid injury
- · Lessons will discuss
 - Repetitive motion injuries
 - Body mechanics
 - Table mechanics

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Introduction

- Body mechanics—Includes strength, stamina, breathing, stability, balance, groundedness/centeredness
- Table mechanics—Includes table height; client positioning, use of bolsters, and draping

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Lesson 6.1 Objectives

- Discuss ways to reduce the risk of repetitive motion injuries
- Implement the concepts of health that relate to the practice of body mechanics
- Identify basic foot stances

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Repetitive Motion Injuries

- Also known as repetitive strain injury (RSI)
- Caused by a repetitive or constant motion, combined with compressive forces or joint hyperextension
- Are self-inflicted injuries
- Primary reason massage therapists leave the industry

Repetitive Motion Injuries

- Usually cumulative—builds up over extended period of time
- Most common types—carpal tunnel syndrome, thoracic outlet syndrome, tennis elbow, rotator cuff problems
- Symptoms and damage progress unless strain is altered

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RSI Progression

- Symptoms of RSI are related to inflammation
- Initial symptoms usually limited to soft tissues
- Progression—muscle soreness, increased tonus, formation of trigger points, nerve entrapment

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RSI Seen in Massage Therapists

- Anterior forearm becomes large because of finger flexing—muscle compresses against tendons and nerves supplying hand
- Massage therapist may notice numbness or weakness in forearm, wrist, or hand (especially thumb, middle and ring fingers)

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Prevention of RSI

- If symptoms occur, massage arm, pectoralis major and minor, and neck
- To prevent injury, frequently massage anterior forearm muscles while strengthening posterior forearm muscles

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RSI in Clients

- Primarily due to improper work habits, e.g., poor lifting or keyboarding posture
- 100% preventable
- Bad habits must be replaced with good ones
- RSI takes time to occur—by the time symptoms occur, bad habits are already in place

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Ways to Reduce Likelihood of RSI

- Use a variety of strokes
- Rest hands by spacing clients
- Stretch between sessions
- Adjust height of massage table

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Ways to Reduce Likelihood of RSI

- Avoid sustained pressure or delayed compression
- Keep fit using weight and flexibility training
- Use proper body mechanics
- Get massages

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Preparing for the Massage

- Self-care exercises:
 - Warm up
 - Finger stretch
 - Wrist circles
 - Hand swishing
 - Rubber band stretch
 - Ball squeeze
 - Reach and pull

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Preparing for the Massage

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Body Mechanics

- Definition: The proper use of postural techniques to deliver massage therapy with the utmost efficiency and with minimum trauma to the practitioner
- As critical to successful practice as anatomical knowledge, manual skills, and business acumen

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Body Mechanics and Massage

- Massage therapy is classified as a strenuous occupation—requires physical energy and use of torque
- Physical fitness helps prepare the body for the practice of massage

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Eastern and Western Concepts of Fitness

- Eastern—focus on building balance and becoming grounded/centered
- Western—focus on strength and stamina
- · Both views have merit

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Principles of Body Mechanics

- Strength
- Stamina
- Breathing
- Stability
- Balance
- Groundedness/centeredness

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Strength

- Massage requires strength—performing massage, moving clients, moving equipment, etc.
- Best activities for strength—floor exercises (sit-ups, push-ups) and weight or resistance training
- All major muscle groups should be addressed in training

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Stamina

- Build up through cardiovascular training at least 30 minutes 3 times weekly
- Complex carbohydrates keep energy level high
- Get enough rest
- Practice proper breathing techniques

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Breathing

- Proper breathing keeps the therapist relaxed, paces massage movements, fuels muscles
- Enhances mental and physical health
- Exhale during reaching strokes, inhale during return strokes

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Breathing

- Dantein—ancient center of gravity
 - Specific spot located two inches below and behind the navel
- Hara—lower abdomen
 - Breathing in and out of the hara helps lower the center of gravity and contributes to stability



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Stability

- Lower body provides two and a half times more power and greater stability than upper body
- Use lower body as base, upper body as flexible conduit of energy



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Stability

- Greater number of points of contact greater stability
- Both feet flat on the floor provides a stable base

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Balance

- Proper body mechanics are a direct result of balanced posture
- Less energy is expended when body is balanced
- Center of gravity—between fourth and fifth lumbar vertebrae, or an inch or two behind and below navel (dantien)

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Groundedness/Centeredness

- Refer to mental, emotional, and physical states of the therapist
- Body and mind are interconnected—taking time to prepare the mind helps therapist be more effective
- Being grounded helps the therapist release his own tension as well as that of the client

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Foot Stances Related to Body Mechanics

- Massage is performed with the whole body, not just the hands
- Correct foot placement provides stable base—affects body mechanics and body alignment
- The foot forms a base of support with three points of contact



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Foot Stances Related to Body Mechanics

- Two main stances: bow stance and warrior stance
- Both stances provide a secure foundation and balanced posture
- Let massage be initiated from a stable base (double-tripod of both feet on floor), up to the center of balance (dantien), and then through arms and hands

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Bow Stance

- Also known as archer stance or lunge position
- Used when applying effleurage or other strokes where therapist moves from one point to another on client's body
- Feet on floor in 30–50 degree angle
- Lead foot points forward; trailing foot points off to side

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Bow Stance

- When possible, get behind your hands while working in the bow stance
- During stroke, weight shifts from rear to front foot as therapist lunges forward
- Keep knees flexed while shifting weight between lead foot and trailing foot
- · Torso is kept as straight as possible

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Warrior Stance

- Also known as horse stance
- Used for strokes that traverse relatively short distances, such as pétrissage, or for reaching across the body
- Feet are placed on floor a bit wider than hip distance apart; back is kept straight
- Keep shoulders relaxed while hands and arms are moving

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Warrior Stance Figure 2008 by Saunders, an importe of Elsevier Inc. All rights reserved.

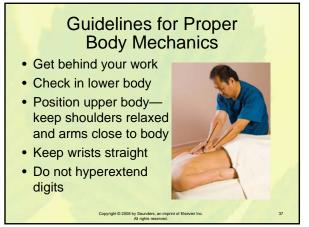
Lesson 6.2 Objectives

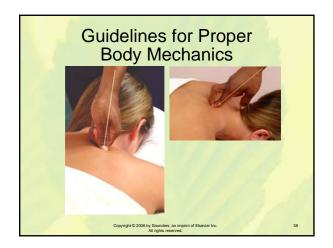
- Explain guidelines for proper body mechanics
- Use appropriate positioning equipment and bolstering devices and position the client in the prone, supine, side-lying, and seated positions

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Guidelines for Proper Body Mechanics

- Check table height—adjust if necessary (see Chapter 3)
- Wear comfortable attire
- Warm up before massage
- Use a variety of strokes—alternate if you notice fatigue





Guidelines for Proper Body Mechanics

- Lean or sit, depending on modality being performed
 - Apply pressure with your weight rather than your strength
 - When sitting, keep feet flat on floor and back straight





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Guidelines for Proper Body Mechanics

- Body aligned
 - Keep back straight by tilting pelvis backward
 - Maintain head over neck and shoulders; keep eyes forward whenever possible
- Stretch
 - Look up and away from work to stretch anterior neck muscles

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Guidelines for Proper Body Mechanics

- Breathe—use deep, full abdominal breathing
- Move smoothly—find your own rhythm and move with it
- Lift correctly—keep weight close to body; use legs, not back; ask for help if necessary

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Table Mechanics

- Involves practical considerations concerning placement of client on massage table
 - Client positioning
 - Positioning equipment (bolsters and pillows)
 - Draping, using towels or sheets

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Client Positioning

- Promotes client comfort through positional release
- Promotes relaxation through proper body alignment
- · Addresses health conditions such as swelling or recent surgeries

Client Positioning— Questions to Consider

- In which position would you like the client to lie?
- How do you position the client's joints during the massage?
- · Does the client have any health considerations or physical limitations that would require table adjustment or additional bolstering?

Positioning Equipment

- Cushions support individual joints muscles relax more fully
- Most common placement—face/head, neck, ankles, knees

Positioning Equipment

 Rolled-up towel, pillow, or blanket can be used in place of commercially made bolster



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Use of Bolsters: General

- Avoid bending to retrieve bolsters—squat down, stand bolsters on end in a corner, or store at convenient height
- Position seam away from client
- Cover bolster with drape or place under sheet

Use of Bolsters: Prone Position

 Prone position: client is in a horizontal position while lying face downward



- Used most often under anterior ankles and head/neck complex
- Use prone pillow or face rest for head/neck if possible

Use of Bolsters: Prone Position

 Support anterior ankles with 3" or 6" bolster—try both sizes with each client



- Lower back strain can be relieved by cushion under abdomen or pelvis
- Arm rest provides additional shoulder and arm relaxation

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Use of Bolsters—Supine Position

 Client is lying horizontally on the back when supine



- Support posterior cervical (neck) region and posterior knees
- Knee bolster helps relax lower back
- Place cervical pillow at lower cervical region, not occipital region

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Preparing a Cervical Pillow

 Rolling up a bathsize towel for a cervical pillow; fold both long sides toward the middle, leaving a 1" gap in the center, before rolling



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Foot Massage in Supine Position

- Use a pillow, cushion, or rolled towel under client's feet for easier access and proper body mechanics
- Do not have client lift both feet at once (causes low back strain)
 - Lift feet for client, or have client lift one at a time onto pillow

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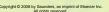
Side-Lying Position

- Preferred for pregnancy, some older adults, and some other conditions
- Client should lie first on side they find most comfortable; most of the massage is done from that position
- Back should be about 4" from edge of table

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Side-Lying Position— Use of Pillows

- First pillow—under head
- Second pillow—under upper arm, to support arm and shoulder
- Third pillow—under upper knee and ankle (align in one horizontal plane use additional pillow if needed)





Performing Side-Lying Massage

- Therapist should adjust his position for best leverage—may use stool, squat, or kneel
- Perform majority of work with client on first side, then have client roll over to other side
- Remove all pillows and bolsters before client gets up from table

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Seated Position

- Can be performed with client in regular chair, massage chair, or wheelchair
- When using regular chair or wheelchair, client may lean forward onto cushion placed on table or onto commercial desk topper

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Reasons to Use Seated Position

- Client prefers seated massage or has reservations about removing clothing
- Massage table is unavailable, or there is insufficient space for use
- Client has medical condition or pain that make table use difficult

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How to Begin?

- Can begin prone or supine
- There are pros and cons to each choice
- Some therapists make this choice; others let client decide

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Beginning Prone, Ending Supine

- Allows massage of back area first—often a site of pain
- Keeps genital area underneath client at start of massage—gives time for trust to develop
- Allows client's sinuses to drain after time spent in prone position

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Beginning Supine, Ending Prone

- Allows eye contact at start of massage facilitates conversation
- Beginning supine allows back to be massaged last
- Some therapists finish massage with client in side-lying position regardless of starting position

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Lesson 6.3 Objectives

- Properly drape the client with sheets and towels
- Maintain appropriate draping while the client rolls over
- Assist the client on and off the massage table while maintaining the appropriate drape

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Draping: Purpose

- Provides a professional atmosphere
- Supports client's need for emotional privacy (modesty)
- Offers warmth
- Provides access to individual parts of client's body

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Draping: Warmth

- Warmth is primary comfort consideration
- Body relaxes during massage; blood pressure and basal body temperature drop
- Client may become chilled and find it difficult to relax if he is cold

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Draping: Warmth

- Ask client at least twice about warmth once at beginning of session and once halfway through
- If too cold, add blanket over drape
- If too warm, remove some drape
 - Keep genital areas and gluteal cleft covered

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Draping: Rules

- First rule—state and local laws
 - Cannot drape with less than law requires without endangering license
- Second rule—client's request
- Third rule—therapist's comfort level

Draping: General

- Expose only areas being massaged
- Do not lift or fluff drapes so that fabric leaves client's body
- If client is accidentally uncovered, look away and redrape the area
- Apologize while remaining composed and professional

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Towel Draping

- Thicker, heavier, and more opaque than sheets
- One towel typically used for men, two for women—more used if requested by client
- Fold towel back or under to reveal area to be massaged

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Towel Draping Male Clients

- Instruct client to undress, lie on table, and drape himself with towel across the pelvis
- Grasp bottom corner closest to you with lower hand; grasp top corner on opposite side of client's body with upper hand
- Rotate towel 90° until lengthwise over client's legs

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Towel Draping Male Clients Copyright © 2008 by Sanders, an imported Elsevier Inc. All rights reserved.

Towel Draping Female Clients

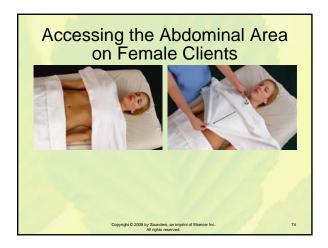
- Instruct client to undress, lie on table, and drape herself with one towel across the torso and one towel across the pelvis
- Reenter room and rotate bottom towel as described for male clients—towels are now in T formation



Accessing the Abdominal Area on Female Clients

- Top towel is pulled down until edge reaches clavicle
- Bottom corners are pulled up and towel is fanfolded upon itself in a strip—"bikini top"
- Client's knees are flexed when working abdomen
- To redrape, anchor top edge of towel with one hand and pull lower edge down with the other

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Turning the Client Prone to Supine (Two Towels)

- Remove all positioning equipment; return towels to equal sign position
- Instruct client to scoot down from face rest; assist with towels
- Anchor nearest towel edges by leaning on them and grasping corners

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Turning the Client Prone to Supine (Two Towels)

- Instruct client to roll toward you (to face you) and continue turning until she is on her back
- Rotate bottom towel back to T formation; position bolsters under knees and neck

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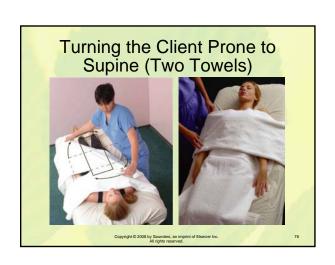
Turning the Client Prone to Supine (Two Towels)

Towels

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Towels

**Towels*



Turning the Client Supine to Prone (One Towel)

- Remove all positioning equipment; rotate towel back to perpendicular (crosswise) position
- · Anchor nearest towel edge by leaning on it and grasping corners

Turning the Client Supine to Prone (One Towel)

- Instruct client to roll to face away from you and continue turning until he is on his abdomen
- Have client scoot up to face rest
- Rotate bottom towel back to parallel (lengthwise) formation; position bolster under ankles

Turning the Client Supine to Prone (One Towel)





Turning the Client Supine to Prone (One Towel)





Sheet Draping—General

- Two sheets required: one covering client, one covering table
- Arrange the top sheet on top of the bottom sheet; fold down top corner edge
- During massage, undrape where needed and tuck loose fabric under client's body

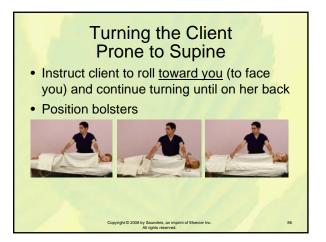
Accessing the Abdominal Area on Female Clients

- Place towel or pillowcase on top of sheet in "bikini top" position
- Anchor towel and pull sheet out from under it
- Fold sheet down and towel up to expose abdomen

Turning the Client Prone to Supine

- Remove all positioning equipment; uncover feet
- Have client scoot down from face rest
- Anchor nearest edge of sheet by leaning on it; grasp sheet along opposite edge of table

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Turning the Client: Supine to Prone

- Remove all positioning equipment; uncover feet
- Anchor nearest edge of sheet by leaning on it; grasp sheet along opposite edge of table

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Turning the Client: Supine to Prone

- Instruct client to roll to face away from you; continue turning until he is on his abdomen
- Have client scoot up to face rest
- Position bolster under ankles







Side-Lying Using Sheet Draping

- Drape side-lying client with sheet
- Use towel to hold sheet in place when massaging back and neck



 Work arm from the front with client draped chest-down

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Side-Lying Using Sheet Draping **Description of the service of th

Turning the Client

- Supine to Side-Lying or from Side-Lying to Opposite Side
 - Remove all positioning equipment except head pillow
 - Anchor nearest edge of sheet by leaning on it; grasp sheet along opposite edge of table
 - Instruct client to turn to lie on whichever side is most comfortable (or onto other side)
 - Position pillows

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Assisting a Client On and Off the Massage Table

- Client may need assistance getting on or off massage table
- To assist client getting off table: begin with client in supine position
- Remove all positioning equipment

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Assisting a Client On and Off the Massage Table: Steps

- Face client; stand at client's waist level
- Place your closest arm under client's closest arm and grasp under and beneath her shoulder; ask client to do the same on you
- Slide other arm under client's back and over shoulder; grasp top drape

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Assisting a Client On and Off the Massage Table: Steps

- With client assisting, raise client to seated position
- Pull drape around client's neck and shoulders
- Reach over client's knees and cup palm over opposite knee

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Assisting a Client On and Off the Massage Table: Steps

- Support client's back with upper arm; pull client's legs toward you until they dangle off the table
- Pull drape around client's neck and shoulders
- Support client into a standing position; continue holding drape until client can drape himself

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Summary

- Body mechanics—massage therapist's personal health maintenance and postural techniques
 - Proper body mechanics support longer, healthier careers in massage therapy
 - Body mechanics also contribute to success of the massage
- Table mechanics affect client's physical security and emotional comfort

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