

Advanced Certificate in Geriatric Shiatsu Massage (Switzerland)

## Anatomy And Physiology For Geriatric Shiatsu

Anatomy is the study of the physical structure of the body. In geriatric shiatsu, a clear understanding of the anatomical changes that occur with age is essential for safe and effective treatment. For example, the cortical bone becomes thinner and more porous, a condition known as osteoporosis, which increases the risk of fractures during deep pressure techniques. Practitioners must therefore modify their hand placements, using broader, more supportive strokes to distribute force evenly across the skeletal framework.

Physiology refers to the functions of the body's systems and how they interact. Age-related physiological shifts include reduced cardiac output, diminished lung elasticity, and slower nerve conduction velocity. These changes influence how energy flows through the meridians and affect the client's response to shiatsu. A therapist might notice a slower return to baseline after a session, indicating the need for extended recovery periods and gentler manipulation.

Geriatric denotes the older adult population, typically individuals aged 65 and above. The term encompasses not only chronological age but also the functional status of the client. A geriatric client may present with multiple comorbidities such as type-2 diabetes, hypertension, and arthritis. Understanding the interplay of these conditions is vital when selecting appropriate pressure levels and treatment sequences.

Shiatsu is a Japanese bodywork modality that uses finger pressure, palm strokes, and body weight to stimulate the flow of ki (energy) along the meridian pathways. In a geriatric context, the therapist adapts classic shiatsu techniques to accommodate reduced tissue elasticity and heightened sensitivity. For instance, the "Shiatsu press" on the lumbar region may be replaced with a lighter "brush-stroke" to avoid overstressing the intervertebral discs that have lost hydration with age.

Meridian refers to the invisible channels through which ki circulates. In the elderly, meridian pathways may become obstructed by scar tissue, adipose accumulation, or age-related muscular atrophy. Identifying these blockages is a key skill; a practitioner may use the "palpation of pulse" along the radial artery to gauge the quality of ki flow in the hand meridian and adjust the treatment plan accordingly.

Acupressure point is a specific location on the body where ki is believed to be concentrated. These points correspond to the same locations used in acupuncture, but they are stimulated with pressure rather than needles. For geriatric patients, points such as LI4 (Hegu) and ST36 (Zusanli) are frequently employed to boost immune function and improve digestion, respectively. However, due to thinner skin and decreased subcutaneous fat, the therapist must use a softer touch to avoid bruising.

Musculoskeletal system comprises bones, muscles, tendons, ligaments, and joints. In older adults, sarcopenia (loss of muscle mass) and osteoarthritis (degenerative joint disease) are common. A therapist must assess the range of motion in each joint before beginning treatment. For example, limited flexion in the knee may require the therapist to avoid deep kneading in the quadriceps and instead focus on gentle

stretching of the hamstring to improve circulation without causing pain.

Cardiovascular system includes the heart and blood vessels. With age, arterial walls stiffen, and the heart's pumping efficiency declines. Shiatsu techniques that involve rhythmic tapping over the chest can stimulate the vagus nerve, promoting parasympathetic activity and lowering blood pressure. Nevertheless, practitioners should monitor for signs of orthostatic hypotension, such as dizziness when the client sits up after a supine session, and adjust the pacing of the treatment accordingly.

Respiratory system consists of the lungs, airways, and diaphragm. Elderly individuals often exhibit reduced vital capacity and weakened diaphragmatic movement. A common shiatsu maneuver is the "diaphragmatic lift," where the therapist gently raises the ribs to encourage deeper breathing. In a geriatric client, this technique must be performed slowly, allowing the client to synchronize their breath with the therapist's movements, thereby enhancing oxygenation without triggering hyperventilation.

Nervous system is divided into the central (brain and spinal cord) and peripheral (nerves throughout the body) components. Age-related changes include slower nerve conduction speed and decreased myelin sheath thickness. These factors can affect the perception of pressure and the speed of therapeutic response. A practitioner may notice that a client reports a delayed sensation after a pressure hold; this is a normal finding and indicates the need for longer hold times to achieve the desired effect.

Skin is the body's largest organ and acts as a protective barrier. In the elderly, skin becomes thinner, drier, and more fragile, increasing the risk of abrasions and bruises. During shiatsu, the therapist must ensure that hands are clean, warm, and free of jewelry that could cause injury. The use of a light oil or cream can reduce friction, but only hypoallergenic products should be selected to avoid skin reactions.

Connective tissue includes fascia, tendons, and ligaments. With age, fascial layers lose elasticity and can develop adhesions, leading to restricted movement and pain. Shiatsu employs "myofascial release" strokes to gently stretch and soften these tissues. In a geriatric client, the therapist should apply sustained, low-intensity pressure rather than rapid, high-force techniques, allowing the connective tissue to gradually remodel without causing micro-tears.

Sarcopenia is the progressive loss of skeletal muscle mass and strength. It contributes to frailty, falls, and reduced functional capacity. A shiatsu therapist can address sarcopenia by incorporating "muscle activation" techniques that involve light tapping and rhythmic compression along the muscle bellies, encouraging micro-circulation and neuromuscular recruitment. Combining these approaches with gentle stretching helps maintain muscle pliability.

Osteoporosis is a condition characterized by decreased bone density and increased fracture risk. The therapist must avoid deep pressure over vulnerable areas such as the lumbar spine and proximal femur. Instead, the practitioner can focus on surrounding soft tissue, using "circular palm strokes" to improve blood flow to the periosteum, which may support bone health indirectly through enhanced nutrient delivery.

Circulatory insufficiency refers to inadequate blood flow, often seen in peripheral arteries of older adults. Symptoms include cold extremities, delayed capillary refill, and numbness. Shiatsu can stimulate peripheral

circulation by applying “light sweeping motions” along the arms and legs, encouraging venous return. However, the therapist must be vigilant for signs of deep vein thrombosis, such as unilateral swelling, and cease treatment if these appear.

Autonomic nervous system regulates involuntary bodily functions, including heart rate, digestion, and respiratory rate. It comprises the sympathetic (fight-or-flight) and parasympathetic (rest-and-digest) branches. Shiatsu aims to balance these systems by stimulating specific points like PC6 (Neiguan) to calm sympathetic overactivity. In geriatric clients, an overactive sympathetic response can exacerbate hypertension, so careful monitoring of pulse and blood pressure before and after treatment is essential.

Pulse diagnosis is a traditional technique used to assess the quality of ki flow by feeling the radial pulse at three depths. In older adults, the pulse may be weaker due to decreased cardiac output. Practitioners should use a light touch and extended observation time to accurately interpret the pulse, noting any irregularities that might indicate underlying cardiovascular concerns.

Thermoregulation is the body’s ability to maintain a stable internal temperature. Aging impairs thermoregulatory mechanisms, making seniors more susceptible to hypothermia or hyperthermia. During a shiatsu session, the therapist should ensure a comfortable ambient temperature and use warm blankets if needed. Additionally, the use of heated stones can provide soothing warmth, but the temperature must be checked frequently to prevent burns on sensitive skin.

Joint mobility describes the range of motion available at a joint. In geriatric patients, joint mobility is often reduced by arthritis, calcific deposits, and decreased synovial fluid. Shiatsu can improve mobility through “passive joint glides” where the therapist gently guides the joint through its available range without forcing it. This technique should be performed within the client’s comfort zone, and any pain should prompt immediate cessation.

Balance is the ability to maintain the body’s center of gravity. Age-related declines in vestibular function, proprioception, and muscle strength increase fall risk. Shiatsu can contribute to balance improvement by stimulating points that enhance proprioceptive feedback, such as Kidney 1 (KD1) on the sole of the foot. Practitioners may also incorporate gentle “weight-shifting exercises” during the session to reinforce neuromuscular coordination.

Proprioception is the sense of body position and movement. Diminished proprioception in older adults can lead to missteps and injuries. By applying pressure to specific points along the limbs, shiatsu can heighten sensory input, thereby sharpening proprioceptive awareness. For example, a light “finger-press” on the tibialis anterior muscle can enhance the client’s perception of ankle position.

Hypertension is high blood pressure, a common condition in the elderly. Certain shiatsu points, such as LV3 (Taichong) and HT7 (Shenmen), are known to help lower blood pressure by promoting parasympathetic activity. The therapist must verify the client’s baseline blood pressure and avoid vigorous techniques that could cause a sudden spike, especially in clients with uncontrolled hypertension.

Diabetes mellitus affects glucose metabolism and can lead to peripheral neuropathy, delayed wound healing, and vascular disease. Shiatsu practitioners should be aware of reduced sensation in the feet and

hands, which may mask discomfort during treatment. Gentle, slow strokes are recommended, and the therapist should inspect the skin for any signs of ulceration before beginning a session.

Arthritis encompasses both osteoarthritis and rheumatoid arthritis. In osteoarthritis, the cartilage deteriorates, while rheumatoid arthritis involves inflammatory joint damage. Shiatsu can alleviate joint pain by applying “soft circular pressure” around the affected area, which improves synovial fluid circulation. However, deep kneading should be avoided in inflamed joints to prevent exacerbating the condition.

Edema is the accumulation of fluid in tissues, often seen in the lower extremities of older adults due to venous insufficiency. Shiatsu can reduce edema by employing “drainage strokes” that move fluid proximally toward the heart. The therapist should position the client with the legs slightly elevated and use light, rhythmic movements, monitoring for any increase in swelling that might indicate an underlying cardiac issue.

Frailty is a clinical syndrome characterized by weakness, weight loss, and low activity. Frail clients require a highly individualized approach. Shiatsu sessions should be shorter, with an emphasis on gentle, nurturing touch rather than vigorous manipulation. The therapist may focus on points that promote overall vitality, such as GV20 (Baihui) on the crown of the head, while constantly checking the client’s energy levels and comfort.

Immune function declines with age, making seniors more vulnerable to infections. Certain shiatsu points, like LI11 (Quchi) and SP6 (Sanyinjiao), are considered to boost immune response. The practitioner can incorporate these points into a routine aimed at supporting the client’s natural defenses, especially during cold seasons. Care must be taken to avoid overstimulation, which could trigger fatigue.

Digestive function slows in the elderly, often resulting in constipation and reduced appetite. Shiatsu can stimulate peristalsis by applying pressure to the abdominal meridians, particularly at ST25 (Tianshu) and CV12 (Zhongwan). Gentle clockwise strokes along the abdomen can aid in moving food through the gastrointestinal tract. Clients with recent surgeries or abdominal hernias should be screened before these techniques are applied.

Renal function declines with age, affecting fluid balance and waste elimination. Shiatsu points such as KD3 (Taixi) and BL23 (Shenshu) are traditionally used to support kidney health. The therapist should assess the client’s hydration status and avoid excessive pressure on the lumbar region if the client reports back pain related to renal pathology.

Neuropathy is nerve damage that often results in tingling, numbness, or burning sensations. In diabetic geriatric clients, neuropathy is common in the feet. Shiatsu can provide symptomatic relief by using “light tapping” along the plantar surface, enhancing blood flow and reducing discomfort. However, any open wounds or calluses must be avoided to prevent infection.

Pressure ulcer is a localized injury to the skin and underlying tissue due to prolonged pressure, frequently occurring in immobile seniors. Shiatsu therapists must inspect for existing ulcers before treatment. If present, the practitioner should avoid direct pressure on the affected area and instead work on surrounding healthy tissue to improve circulation and promote healing.

Postural alignment concerns the way the body maintains its structural balance. Age-related spinal curvature, such as kyphosis, can affect the flow of ki. Shiatsu can address postural issues by applying “supportive palm pressure” along the paraspinal muscles, encouraging a more neutral spine alignment. Clients with severe spinal degeneration should be treated with caution, using only gentle supportive strokes.

Muscle tone is the continuous and passive partial contraction of the muscles. In older adults, muscle tone may become either excessively tight (hypertonic) due to chronic pain or overly lax (hypotonic) because of inactivity. Shiatsu can modulate tone by using “alternating pressure” techniques that first relax hypertonic muscles and then gently activate hypotonic ones, fostering a balanced muscular state.

Flexibility is the capacity of a joint to move through its full range of motion. Decreased flexibility is common with aging, particularly in the hips and shoulders. Shiatsu can improve flexibility by incorporating “slow stretch-holds” where the therapist gently extends a limb while maintaining a light pressure. This method should be performed within the client’s tolerance to avoid strain.

Hydration is vital for maintaining tissue elasticity and circulatory health. Older adults often have a blunted thirst response, leading to dehydration. During a shiatsu session, the therapist can encourage hydration by offering water before and after treatment, especially when employing techniques that increase sweat production, such as “heat-enhanced palm rolls.”

Sleep quality tends to decline with age, impacting overall health and recovery. Shiatsu can promote better sleep by stimulating points that calm the nervous system, such as HT7 and Yin Tang. A gentle, rhythmic session in the evening can prepare the client’s body for restful sleep, but practitioners should avoid overly stimulating points close to bedtime.

Stress response in the elderly may be heightened due to chronic health concerns. Shiatsu’s ability to activate the parasympathetic system can mitigate stress. Techniques that focus on the “calming meridian,” such as gentle strokes along the spleen channel, help lower cortisol levels. The therapist should assess the client’s emotional state and tailor the session to address both physical and psychological needs.

Medication interactions are an important consideration. Many seniors take anticoagulants, antihypertensives, or diuretics, which can affect how the body responds to massage. For example, anticoagulants increase bruising risk; therefore, the therapist must use very light pressure and avoid deep tissue work. Communication with the client’s healthcare provider ensures that the shiatsu treatment aligns with medical management.

Contraindications are conditions where shiatsu should be avoided or modified. In geriatric practice, common contraindications include recent fractures, severe osteoporosis, uncontrolled hypertension, acute infections, and active cancer treatment sites. The therapist must conduct a thorough intake interview, documenting any contraindications, and adapt the treatment plan accordingly.

Assessment is the systematic process of gathering information about the client’s health status, functional abilities, and goals. In this course, students learn to perform a comprehensive assessment that includes medical history, physical observation, pulse diagnosis, and range-of-motion testing. The findings guide the selection of appropriate points, pressure levels, and treatment sequences.

Treatment plan is a structured outline of the therapeutic approach, specifying which meridians and points will be addressed, the sequence of techniques, and the intended outcomes. For geriatric clients, the plan often emphasizes short, frequent sessions rather than long, intensive ones. It may also integrate home exercises, such as "self-pressure on the forearm," to reinforce the in-session work.

Documentation is the written record of the client's assessment, treatment, and progress. Accurate documentation is essential for continuity of care and legal protection. In the context of geriatric shiatsu, notes should include details such as skin integrity, blood pressure readings, and any adverse reactions observed during the session.

Client communication involves clear, respectful dialogue that acknowledges the client's experience and preferences. Older adults may have hearing impairments; therefore, the therapist should speak slowly, maintain eye contact, and confirm understanding. Using simple language to explain the purpose of each technique helps build trust and reduces anxiety.

Informed consent is the ethical and legal requirement for obtaining permission before treatment. The therapist must explain the nature of shiatsu, its benefits, potential risks, and alternatives. For geriatric clients with cognitive decline, consent may need to be obtained from a legal guardian or family member, ensuring that the client's autonomy is respected as much as possible.

Safety protocols encompass measures such as proper hand hygiene, the use of clean linens, and maintaining a clutter-free treatment area. In a geriatric setting, additional precautions include ensuring that the treatment table is stable, providing non-slip footwear, and having emergency contact information readily available.

Ergonomics for the practitioner is especially important when working with older adults, who may require the therapist to adopt awkward positions to accommodate limited mobility. Maintaining proper posture and using body weight rather than muscle force reduces the risk of injury to the therapist and allows for smoother, more consistent pressure application.

Professional boundaries are critical to maintaining a therapeutic relationship. The therapist should avoid overly personal conversations, respect the client's privacy, and refrain from touching areas that are not directly related to the treatment objectives unless explicitly consented to. This is particularly relevant when working with vulnerable geriatric populations.

Continuing education ensures that practitioners stay current with advances in anatomy, physiology, and geriatric care. The Advanced Certificate in Geriatric Shiatsu Massage requires ongoing study of emerging research on age-related musculoskeletal changes, cardiovascular health, and integrative therapies, fostering a commitment to evidence-based practice.

Case study: Mrs. L. is an 82-year-old woman with mild osteoarthritis in the knees, hypertension, and a history of falls. During the initial assessment, the therapist notes limited knee flexion, a weak radial pulse, and slight peripheral edema. The treatment plan includes gentle "circular palm strokes" around the knee joint, "light pressure on LI4" to support immune function, and "drainage strokes" on the lower legs to reduce edema. After four weekly sessions, Mrs. L. Reports improved knee mobility, a reduction in swelling,

and a lower resting blood pressure. This example illustrates how anatomical knowledge, physiological awareness, and tailored shiatsu techniques combine to create a safe and effective geriatric treatment.

Case study: Mr. K. is a 76-year-old man with type-2 diabetes and peripheral neuropathy in the feet. The therapist conducts a thorough skin inspection, discovering several callused areas but no open lesions. The session focuses on “light tapping” along the plantar surface, “soft pressure on ST36” to aid digestion, and “gentle stretch-holds of the calf muscles” to improve circulation. The therapist advises the client to wear breathable socks and perform daily foot rotations. Over six weeks, Mr. K. Experiences decreased tingling sensations and better foot temperature regulation, demonstrating the importance of adapting techniques to neuropathic conditions.

Challenge: Managing limited mobility is a frequent obstacle. Some clients may be unable to lie supine due to severe arthritis or respiratory compromise. In such cases, the therapist can modify the treatment by using a seated position, employing “standing shiatsu” techniques that apply pressure while the client remains upright. The therapist must ensure the chair is stable and the client’s posture is supported to prevent falls.

Challenge: Sensory deficits can mask discomfort. Older adults with reduced tactile perception may not report pain until tissue damage occurs. Practitioners must rely on visual cues, such as skin coloration, and on their own sense of pressure to avoid over-loading tissues. Using a “feedback scale” where the client rates pressure on a 0-10 scale can help calibrate the intensity of treatment.

Challenge: Cognitive impairment may affect the client’s ability to follow instructions or remember post-session recommendations. Therapists should use simple, repeatable instructions, demonstrate techniques, and provide written handouts with large fonts. Engaging a caregiver in the session can reinforce compliance with home exercises and ensure safety.

Challenge: Cultural considerations are relevant when treating a diverse geriatric population. Some clients may hold beliefs about touch, energy flow, or medical interventions that differ from the therapist’s perspective. The practitioner should inquire respectfully about any cultural or spiritual preferences and adapt the treatment environment, such as offering a modest draping style or allowing the client to pause for prayer.

Challenge: Time constraints often limit the length of sessions in clinical settings. The therapist must prioritize the most critical points and techniques, focusing on those that address the client’s primary concerns. For example, if a client’s main issue is chronic low back pain, the session may concentrate on the bladder and kidney meridians, while other supportive points are applied briefly.

Challenge: Documentation accuracy requires meticulous attention to detail. The therapist must record objective findings, such as pulse quality and range of motion measurements, as well as subjective reports like pain levels. In geriatric practice, noting any changes in medication, recent falls, or new diagnoses is essential for tracking progress and adjusting treatment plans.

Challenge: Maintaining therapist stamina is crucial when working with multiple geriatric clients in a day. The physical demands of applying sustained pressure can lead to fatigue. Therapists should incorporate regular breaks, use supportive equipment like a treatment stool, and practice self-care routines that include

stretching and hydration to preserve their own health.

Key vocabulary summary provides a quick reference for students. Each term is linked to its practical implication in geriatric shiatsu:

- Anatomy: Knowledge of bone fragility guides pressure modification.
- Physiology: Understanding reduced cardiac output informs pacing.
- Meridian: Pathways may be obstructed by age-related tissue changes.
- Acupressure point: Points are selected for immune, circulatory, and pain relief.
- Musculoskeletal system: Sarcopenia and osteoarthritis shape technique choice.
- Cardiovascular system: Monitor blood pressure before, during, after.
- Respiratory system: Diaphragmatic techniques enhance breathing.
- Nervous system: Slower conduction necessitates longer holds.
- Skin: Thin, fragile skin requires gentle, non-abrasive contact.
- Connective tissue: Fascial adhesions are addressed with low-intensity release.
- Sarcopenia: Muscle activation strokes counteract strength loss.
- Osteoporosis: Avoid deep spinal pressure; use peripheral soft strokes.
- Circulatory insufficiency: Sweeping motions improve peripheral flow.
- Autonomic nervous system: Balance sympathetic and parasympathetic activity.
- Pulse diagnosis: Light touch assesses ki quality in weak pulses.
- Thermoregulation: Maintain warm environment to prevent hypothermia.
- Joint mobility: Passive glides respect limited range.
- Balance: Point stimulation and weight-shifting aid stability.
- Proprioception: Pressure enhances body awareness.
- Hypertension: Select calming points, avoid abrupt pressure spikes.
- Diabetes mellitus: Monitor for neuropathy, use gentle strokes.
- Arthritis: Soft circular pressure reduces joint pain.
- Edema: Drainage strokes move fluid proximally.
- Frailty: Short, nurturing sessions support vitality.
- Immune function: Stimulating points may boost defenses.
- Digestive function: Abdominal meridian work aids peristalsis.
- Renal function: Kidney points support fluid balance.
- Neuropathy: Light tapping relieves tingling sensations.
- Pressure ulcer: Avoid direct pressure on compromised skin.
- Postural alignment: Supportive palm pressure corrects curvature.
- Muscle tone: Alternating pressure balances hyper- and hypotonia.
- Flexibility: Slow stretch-holds increase joint range.
- Hydration: Encourage fluid intake before and after.
- Sleep quality: Calming points prepare body for rest.
- Stress response: Parasympathetic activation reduces cortisol.
- Medication interactions: Adjust technique for anticoagulants, antihypertensives.
- Contraindications: Identify and respect conditions that limit treatment.
- Assessment: Comprehensive intake informs individualized care.

- Treatment plan: Structured approach aligns goals with techniques.
- Documentation: Detailed notes ensure continuity and safety.
- Client communication: Clear, respectful dialogue builds trust.
- Informed consent: Ethical foundation for all interventions.
- Safety protocols: Hygiene and emergency preparedness protect all parties.
- Ergonomics: Therapist posture preserves energy and effectiveness.
- Professional boundaries: Maintain therapeutic integrity.
- Continuing education: Lifelong learning sustains competence.

By mastering this terminology, students of the Advanced Certificate in Geriatric Shiatsu Massage will be equipped to assess, treat, and document the complex needs of older adults with confidence and compassion. The integration of anatomical and physiological insight with traditional shiatsu principles creates a holistic framework that respects the unique challenges of aging while promoting health, comfort, and vitality.