

Lesson 16: Back & Spine Anatomy — Basic Techniques

Welcome to **Lesson 16** of the advanced Kalari Uzhichil certification course. In this lesson, we will focus on the anatomy of the back and spine and how it relates to Kalari Uzhichil (traditional Kalari massage). We'll integrate modern anatomical terms (muscles, vertebrae, etc.) with Ayurvedic concepts (marma points, **sira** channels, **asthi dhatu** or bone tissue) to deepen your understanding. You will learn the structural divisions of the vertebral column (cervical, thoracic, lumbar, sacrum) and identify key back muscles involved in posture and movement. We'll also highlight **Prishta Marma** points (vital energy points on the back) and their significance in therapy. Finally, we will cover basic oil massage techniques for the back – including warm oil application, various stroke types for different spinal regions, and adjustments for different doshas – while emphasizing therapist ergonomics, safety precautions (like avoiding direct spinal pressure), and a guided 10-minute back massage practice flow.

Back & Spine Anatomy: Modern and Ayurvedic Perspectives

Vertebral Column Structure

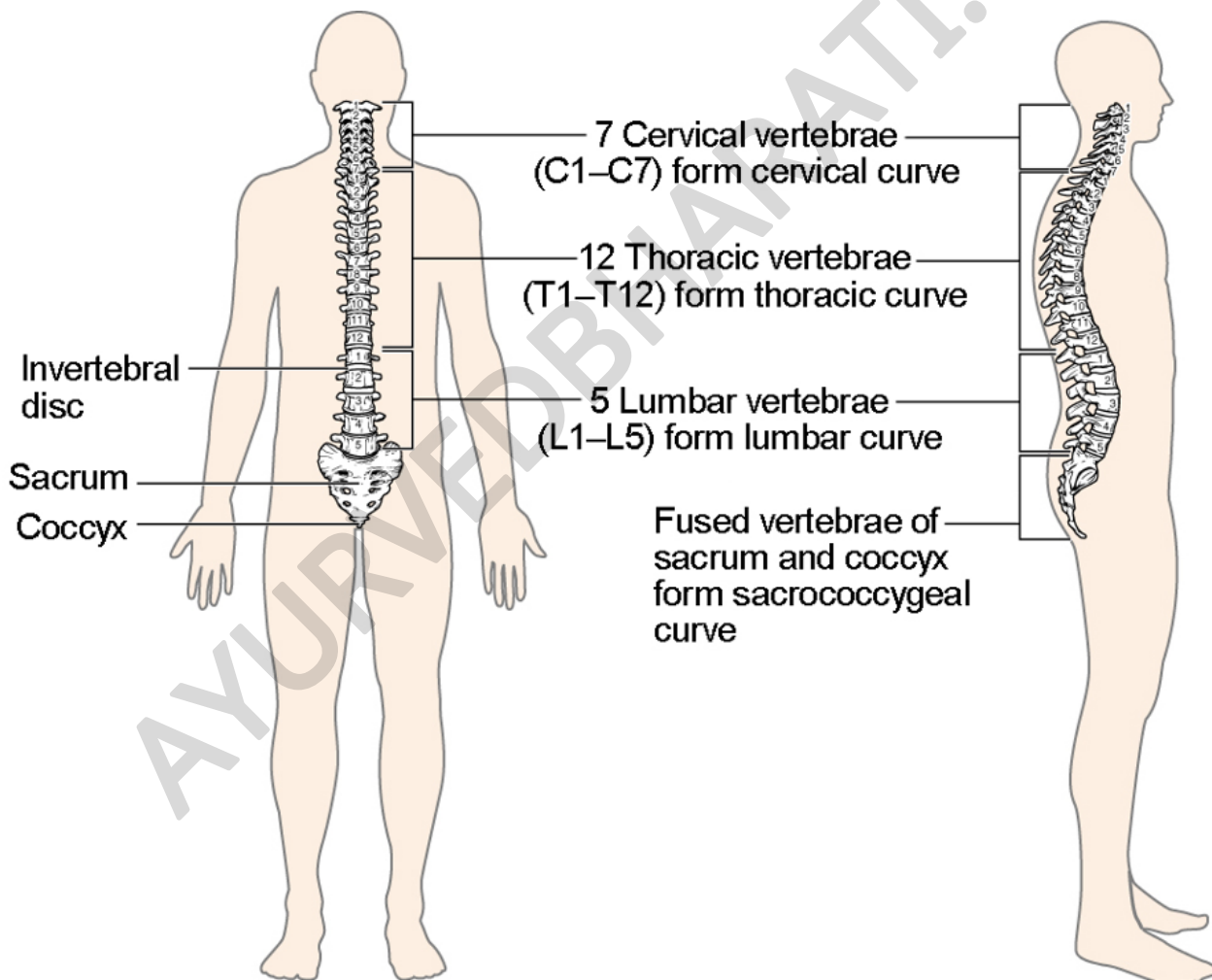


Figure: Regions of the vertebral column (7 cervical, 12 thoracic, 5 lumbar vertebrae, plus the fused sacrum and coccyx) and natural curvatures.

The human spine (vertebral column) consists of **24 moveable vertebrae** plus the sacrum and coccyx (tailbone) in adults. These vertebrae are divided into four main regions: **Cervical** (neck) with 7 vertebrae (C1–C7), **Thoracic** (upper/mid-back)



with 12 vertebrae (T1-T12), **Lumbar** (lower back) with 5 vertebrae (L1-L5), and the **Sacral** region where 5 vertebrae are fused into the sacrum (plus 3-5 tiny fused coccygeal bones forming the coccyx). The spine's natural curvatures include a gentle inward curve in the cervical and lumbar regions (lordosis) and an outward curve in the thoracic and sacral regions (kyphosis), which together help distribute mechanical stress during movement. This bony **asthi dhatu** framework provides central support for the body and protects the spinal cord. Ayurveda describes **Asthi Dhatu** as the bone tissue that holds the body structure, providing stability and forming the skeleton. In the spine, asthi dhatu corresponds to the vertebrae and supporting bony elements. When aligning a client for massage, it's important to respect the spine's natural curves and ensure the vertebrae are not put under undue pressure.

Back Muscles and Support

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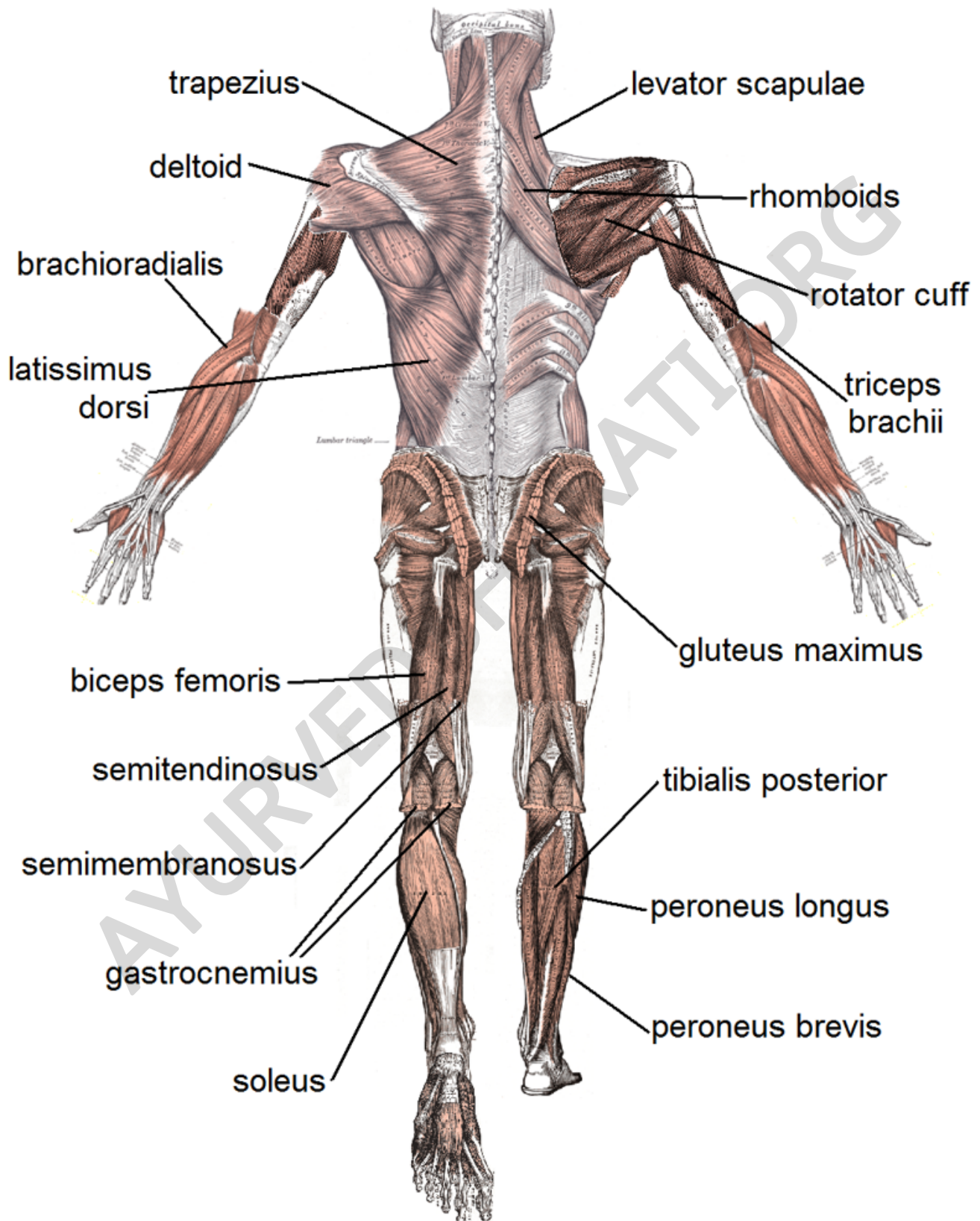


Figure: Posterior view of major back muscles (labeled), including trapezius, latissimus dorsi, rhomboids, erector spinae, etc.

The back is composed of multiple layers of muscles that support the spine, connect the upper and lower body, and facilitate movement. The five major muscles of the back are the **trapezius**, **latissimus dorsi**, **rhomboids** (major/minor), **erector spinae**, and **levator scapulae**. The trapezius is a large triangular muscle covering the upper back and neck, responsible for shoulder blade movements and neck support. The latissimus dorsi (the broad “wing” muscle of the mid-to-lower back) extends and adducts the arms and also stabilizes the lower back. Deep along the spine run the **erector spinae muscles**, a group of three long muscle columns (spinalis, longissimus, iliocostalis) that **hold the spine erect and maintain upright posture**. These muscles work continuously to resist gravity, providing core support for the torso. Together, the back muscles attach the shoulders and pelvis to the trunk, forming a muscular bridge that stabilizes the spine and allows trunk mobility. Strong and flexible back muscles help maintain proper spinal alignment and absorb strain, which is crucial both in martial arts training and in therapeutic massage. By understanding these muscles – e.g. how tight **levator scapulae** or **upper trapezius** can contribute to neck stiffness, or how the **quadratus lumborum** and **erector spinae** contribute to low back tension – a Kalari therapist can target techniques to release specific areas of tension.

Ayurvedic Anatomy of the Back (Prishta Marma & Dhatus)

In Ayurveda, the back is not just a musculoskeletal structure but also a map of vital energy points and channels. The term **Prishta Marma** refers to the marma points located on the back (Prishta = back). There are **7 pairs of marma points** along the back (aligned on either side of the spine), totaling **14** marmas in the posterior trunk. These **Prishta gata marmas** run from the upper back (shoulder region) to the lower back and hip region. For example, **Amsa Marma** is at the junction of the shoulder and neck (near where the trapezius and scapula meet), **Amsaphalaka Marma** is located at the shoulder blade (scapular) region, **Brihati Marma** lies in the mid-back beside the spine (around the lower border of the shoulder blades), and **Kateekataruna Marma** is in the low back at the level of the pelvic bones. Each marma is associated with particular structures: e.g. Amsa marma corresponds to the shoulder joint complex and trapezius muscle, while Katikataruna marma is in the sciatic notch area of the pelvis. Ayurvedic texts categorize marmas by the predominant tissue (**dhatu**) involved – many back marmas are **Asthi Marmas** (associated with bone, e.g. spine or pelvic bone) or **Snayu Marmas** (ligament/tendon) or **Sira Marmas** (vessel/nerve). For instance, Katikataruna is considered an **Asthi marma** (bone-related), whereas **Brihati Marma** is a **Sira marma** involving blood vessels (it's located near the transverse cervical artery). **Sira**, in Ayurvedic anatomy, generally denotes the body's channels such as veins, arteries, and nerves. So a Sira-type marma implies a vital point where blood flow or nerve impulses could be influenced. **Asthi dhatu**, as noted, is the bone tissue; healthy asthi (bones) supports the body's structure and protects the spinal cord. Kalari Uzhichil practitioners pay special attention to these marma points and dhatus during massage. Stimulating or relieving tension around marmas like **Kukundara** (near the sacroiliac joints) or **Nitamba** (upper buttock region) can help release energy blockages and alleviate pain radiating to other areas. By understanding Prishta marmas, a therapist can work more precisely – for example, applying gentle pressure around **Amsa Marma** can relieve shoulder stiffness, or massaging around **Kukundara** marma may ease sacral nerve impingement that contributes to sciatica.

Common Spinal Conditions Treated by Kalari Uzhichil

Kalari Uzhichil (Kalari marma massage) is traditionally renowned for addressing a range of back and spine related complaints. Many orthopedic and neuromuscular issues can be alleviated through this therapy. Some common spinal conditions and issues treated include:

- **Chronic Back Pain & Muscular Tension:** Generalized back ache or stiffness often results from muscle strain, overuse, or poor posture. Kalari massage uses deep oil application and pressure techniques to improve blood circulation, loosen tight **mamsa dhatu** (muscles), and reduce pain and stiffness. It is considered one of the most effective non-invasive treatments for muscle-based back pain, as it increases circulation, relieves muscle knots, and lowers stress hormones that contribute to tension. Many clients experience significant relief from chronic back pain after a series of Kalari Uzhichil sessions. However, if pain is due to an acute structural injury (e.g. fracture) or involves neurological deficits, those cases are referred to medical professionals.
- **Low Back Pain (Lumbar Strain):** Low back pain is extremely common, often due to lumbar muscle strain or **Gridhrasi** (sciatic nerve irritation). Kalari Uzhichil focuses on the lumbar region with warm medicated oils and targeted strokes to ease spasm in the erector spinae and quadratus lumborum. Techniques like gentle spinal stretching and sacral presses help improve flexibility and relieve lower back ache. Therapists also bolster the

client's ankles or pelvis during prone massage to maintain a neutral spine and reduce pressure on lumbar vertebrae. Regular Kalari massage is noted to strengthen the backbone and reduce recurrence of pain by improving muscle tone and posture.

- **Sciatica:** Sciatica refers to pain radiating down the leg from compression or irritation of the sciatic nerve (often due to a herniated disc or piriformis tightness). In Ayurveda this can be correlated to **Gridhrasi**. Kalari marma therapy is beneficial for sciatica by relieving tension in the piriformis/gluteal muscles and lower back, thereby reducing nerve compression. The use of certain herbal oils like *Dhanwantharam Thailam* is **especially effective for back pain and sciatica**, due to its anti-inflammatory and nerve-soothing herbs. The therapist will apply long strokes from the lower back down the buttocks and thighs (following the path of the sciatic nerve) to improve circulation and reduce pain. According to Kalari tradition, specialized techniques can even help in managing disc prolapse or "slipped disc" related sciatica – some experts claim to be able to help reposition a mild disc bulge through marma stimulation and stretching. While such claims should be approached cautiously, the therapy certainly helps alleviate muscular spasm and pain around the affected area. Modern Kalari treatment centers list **sciatica, disc prolapse, and spondylosis** among the conditions that respond well to Kalari Uzhichil, as it blends massage with marma point pressure to restore normal function.
- **Postural Issues (Mild Scoliosis, Kyphosis):** **Scoliosis** (lateral curvature of the spine) or **kyphosis** (excessive upper back curve) in mild forms can lead to muscular imbalance and discomfort. **Massage cannot cure structural scoliosis, but it can treat the associated muscle pain and tightness.** In Kalari Uzhichil, the therapist will note asymmetries in muscle development on either side of the spine. By using tailored strokes – e.g. deeper pressure and stretching on the concave side of a scoliotic curve, and gentle lengthening strokes on the convex side – they aim to release chronic tension and improve spinal mobility. The focus is on reducing gravitational stress and creating myofascial balance rather than forcibly adjusting bones. Over time, regular massage combined with specific **Yoga asanas** can prevent progression of mild curvature and reduce pain. Kyphosis-related upper back tightness can similarly be relieved by massaging pectoral muscles (chest) and upper back muscles to encourage a more neutral spine. Always, any severe or structural deformity should be co-managed with medical guidance; the role of Kalari massage here is supportive – to ease muscle compensations and improve posture awareness.
- **Stiff Neck and Shoulders (Cervical Spondylosis):** Although not explicitly in the back, the neck is the cervical spine and often prone to stiffness or **spondylosis** (age-related wear). Kalari Uzhichil addresses the cervico-thoracic area by working on marmas like **Amsa** (shoulder) and the base of the neck. Warm oil application and gentle mobilization of the neck muscles (trapezius, levator scapulae) help improve range of motion. Traditional texts mention Kalari chikitsa for cervical pain and even migraines, due to its effect on marma points and circulation. Care is taken to avoid direct pressure on the cervical vertebrae; instead, the therapist uses supporting hand positions and focuses on surrounding muscles. Over a series of sessions, clients often report reduced neck pain, fewer tension headaches, and improved alignment of the head and spine.

Overall, Kalari Uzhichil is a holistic therapy that not only alleviates pain but also aims to correct the underlying imbalance (whether it's muscular, doshic, or marma-related) contributing to the condition. It's common for Kalari practitioners to treat athletes or martial artists for injuries and also to help laypeople with issues like **back pain, spine-related issues, and orthopedic problems**. Always ensure to assess the client's condition: if there is any red flag (severe pain with numbness, acute trauma, etc.), get clearance from a medical professional. When applied appropriately, Kalari marma massage can be a powerful tool to manage chronic back ailments and improve spinal health.

Kalari Uzhichil Techniques for the Back

Preparation and Warm Oil Application

Preparation is key for an effective back massage session. Begin by creating a comfortable environment: a quiet, warm room with a proper massage table or firm mat. Position the client **prone (face-down)**, and use bolsters or pillows as needed – for example, placing a small pillow under the patient's abdomen or ankles can help maintain the natural lumbar curve and reduce pressure on the spine. Ensure the client is modestly draped with a cloth, exposing only the back.

Next, select an appropriate **Ayurvedic massage oil** (Thailam) and warm it to a pleasant temperature (test on your wrist). In Kalari Uzhichil, traditionally oils like **Dhanwantharam Thailam** or **Mahanarayana Thailam** are used for back treatment. These herbal oils are renowned for relieving pain and nourishing the tissues: for instance, *Dhanwantharam Kuzhambu* is specifically praised for its efficacy in musculoskeletal disorders, inflammation, and nerve pain – making it



ideal for back aches and sciatica. *Mahanarayana Thailam*, another classical oil, is similarly used to **soothe joint and muscle pain**, improve flexibility, and even support a healthy spine and posture. If these medicated oils are unavailable, a good quality sesame oil (which is warming and Vata-calming) can be used as a base.

Work plenty of oil into your hands and **apply the warm oil generously over the entire back** before starting specific techniques. Use broad palm strokes to spread the oil from the low back up to the shoulders and out to the sides. The warm oil helps relax the muscles, lubricate the skin, and activate the therapeutic herbs. In Ayurvedic terms, it also balances **Vata dosha** (which tends to accumulate in the back causing stiffness). Take at least **1-2 minutes** to gently rub in the oil and make the client feel comfortable with your touch. This initial oiling is itself therapeutic – it begins the process of softening tight fascia and signaling the nervous system to relax. Remember to maintain continuous contact; your calm, confident touch during this preparation phase sets the tone for the massage.

Massage Strokes for Different Spinal Zones

Once the oil is applied, proceed with **basic massage strokes**, adjusting technique and pressure for each region of the back. A Kalari Uzhichil back massage often incorporates a blend of classical **Abhyanga** strokes and marma pressure. Here are the primary stroke types and how to use them on different zones of the back:

- **Effleurage (Long Gliding Strokes):** Begin with **effleurage** to warm up the entire back musculature. Using the palms of both hands, make long, gliding strokes along the length of the spine *and* across the back. For example, start at the lower back (just above the pelvis) and glide upward on either side of the spine to the base of the neck, then sweep out over the shoulders, and circle back down along the sides (following the latissimus area) toward the hips. Repeat these flows in a rhythmic manner for a couple of minutes. Effleurage increases local circulation and prepares the muscles for deeper work. Keep your pressure light to moderate at first, and **always avoid pressing directly on the bony spine** – instead, aim for the muscle columns (erector spinae) about an inch or two lateral to the spinous processes. Effleurage is particularly useful in the **thoracic region (mid-back)**, where broad strokes can also help relax the large trapezius and rhomboid muscles. As the tissues warm up, you can increase pressure slightly on the upward strokes (toward the heart to assist blood return), and use lighter pressure on the downward/outward strokes. This wave-like motion both relaxes the client and allows you to feel for any knots or areas of tension that will need more focus.
- **Petrissage (Kneading):** After general warming, move into **petrissage**, or kneading techniques, to delve deeper into tight muscles. Using your thumbs, fingertips, or the heel of your hand, compress and lift the soft tissue in a rolling motion. Focus first on the **upper back and shoulders**: e.g., gently grasp the flesh of the upper trapezius between your fingers and thumb and knead it as if squeezing water out of a sponge (this relieves the commonly tight shoulder/neck junction). Work across the tops of the shoulders and around the shoulder blades. Then knead down either side of the spine – you can use circular thumb pad motions or do wringing motions with both hands (one hand pushes tissue toward the spine, the other pulls away, in opposite directions) to release the paraspinal muscle tension. **Lower back (lumbar) petrissage:** place your palms on either side of the lower spine and use your thumbs or heel of the hand to make small circles in the thick erector spinae muscles of the lumbar area. Knead the **quadratus lumborum** just above the hip crest with your fingertips in circular motions – this muscle often harbors trigger points that refer pain to the low back. Petrissage helps **release knots (“granthis”) and adhesions**, improve blood flow, and flush out metabolic waste from the muscles. Maintain communication with your client about pressure; the goal is a “good pain” if any – therapeutic but not excessive. If you encounter a ropey band or knot, you can spend extra time kneading it or switch to focused pressure (see next point) to encourage it to soften. Always follow up a kneaded area with a few light effleurage strokes to soothe it.
- **Focused Pressure and Circular Frictions:** For localized points of tension or marma points, use directed pressure techniques. For example, if you find a tender nodule in the **upper back (around Amsaphalaka/shoulder blade region)**, you might perform **trigger point release**: press steadily with your thumb or thumb knuckle on that spot for ~8-10 seconds and then slowly release, as the knot “melts”. Another technique is **circular friction**: use the pads of two fingers or the thumb to make small deep circles over a tight area. This is particularly effective around the **sacrum and lower back** – make slow, firm circular motions over the sacral bone and the attachments of the gluteal muscles. This can relieve tension in the lumbosacral fascia and is very soothing for low back pain. When applying pressure near the spine, work **alongside the vertebrae, not on them**. For instance, you can do gentle pressures with your thumbs in a line down the muscle grooves roughly 1 cm lateral to the spine (this might correspond to points along the **Ida and Pingala nadis** or nerve roots). Each press can be held a few seconds then released, moving sequentially down or up. These techniques stimulate specific marma points along the back: e.g.



pressing just below the scapula corresponds to **Brihati Marma** area, which in Ayurvedic terms can help energy flow in the upper back. Be mindful to never grind on bones – if you feel a bony prominence (like a rib or vertebra) under your fingers, adjust your position slightly off it. **Avoid heavy pressure over the kidney area** (mid-back under the ribs) as well, since direct force there can be uncomfortable or harmful – instead use only light rubbing in that region. Save deep pressure for the meaty muscle areas. After focused work on a spot, flush it out with a glide of your palm or a broad stroke to disperse any soreness.

- **Long Strokes and Stretching:** Integrate some longer strokes that travel the length of the back to integrate the work done. For example, using your forearm (ulna side) or the heel of your palm, you can apply a **deep gliding stroke** from the low back up to mid-back along the erector spinae, adding a mild stretch by leaning your body weight in. This is like a slow “ironing” of the muscle and can feel very relieving after focused pressure techniques. You might also gently traction the spine: place one hand at the base of the neck and the other at the lower back and pull them apart very gently to encourage a stretch (or simply maintain a gentle pull at the neck while effleurage upward with the other hand). Additionally, incorporate **passive stretching** movements if the client is comfortable: for the upper back, you can carefully bring the client’s arm into a chicken-wing position and depress the shoulder to stretch the scapular muscles; for the lower back, you can rock the hips or press one side of the hip down to induce a slight rotational stretch of the lumbar spine. Always perform stretches within a pain-free range and slowly.

Throughout the back massage, **maintain a flowing rhythm**, switching between techniques as needed. For example, you might do a sequence: effleurage, petrissage (upper back, then lower back), trigger point on a knot, friction on the sacrum, then effleurage again to soothe and transition to another area. Keep the client’s breathing as a guide – if you notice their breathing slow and deepen, that’s a good sign of relaxation; if they tense up or hold breath, lighten your touch or check in. By covering all **spinal zones** – cervical (neck/upper shoulders), thoracic (mid-back between shoulder blades), lumbar (lower back), and sacral (tailbone/hips) – with appropriate strokes, you ensure a comprehensive treatment. Each zone may require a slightly different approach: e.g. **neck and upper traps** respond well to gentle kneading and stretching; **mid-back** benefits from deep pressure between shoulder blades and transverse strokes across the muscles; **low back** enjoys circular kneading and broad pressure; **hip/gluteal region** (though not part of “back” per se) should be included because the gluteal and piriformis muscles often affect low back tension (you can use elbow or knuckles in larger circular motions in the gluteal muscles to release sciatic pressure). All these strokes work in concert to reduce pain and improve flexibility in the back.

Adjusting Techniques for Dosha Imbalances

Every individual has a unique **dosha** constitution, and imbalances in **Vata**, **Pitta**, or **Kapha** can influence how a massage should be given. In Kalari Uzhichil – which is rooted in Ayurveda – therapists adjust their techniques (and oil choices) based on the dominant dosha or the imbalance observed in the client, so as to maximize healing. Here are some general guidelines for dosha-specific adjustments in back massage:

- **Vata** (air & ether, cold, dry, mobile qualities): Vata imbalance often manifests as stiffness, cracking joints, and variable pain that moves around. A person with high Vata may have a very tense back but also sensitive nerves. The key is to provide *grounding, warming, and calming* therapy. Use **plenty of warm oil** (sesame-based oils are excellent, possibly fortified with Vata-pacifying herbs). Strokes should be **slow, steady, and soothing** – for example, long effleurage strokes with consistent pressure help reassure the Vata client’s nervous system. Avoid very abrupt or overly vigorous techniques, as Vata can be easily aggravated by randomness or intensity. Instead, apply gentle compression and broad palm contact. You can still do deeper work, but introduce it gradually and keep the client warmly covered on areas you’re not working on (Vata types get cold easily). *Dhanwantharam Thailam* is a great oil choice for Vata-related back issues, as it is warming and nourishing. Also, **focus on the lower back and sacrum** for Vata (since the colon and pelvic region is a site of Vata) – circular strokes around the sacrum with warm oil can be incredibly calming and help disperse excess Vata. End the session with very gentle spinal stretches or rocking motions to settle Vata. The client should feel deeply relaxed and “grounded” after the massage.
- **Pitta** (fire & water, hot, sharp, intense qualities): Pitta imbalance may cause inflammation, hot sensations, or tension with a burning quality (for instance, a Pitta individual might present with inflammatory back conditions or feel heat in tight areas). The approach is to be *cooling, moderate, and gentle*. Use **cooling or neutral oils** – e.g. coconut oil or ghee-based oils, or classical oils like *Chandan Bala Lakshadi* which have cooling herbs, or simply ensure the oil is not overheated. Pitta skin can be sensitive, so always check temperature and any herbal oil for potential irritation. The strokes can be a mix of moderate gliding and gentle kneading; maintain a **medium**

pressure – not too light (Pitta likes some pressure) but not too deep or abrasive, as over-stimulation can provoke irritability. Keep the room at a comfortable, slightly cool temperature and consider using a fan if the client runs hot. **Avoid too much friction**; instead of fast rubs, do more static compressions or slow effleurage. If there is inflammation (say around a particular vertebra or muscle attachment), you might avoid heavy direct work on that spot and instead work around it to encourage blood flow without aggravation. Use **calming aromas** if available (like sandalwood or lavender in the oil) to soothe Pitta's sharp mental focus. A Pitta back massage should leave the client feeling balanced and free of the "heat" of pain or anger. Signs you've overdone it for Pitta would be if the area becomes red or the client feels irritated – so less is more with Pitta. Finish with a cool compress or a few minutes of rest without a covering if they feel too warm.

- **Kapha** (earth & water, heavy, slow, cool qualities): Kapha imbalance often shows as stagnation – maybe dull achy back pain, edema, or excess weight causing strain. Kapha types benefit from a more *stimulating and invigorating* massage. You can use **less oil or a lighter oil** (Kapha's skin is usually moist and thick; too much oil can feel cloying). Mustard oil or herbal oils with eucalyptus or camphor are classic for Kapha to add heat and lightness. **Use brisker, deeper strokes** with faster pacing than you would for Vata or Pitta. For example, you might do rapid friction rubs along the paraspinals or tapotement (rhythmic tapping) over the muscle bellies to energize the area. Kapha can generally handle (and enjoy) firmer pressure and even strong techniques like **Chavutti Uzhichil** (foot massage) traditionally – but always gauge individual tolerance. **Kneading** can be done more vigorously, and you might incorporate **garshana** (dry massage) with a silk glove or a bit of raw silk cloth on the back before oiling, to further stimulate circulation and scrape off excess oiliness. Keep the client warm but not overheated – a bit of sweat is okay as it indicates stimulation of circulation. Encourage the Kapha client to take some deep breaths during the massage or even engage in it (e.g., ask them to do a gentle seated backbend stretch afterwards) – this involvement helps get their sluggish energy moving. The overall vibe should be **invigorating and lightening**. By the end, a Kapha person should feel lighter, more flexible, and energized rather than sedated. If a Kapha client tends to congest or have sinus issues, doing some work on the upper back and chest (even percussive tapping) can help release that – since Kapha accumulates in the chest.

In summary, **dosha-based adjustments** ensure the massage is personalized: more **grounding and warming for Vata**, more **cooling and soothing for Pitta**, and more **stimulating for Kapha**. A skilled Kalari therapist will observe the client's body type, skin, pulse, and even emotional state to judge these factors. For instance, a very anxious, thin client likely needs a Vata-pacifying approach; a muscular, irritable client may need Pitta-calming; a slow, stocky client might need Kapha-stimulating techniques. The oils used can also be dosha-specific (there are even *Tridoshic* oils to balance all three). By integrating these Ayurvedic principles, the massage not only works on the physical knots but also restores the subtle balance in the body, leading to more profound healing.

Therapist Ergonomics and Body Alignment

Proper **body mechanics** for the therapist are essential in Kalari Uzhichil, both to deliver effective pressure and to protect your own body from injury. An advanced therapist must be just as mindful of their own posture as the client's. Here are key ergonomics principles to follow when working on the back:

- **Stance and Alignment:** Stand (or kneel, if on floor) in a stable lunge or stride stance. Keep your feet about shoulder-width apart, one foot slightly forward in the direction of your stroke. For example, if you are massaging up the client's left side, step your left foot forward; if moving to the right, switch stance accordingly. *Face the direction of your stroke* – your toes, hips, shoulders, and head should all be aligned and pointing where your hands are moving. This alignment allows you to use your body weight in the motion rather than straining with your arms. Your back foot should remain planted to give you stability. Avoid twisting your torso awkwardly; instead, **move your feet** as needed to reposition your whole body for a stroke.
- **Use Body Weight, Not Just Muscles:** One of the secrets of delivering firm pressure without fatigue is to **lean into the client** using your body weight and gravity, rather than pushing with isolated muscle effort. For instance, when doing a downward press or an effleurage, position yourself so your center of gravity is above the area – then **"fall" or lean gently into the stroke**. Keep your spine neutral (not hunched) and engage your core abdominal muscles to support your lower back. By leaning in with a straight back and using a lunge, you transfer force from your legs and torso into the hands, which is much more efficient. This prevents overusing your shoulders or thumbs. One tip is to **"stack your joints"**: keep your wrists, elbows, and shoulders in one line behind the force. If you push with a bent wrist or flared elbow, you'll strain those joints. Instead, for example, when pressing down with your palms, position yourself almost as if doing a push-up – wrists straight, elbows not flared too far out (ideally

<45 degrees from your body). To generate deeper pressure, you can also use forearms or knuckles, which saves your fingers and thumbs.

- **Table (or Floor) Height:** Adjust the massage table to a height that allows you to use leverage. Generally, the table should be about mid-thigh height or a height where you can bend your knees and have a near-neutral back when applying pressure. If the table is too high, you'll shrug your shoulders and strain your upper body; if too low, you'll hunch over. In Kalari Chikitsa, sometimes the practitioner even uses their **feet (Chavitti Uzhichil)** for pressure by hanging onto a rope – that's an advanced method to apply deep pressure using full body weight. If using hands, find a height that lets you comfortably lean. When working on the floor (on a mat), you can use a half-kneeling stance or sit on your heels for certain strokes, but still keep mindful of not overreaching. If you need to get more power, don't hesitate to reposition the client or yourself rather than extending your arms too far.
- **Hips and Spine Posture: Avoid bending forward with a rounded back** for long periods; this can strain your lumbar spine. Instead, **hinge at your hips** (maintain a slight arch in your low back), and step into your strokes. Keep your own spine as aligned as possible – imagine you have to maintain your own "neutral spine" even as you work. For example, if you are applying pressure downward, drop into it by bending your knees and sinking with your hips, rather than curving your back and pushing with arms. If you need to reach across the table, rather than extending your arms fully and straining your shoulder, step around to the other side of the client or ask them to adjust position. It's better to take a second to re-position than to deliver an awkward stroke that hurts you.
- **Arm Usage and Tools:** Use the larger joints and tools of your body for delivering force. Save your thumbs for precise points, and **avoid continuous heavy use of your thumbs** to prevent issues like thumb tendinitis. Instead, deliver broad pressure with your palms, fists, forearms, or even elbows for deep work, as these distribute force and spare your small joints. For example, to work the long spinal muscles, using a forearm glide can give consistent pressure without exhaustion. When using forearms, keep your hand relaxed and lead with the ulna bone (pinky side) with your other hand supporting if needed. For kneading, you can use knuckles (the flats of your fingers bent at the first joint) to work out knots instead of just finger tips. These substitutions protect your wrists and hands. **Relax your shoulders and hands** while working – avoid clenching or tensing your own muscles unnecessarily. If you notice your shoulders creeping up or your breath held, reset your posture.
- **Leverage and Counter-Pressure:** Make use of counter-pressure to augment your strength. For instance, you can place one hand on the client and the other hand can grab the edge of the table for leverage, pulling your body to increase pressure (as long as it doesn't shake the table). Or if you're doing a stroke towards yourself, you might lean back and use your body weight that way, even bracing a foot if needed (e.g. bracing your forward knee against the table for stability). Many Kalari practitioners are trained to even use their **feet** by holding ropes – this is the ultimate example of leveraging body weight while maintaining balance. If you are using hands-only techniques, just keep in mind: *let physics do the work*. Gravity, body weight, leverage – these reduce the workload on your muscles.
- **Self-Care during Massage:** Breathe deeply and evenly as you work. If you align your breathing with your strokes (exhaling on exertion), you'll find more endurance and fluidity. Periodically check in with your posture: are your knees bent? Is your back hurting (a sign you might be bending incorrectly)? Are your wrists okay? Make micro-adjustments as you go. Seasoned therapists might flow around the table almost like a dance – shifting stances, sometimes using a stool for detailed neck work to avoid hunching, or lowering their center of gravity to push. If you maintain good body mechanics, you'll not only protect yourself from injury but also be able to deliver a stronger, more consistent massage pressure. Common injuries in therapists (wrist strain, low back pain, shoulder issues) are largely preventable with proper ergonomics. By practicing what we preach – good posture and alignment – we ensure a long, healthy career as Kalari Uzhichil practitioners. In summary: **face your work, ground your stance, use your core, and let your whole body participate in the massage**. This will make your treatments effective and keep your own body pain-free.

Practice: 10-Minute Basic Back Massage Flow

Now that you understand the techniques, here is a **step-by-step 10-minute back massage routine** you can practice on a volunteer. This basic flow incorporates the methods discussed, in a logical sequence. (As you gain experience, you can modify timing or techniques, but this provides a solid starting template.)

1. **Centering & Oil Application (1 minute):** Have the volunteer lie prone and ensure they are comfortable (bolster as needed). Warm about 2 tablespoons of oil. Standing at their side, **center yourself** with a deep breath, then rub the oil between your palms. Begin spreading the warm oil over the entire back using broad, gliding strokes. Start at



the low back and glide up to the shoulders, then sweep out and down the flanks, creating big circles. Make sure to cover from the neck to the sacrum and out to the sides of the torso. This initial lubrication and light touch helps the person relax and indicates you'll be working on them. Keep your touch gentle and tune into the texture of their muscles as you apply oil.

2. **Effleurage - Warm-Up Strokes (2 minutes):** Transition into rhythmic **effleurage** strokes to warm the back muscles. Using your full palms (or palms stacked one over the other for a bit more pressure), perform long glides from the low back up to the upper back. Move **slowly and evenly**, following the curve of the spine without pressing on it – your hands should slide along the muscles on either side. When you reach the shoulders, fan your hands outwards, gliding over the shoulder blades toward the arms, then lightly drag down along the sides back to the low back. Repeat this cycle, gradually increasing pressure on the upward stroke as the tissues warm. You can vary the path slightly: e.g., sometimes go straight up parallel to the spine, other times angle slightly outward in the mid-back to cover the ribs. Maintain a **flowing rhythm** – one stroke merging into the next – to induce relaxation. Effleurage boosts circulation and lets you scan for any tight spots or flinching (which might indicate areas to be careful with). Encourage the volunteer to take slow breaths; you can even synchronize strokes with their breathing (stroke up as they inhale, down as they exhale) for added harmony.
3. **Petrissage - Upper Back and Shoulders (2 minutes):** Now move into **kneading** the upper back and shoulder region. Stand near the head, facing their shoulders. Using your thumbs or fingertips, begin at the top of the shoulders (trapezius area) and **knead** the muscle: press, lift and roll the soft tissue in your fingers. Work from the neck out toward the shoulder joints. Do this on both sides, spending perhaps 30 seconds on each upper trapezius muscle – this is often a site of significant tension. Then use a thumb-over-thumb or reinforced fingers to knead along the edge of the **scapula (shoulder blade)**: trace around the shoulder blade – between the spine and scapula (rhomboid area) – making small circles or presses to release knots. You might find trigger points here; apply sustained pressure 8–10 seconds if you find a tight spot (e.g. a nodule in the rhomboids). Continue kneading outwards along the back of the shoulders and into the deltoid (upper arm) insertion, as sometimes shoulder muscle tightness refers into the back. The upper back petrissage should address the common “spot between the shoulder blades” where people feel knots. Use your body weight to apply enough pressure, but be mindful of the thinner musculature here; moderate depth and more pinpoint pressure on knots is effective. The client may feel some “good pain” as you work out stubborn adhesions – ask them to breathe through it and adjust pressure if needed. By the end of this step, the upper back should feel looser and the shoulders more dropped.
4. **Petrissage - Lower Back and Hips (2 minutes):** Shift focus to the **lumbar** area (low back) and upper hips. Reposition yourself around the side of the table near the client's hip. Place one hand on top of the other (to reinforce) and use the heel of your hand or thumb pads to knead the thick muscles alongside the spine in the low back. Work in **small circles** an inch or two out from the spine, from the bottom of the ribcage down to the sacrum. Spend extra time where the muscles feel ropy or hard (common just above the sacrum). Next, address the **gluteal** muscles at the top of the buttocks (since tight glutes often contribute to low back tension). Use your fists or palms to apply circular kneading strokes on the fleshy parts of the buttocks, and along the **iliac crest** (the top of the pelvic bone) where some back muscles attach. You can also gently press with both thumbs at the **sacroiliac joint** areas (dimples above the buttocks) – this is around the **Kukundara marma** – making small outward circles to relieve tension there. As you knead the lower back, use your other hand to stabilize the skin or apply a counter-pressure. The pressure can be a bit deeper here if the client tolerates, because the lumbar muscles are often thick and need robust work. However, **avoid direct pressure on the spine or kidneys** – stay on muscle tissue. If the client has sciatica, you can also trace down the glute and a little into the upper thigh with your thumbs, following the path of the sciatic nerve, using slow pressure to ease nerve tension. By the end of this segment, the lower back should feel warmer and looser, and often clients experience reduction in that “ache” in the lower back.
5. **Targeted Pressure & Marma Stimulation (1 minute):** Now that the back is generally relaxed, spend about a minute on any *specific points* that need extra attention. This will vary per person, but common targets: maybe a trigger point in the **upper trapezius** (press thumb into that spot between neck and shoulder), or a tight **erector spinae bundle** in the lower back (use knuckle pressure alongside L4-L5 area, for example). Apply **direct, sustained pressure** on one area at a time for ~10 seconds, instructing the volunteer to breathe deeply. Good spots to consider are also the **muscle attachments**: the base of the neck (where many muscles attach to occiput – you can hold a press at the top of the spine below the skull), the mid-back around T5-T7 (between shoulder blades, common trigger area), and the **gluteus medius** trigger point (upper outer quadrant of buttock) if low back or sciatica is an issue. Additionally, you can gently stimulate a few **marma points**: for example, place gentle pressure with middle finger pads on either side of the spine at the level of the heart (roughly between shoulder blades) – this might correspond to **Hridaya Marma** region or simply parasympathetic activation zone – which can



be calming. Or press the **Amsa marma** region at the junction of neck and shoulder. Each press should be deliberate and sensitive – do not jab; slowly sink in, hold, and release. Remember to avoid any point that causes sharp pain. This step is like addressing the last bits of tension or “energy knots” in the back, bringing a satisfying release.

6. **Soothing Effleurage & Finish (1 minute):** Finally, finish the routine with soothing strokes to integrate and calm. Using open palms, perform a few more **effleurage** passes over the entire back, but now with very light pressure (the “feather touch” or nerve strokes). For instance, you might do figure-8 stroking: starting at the sacrum, glide up diagonally to the right shoulder, then down off the arm; back at sacrum glide up to left shoulder, then down the arm. Repeat a couple of times. You can also do gentle **fanning strokes** out from the spine: hands together at the mid-spine then sweep out to the sides like opening a book. These light touches help the nervous system register a state of safety and relaxation, closing the session. If appropriate, you may do a **final stretch**: for example, carefully place one hand on the client’s shoulder and the other on the opposite hip and apply a mild twisting stretch (if the client is flexible and comfortable with it) – or gently pull both shoulders toward you (while they are still face-down) to stretch the pectorals and lightly arch the back. End by placing your hands still on the back for a moment, transmitting a sense of warmth and grounding. Mentally direct positive intention into the person’s body. Then wipe off any excess oil with a towel if needed and cover the client’s back with the sheet. Allow them a minute to rest before slowly getting up.

This 10-minute routine addresses the whole back in a balanced way – from warming up to deeper work and then calming down. As you practice, maintain good body mechanics (use your legs and weight, not just your arms) and stay tuned to your partner’s feedback. With experience, you can expand this routine (in a professional setting, a back massage might be 20-30 minutes or more, incorporating more detailed work). Even in 10 minutes, however, this flow can deliver noticeable relief and relaxation. **Practice on different individuals** to get a feel for varying muscle tones and preferences. The more you practice, the more intuitive your sequence will become. Always remember to end a session with some gentle strokes and ensure the person gets up slowly (ask them to drink some warm water after massage to help flush toxins). Good job on completing Lesson 16’s practice – this routine is an excellent foundation for your Kalari Uzhichil skills!

Safety Considerations

When performing Kalari Uzhichil on the back, safety for both the client and therapist is paramount. Here are some important safety notes and precautions to always keep in mind:

- **Avoid Direct Spinal Pressure:** Never apply heavy, direct pressure on the vertebrae or spinous processes of the spine. The spine’s bony landmarks are not padded and pressing on them can cause pain or injury. Instead, work on the muscles *alongside* the spine. For example, when gliding or doing thumb pressures, stay about 1-2 fingers-width lateral from the midline to target muscle, not bone. Even when working near the neck, avoid pushing on the cervical vertebrae. Use gentle support and focus on muscle or groove areas. This protects the client’s spinal cord and joints. A good mental image is to treat the spine as a delicate “no-fly zone” – you massage around it, not on it.
- **Be Cautious with the Kidney Area:** The kidneys are located roughly in the mid-back (either side of the spine, under the lower ribs). *Do not apply deep percussion or heavy kneading over the kidneys.* Too much pressure here can cause discomfort or injury to these organs. If you’re doing massage around that area, use only light effleurage or very gentle palm pressure. Instead, focus deeper work a bit lower (low back) or above (mid-back) where thick muscle is present. Always err on the side of less pressure if you’re unsure about what lies beneath an area.
- **Mind Existing Injuries or Conditions:** Before the massage, inquire if the client has any spinal injuries, surgeries, herniated discs, osteoporosis, or other medical conditions. These conditions require modifications – for example, in osteoporosis one should avoid strong pressure or twisting of the spine, and in disc herniation one should avoid extreme extension or heavy pressure on affected segments. If a certain movement or posture causes the client sharp pain, stop immediately. **Kalari massage is complementary**, not a replacement for medical care – if a client has serious structural issues (e.g. fracture, severe scoliosis, spinal tumor, etc.), they need a doctor’s clearance and likely more specialized intervention. Massage should be within the comfortable limits of the client’s condition. Remember that while massage can greatly help muscular and mild orthopedic pains, it should not be used to “fix” acute injuries or severe pathologies on your own.
- **Communication and Pain Levels:** Maintain good communication. Ensure the client knows they should speak up if anything hurts or is uncomfortable. A common guideline is to aim for a pressure that might be described as a “good hurt” (therapeutic discomfort that the client can relax into) and never a painful or intolerable sensation. If you notice the client tensing up, wincing, or holding breath, immediately lighten up or check in. Kalari Uzhichil can



sometimes involve intensity (especially at marma points), but an advanced therapist knows to balance intensity with compassion. Pain that makes a client tighten will defeat the purpose of relaxation. When in doubt, use less pressure or spend more time warming the area. **Never force a movement or stretch** – joints of the spine and shoulders should be moved within normal range; avoid any jerky or high-velocity adjustments (leave that to chiropractors).

- **Proper Draping and Professional Boundaries:** Even though this is a training context, always uphold professional standards of draping and privacy. The gluteal cleft and breast areas should remain covered; if you need to work near the glutes or lateral chest, secure the sheet appropriately. Explain techniques if they might seem unusual to the client (e.g. if you plan to do a stepping massage or use feet, etc., make sure they are informed and consent). This ensures the client feels safe and can fully relax. Safety also includes emotional safety – respect the client's comfort level.
- **Therapist Self-Care:** As emphasized, use correct body mechanics at all times to prevent self-injury. If you feel strain in your back or wrists, pause and adjust your posture. Do not overwork your thumbs or any one part of your body. Take breaks between sessions to stretch your own body. Keep your nails trimmed (to avoid scratching the client) and any jewelry removed. Work around the table in a tidy area to avoid tripping. Stay hydrated and use good hygiene (oil can make floors slippery, so clean any spills promptly to prevent falls). A healthy therapist translates to safer practice for clients too.
- **Hygiene of Oils and Temperature:** Make sure the oil you use is clean and at a safe temperature (warm, never hot enough to burn). Test oil temperature on your inner forearm before applying to the client. Some herbal oils can stain or have strong smells – inform the client and ensure no allergies to ingredients. After the massage, wipe off excess oil so the client doesn't slip getting off the table. If doing any *kizhi* (herbal poultice) or heat therapy as part of advanced practice, test the temperature and monitor skin to prevent burns. Keep the room warm enough that the client doesn't get chilled when uncovered, but not overly hot to cause dizziness.
- **Emergency Awareness:** Although rare in massage, be aware of any signs of the client feeling unwell – such as dizziness, nausea, or sudden pain. If a client, for example, experiences a headache or becomes lightheaded (perhaps due to detox or drop in blood pressure from relaxation), have them slowly sit up and drink water, and stay with them until they normalize. If any severe symptom or injury occurs (fainting, etc.), be prepared to call for medical help. This is extremely uncommon, but an advanced practitioner stays calm and prepared. Additionally, avoid massaging someone who shouldn't receive it – contraindications include high fever, severe illness, or acute injury – as it might worsen their condition.
- **Marma Caution:** While marma therapy is powerful, incorrect handling of certain marma points can cause adverse effects (Ayurvedic texts mention injury to certain marmas can be dangerous). In practice, always use gentle, attentive pressure on known sensitive marma points. For example, **Kati Marma** (low back) and **Stanamula** (near chest, in women) are sensitive areas – avoid deep pressure there. Never strike a marma point; in Kalari martial art, marmas are targets for harm, but in therapy we aim to heal, so we treat them with respect. If you are not sure about a marma, it's safer to use mild circular massage over it than a direct hard press. With advanced training (later lessons) you'll learn specific marma activation techniques – for now, stick to the basics and do no harm.

By adhering to these safety guidelines, you ensure that your back massage sessions are **effective, enjoyable, and risk-free** for the client, while also safeguarding your own well-being as a therapist. Kalari Uzhichil, performed with knowledge and care, is a healing art – and safety is the foundation of healing. Always remain mindful and you will continue to build trust and achieve great results in your practice.