



APEX 45 TRIPLE WAVELENGTH LASER SYSTEM

PROTOCOL MANUAL

INTRODUCTION	6
WHAT TO EXPECT	7
EQUIPMENT PARAMETERS	8
WAVELENGTH - THE "MEDICINE" OF PBM THERAPY	8
PULSE SETTINGS	9
POWER - THE QUANTITY AND INTENSITY OF LIGHT	9
CLIENT EVALUATION	11
RATING PAIN	11
RATING RANGE OF MOTION (ROM)	12
TREATMENT TARGETS	13
CHOOSING LASER SETTINGS	14
SPECIAL NOTE	14
RETRACING	14
MUSCLE TRIGGER POINTS	15
TREATMENT TECHNIQUES AND INTERVALS	16
SAFETY	17
CONTRAINDICATIONS AND PRECAUTIONS	18
GETTING STARTED - INITIAL CONSULTATION	19
TREATMENT STEPS	21
POST THERAPY	22
INDIVIDUAL PROTOCOLS	23
HEAD PAIN	24
HEAD PAIN - SINUS	25
NECK PAIN	26
SHOULDER PAIN	27
ARM PAIN - UPPER	28

ARM PAIN - ELBOW	29
LOWER ARM AND WRIST PAIN	30
HAND PAIN	31
BACK PAIN - UPPER	32
BACK PAIN - MID AND LOW	33
BUTTOCK PAIN	34
HIP PAIN	35
UPPER LEG AND GROIN PAIN	36
KNEE PAIN	37
LOWER LEG PAIN	38
ANKLE AND FOOT PAIN	39
NAIL FUNGUS	40
OFF LABEL PROTOCOLS	41
ABDOMINAL PAIN	42
CYSTITIS	43
EDEMA	44
FIBROMYALGIA	45
HAIR REGENERATION	46
NEUROREGENERATION - BRAIN ACUTE INJURY	47
NEUROREGENERATION - BRAIN CHRONIC DEGENERATIVE	48
NEUROREGENERATION - SPINAL CORD - ACUTE INJURY	49
NEUROREGENERATION - SPINAL CORD - CHRONIC DEGENERATIVE	50
NEUROREGENERATION - PERIPHERAL NERVE INJURY ACUTE	51
NEUROREGENERATION - PERIPHERAL NERVE INJURY - CHRONIC	52
ORGANS/GLANDS - CHRONIC DEGENERATIVE CONDITIONS	53
PRE-OP TREATMENT	54

POST OP HEALING	55
SCARS / CONTRACTURES	56
SKIN - ACNE	57
SKIN - ABRASIONS / OPEN WOUNDS	58
SKIN - FINE LINES AND WRINKLES	59
VARICOSE VEINS	60
APPENDIX	62
CONSENT AND INDICATION FORM	63
INTAKE FORM	64
PATIENT EDUCATION FORM: LASER FAQs	70
PATIENT EDUCATION FORM: WHAT IS LASER THERAPY?	71
RECOMMENDED PRICING	72
TREATMENT RECORD	73

INTRODUCTION

Aspen Class IV Laser Therapy is a safe and non-invasive treatment which has been cleared by the FDA to emit photon energy for the relief of minor muscle and joint pain, muscle spasm, pain and stiffness associated with minor arthritis, promoting relaxation of muscle tissue, and increase local blood circulation.

QUESTIONS/VARIATIONS FROM PROTOCOLS

If you have any questions on protocols call your ASPEN Certified Trainer for clarification. If you have any warranty issues, call 877.78.ASPEN immediately. We have a standard Carefree Laser Service Program, which includes an overnight loaner, provided your call is placed within the shipping window.

WHAT TO EXPECT

Every individual responds uniquely to laser therapy treatments.

The variables in number of sessions needed for optimal outcomes are a result of:

1. The equipment parameters

- Wavelength
- Power
- Pulse Settings

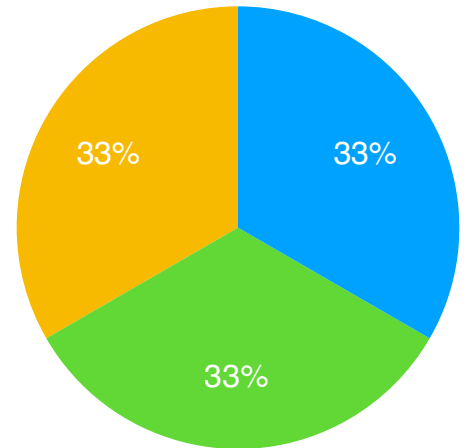
- Client Condition
- Equipment Parameters
- Treatment Techniques

2. The client condition, ie

- how long they have had the condition
- any underlying skeletal dysfunction
- any aggravating factors based on lifestyle

3. The treatment techniques

- the size of the area treated
- the time the area is treated
- the rate at which the hand-piece is moved



There are however common “rules of thumb”. Most patients experience an immediate decrease in pain and an increase in range of motion , with those benefits improving within the first few hours and up to 36 hours from the first treatment.

The overall quality of Laser Therapy is dependent upon multiple factors under control of the therapist. The next section will briefly outline how each factor can affect outcomes and how understanding these principals will allow the therapist to deliver more effective laser therapy more consistently with the client base.

EQUIPMENT PARAMETERS

Proper wavelength, in combination with optimal power, beam size, enables clinicians to safely and effectively deliver significantly higher dosage levels and enhanced abilities that penetrate deeper into cellular tissue for better, longer-lasting results.

WAVELENGTH - THE “MEDICINE” OF PBM THERAPY

Wavelength is the color of the light used, measured in nanometers (nm). The red and near-infrared (NIR) wavelengths stimulate the mitochondria of the body's cells and boost the production of ATP, cellular energy.

Chromophores are components of various cells and sub-cellular organelles which absorb light. Different colors of light are absorbed by different chromophores. The principal chromophore responsible for the beneficial effects of PBM is called Cytochrome C Oxidase. Cytochrome C Oxidase is the terminal enzyme in the Electron Transport Chain, a complex process that drives the creation of adenosine triphosphate (ATP), the energy used by the cell for metabolic processes and cellular functions. In simpler terms, the Electron Transport Chain takes the food that we eat and the air that we breath and creates cellular energy. The oxygen from the air that we breath binds with Cytochrome C Oxidase as the final step in that process.

However, when a cell is diseased or damaged, a molecule that is normally present in small quantities and acts as a cell signaler, Mitochondrial Nitric Oxide (mNO), is produced in much higher quantities and binds with Cytochrome C Oxidase thereby reducing the quantity of oxygen able to attach in turn reducing the production of ATP.

Photobiomodulation is simply the absorption of light in the Red and Near Infrared spectrums by Cytochrome C Oxidase. This photo-disassociates Mitochondrial Nitric Oxide, allowing oxygen attach and resume the process of creating cellular energy.

Once photo-disassociated, these Mitochondrial Nitric Oxide molecules are absorbed by the endothelial lining of local blood vessels resulting in a transient burst of vasodilation and increased local circulation.

Wavelength also determines depth of penetration of light into biological tissue. Significant research has been done to determine how melanin, blood, fat and water absorb light, leading researchers to define a window or range of wavelengths through which light can penetrate biological tissue. This window is referred to as the optical or therapeutic window. The wavelength range of 600 nm to 1100 nm is capable of penetrating the skin and surface tissue and reaching the muscle below.

PULSE SETTINGS

Research suggests that the way light is delivered impacts cellular response; indicating that sequentially pulsed optical energy was more efficacious than the CW mode short and intermittent light delivery might enhance cellular benefits. It also reduces risk for thermal injury.

10 Hz is the most researched pulse parameter, thereby the primary recommended pulse setting in our protocols.

POWER - THE QUANTITY AND INTENSITY OF LIGHT

IRRADIANCE

Power is best defined by intensity rather than simply by quantity (measured in Watts) as the intensity of light affects how the tissue responds. Irradiance (intensity of light) is affected by the area size AND the quantity of light being delivered. The higher the quantity of light delivered to the **same area** in the **same amount of time**, the higher the intensity of the light.

SCATTERING AND THE INVERSE SQUARE LAW

When light penetrates into tissue, it scatters in all directions, thereby increasing the total treatment area. As the area becomes larger, the intensity (irradiance) of the light within that area decreases, therefore the intensity reduces the deeper the light wider and the deeper the light scatters.

TISSUE RESPONSES BASED ON INTENSITY (IRRADIANCE)

PHOTOCHEMICAL

- LEDs and Therapy Lasers set to low power (up to 300 mW/cm²)
- Little to no warming is noted at the surface of the skin
- Stimulates repair in the tissue absorbing the photons
- Can provide photochemical benefits AT THE SURFACE OF THE SKIN **AND** IN TISSUE AT SHALLOW DEPTHS

PHOTOINHIBITORY

- Therapy Lasers set to low to mid power (300mW/cm² - 1000 mW/cm²)
- Photo-inhibitory effects at the surface of the skin and Photo-Stimulatory effects at the deeper tissue targets.
- Mild to moderate warming at the of the skin
- Advantageous when targeting pain nerve fibers and trigger points to provide temporary pain relief

PHOTOTHERMAL

- Focused lasers set to very high irradiance (greater than 1000 mW/cm²)
- Rapid absorption of light particles results in **RAPIDLY HEATING TISSUE**
- **SURGICAL OR ESTHETIC LASERS**

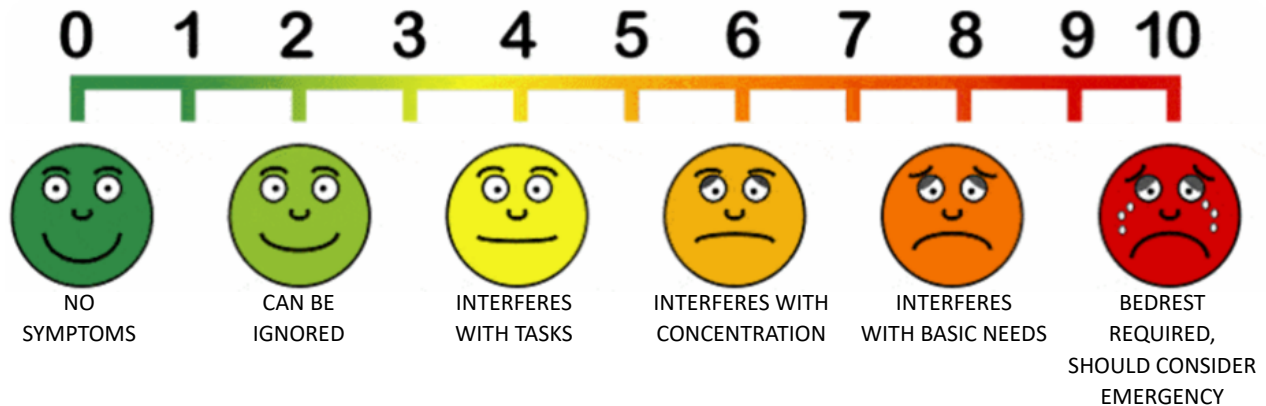
CLIENT EVALUATION

Prior to beginning a Laser Therapy Program, you will need to determine if the condition has been properly evaluated by a health professional. Once that has been established, you will need to document baseline parameters prior to the first therapy so that you can properly track outcomes. You can use the following questions, or any intake form your practice currently uses.

RATING PAIN

1. Before initiating therapy, ask client to point to area of greatest pain AT REST.
2. Ask client to preform movement that will increase pain without causing injury
 1. Note position where pain BEGINS to worsen
 2. Note position where pain is at its greatest without causing re-injury
3. Palpate area and note discomfort in each area that has palpable pain.
4. Note on treatment record.

This pain assessment tool is intended to help patient care providers assess pain according to individual patient needs. Explain and use 0 - 10 Scale for patient self-assessment. Use the faces or behavioral observations to interpret expressed pain and to communicate pain intensity.



<p>0 = NONE, no symptoms</p> <p>1 = VERY MILD, very light, barely noticeable</p> <p>2 = UNCOMFORTABLE, minor, irritating</p>	<p>3 = TOLERABLE, Moderate, however you can adapt</p> <p>4 = DISTRESSING, Strong & deep, like a toothache</p> <p>5 = VERY DISTRESSING, Notice pain all the time</p>	<p>6 = INTENSE, Dominates all your senses some of the time</p> <p>7 = VERY INTENSE, Dominates all your senses at least half of the time</p> <p>8 = HORRIBLE, so intense you can't think clearly at all</p>	<p>9 = UNBEARABLE, so intense you demand pain killers or surgery, no matter the risk</p> <p>10 = UNIMAGINABLE, so intense you will go unconscious shortly</p>
---	--	---	---

RATING RANGE OF MOTION (ROM)

Before initiating therapy, ask client to move affected area in natural range of motion.

1. Stop where pain begins to increase - grade ROM on scale listed below
2. Continue motion until pain causes them to stop - grade ROM
3. Note both on treatment record.

RANGE OF MOTION (ROM) Grading Scale		
0	None	No joint movement
1	Poor	Severe joint restriction
3	Fair	Moderate joint restriction
4	Good	Mild joint restriction
5	Normal	Full ROM - No joint restriction

EVALUATE FOR THE FOLLOWING MOTIONS AS THEY APPLY.

NECK

Flexion
Extension
Right Rotation
Left Rotation

SHOULDER

Flexion
Extension
Abduction
Adduction
Medial rotation
Lateral rotation

ELBOW

Flexion
Extension
Pronation
Supination

WRIST

Flexion
Extension
Radial Deviation
Ulnar Deviation

HIP

Flexion
Extension
Abduction
Adduction
Medial rotation
Lateral rotation

KNEE

Flexion
Extension

FOOT

Dorsiflexion
Plantarflexion

FINGERS AND TOES

Flexion
Extension
Medial deviation
Lateral deviation

TREATMENT TARGETS

Muscle, Tendon, Ligament	Pulsed 10 Hz	Release Trigger Points, Reduce Inflammation and Stimulate Healing
Injured tissue	Pulsed 10 Hz	Reduce Inflammation and Stimulate Healing
Lymph Nodes	Pulsed 10 Hz	Reduce Congestions and Stimulate Immune Response
Nerve Pathways	Pulsed 10 Hz	Reduce Inflammation and Stimulate Healing
Nerve Pathways	Continuous	Inhibit/down regulate
Spinous Process	Continuous	Inhibit/down regulate Nerve Pathways (Dermatome)
Sinuses	Pulsed 10 Hz	Reduce Inflammation and Stimulate Healing
Brain	Pulsed 20, 40, 50 Hz	Reduce Inflammation and Stimulate Healing

Watt	Pulse	Protocol	Intention	Target Example
5	10 Hz	5W 10Hz Off Skin	Stimulation	Off Skin - Tissue Repair
7	10 Hz	7W 10Hz 0-1 cm	Stimulation	On Skin - Tissue Repair
10	10 Hz	10W 10Hz 1-2cm	Stimulation	Shallow tendon
15	10 Hz	15W 10Hz 2-3cm	Stimulation	Sinuses Shallow Ligament Med depth Tendon Lymph Nodes
20	10 Hz	20W 10Hz 3-4 cm	Surface inhibition Deep tissue stimulation	Small Muscles Deep Tendons Deep Ligaments
25	10 Hz	25W 10Hz 4-5 cm	Surface inhibition Deep tissue stimulation	Medium Muscles Deep Ligaments
30	10 Hz	30W 10Hz 5-6 cm	Surface inhibition Deep tissue stimulation	Large Muscles Deep Ligaments
35	10 Hz	35W 10 HZ 5-6 cm	Surface inhibition Deep tissue stimulation	Large Muscles Deep Ligaments Use with Extreme Caution
15	50 Hz	15W 50 HZ	Stimulation	Cognitive Health
10	CONT	10 - 10W CONT	Inhibition	Spinous Process

CHOOSING LASER SETTINGS

When determining Power setting - your primary consideration is depth of target. As long as you keep the other treatment techniques consistent, the 2 questions you need to ask are

1. What is my intention?
 1. Stimulation of healing (Pulsed)
 2. Inhibition of nerve pathways (Continuous) USE DERMATOME CHART
2. How deep is my target in cm?

SPECIAL NOTE

For people the following qualifications, **start with Power Setting 1 level below Standard Setting**

1. Neuropathy
2. Seniors with fragile skin or reduced muscle mass
3. Children younger than 5
4. Indications of nerve compression - Radiculopathy or numbness and tingling
5. Light sensitive people - ie Irish or Scottish descent

As long as they tolerate the therapy with out a retracing episode, the next session can be standard settings.

RETRACING

Some clients that are being treated for chronic conditions may experience "Retracing" after initial therapy. This is typically a condition moving very quickly from a chronic to acute state in the healing process. It is a positive result, however they may experience more pain that evening or next day, even after experiencing pain relief from first treatment.

Always inform clients after 1st treatment that Retracing is possible

If retracing occurs, instruct client they should use an ice pack on the affected area..

1. 5 minutes per 30 minutes no more than 5 minutes at a time
2. Repeat as necessary over then next 24 hours
3. Very important to get treated again within 24 hours.

Most common in clients with "nerve pain" - radiating pain, numbness, tingling etc.

Rare in lower extremities, more common in neck and upper extremities. Use cation (lower setting) on initial treatment if you suspect retracing may occur. As long as they tolerate the therapy with out a retracing episode, the next session can be standard settings.

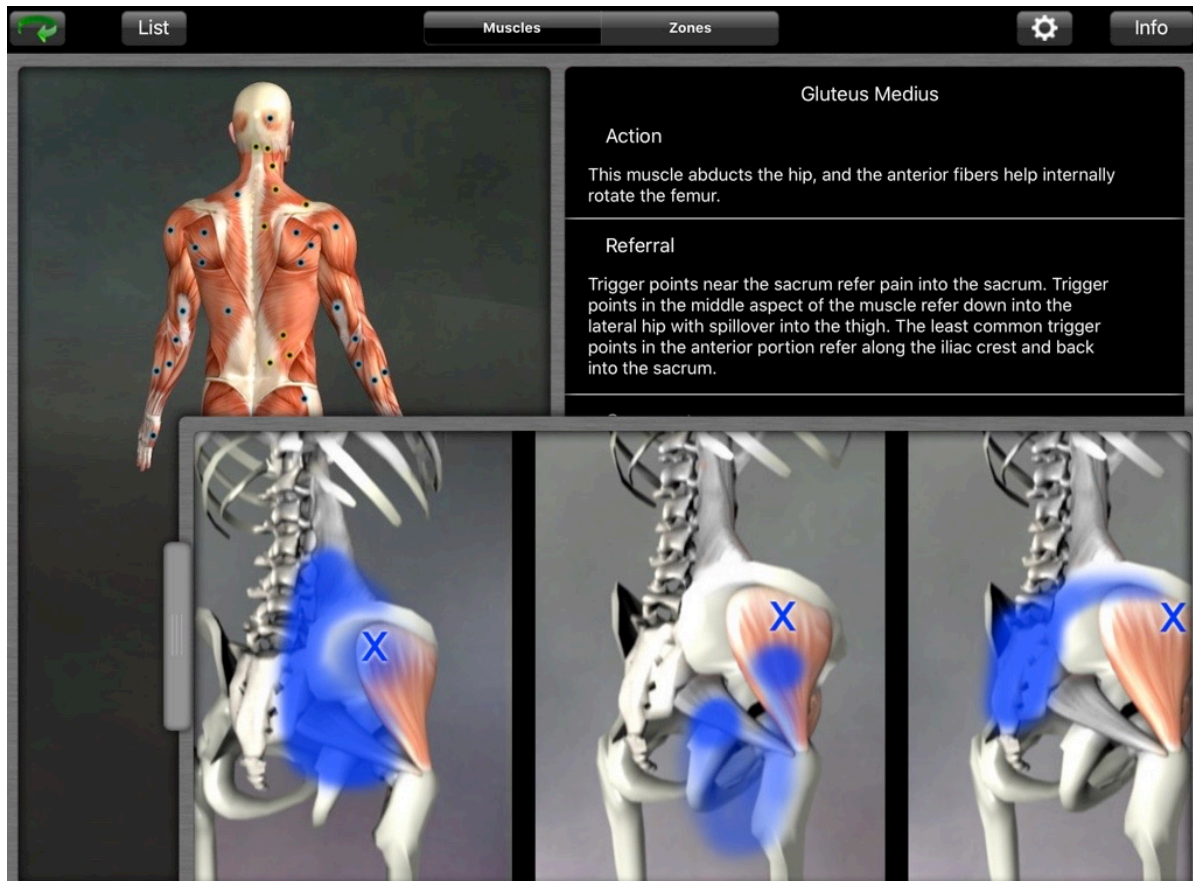
MUSCLE TRIGGER POINTS

Myofascial trigger points (MTrPs), also known as trigger points, are described as hyperirritable spots in the skeletal muscle. They are associated with palpable nodules in taut bands of muscle fibers.

Compression of a trigger point may elicit local tenderness, referred pain, or local twitch response. The local twitch response is not the same as a muscle spasm. This is because a muscle spasm refers to the entire muscle contracting whereas the local twitch response also refers to the entire muscle but only involves a small twitch, no contraction.

Dr Janet Travel, author of Myofascial Pain and Dysfunction, identifies a trigger point as a hyper irritable neuromuscular point that is painful when compressed, and is associated with dysfunctional neurological reflex circuits. Put simply this is an area that gets so irritated that the body misinterprets the signal, causing the person to feel as if the pain is going from somewhere else. About 70% of the time an area will refer pain to a predictable spot, and these are shown on trigger point charts.

The image below is from an extremely helpful tool called Muscle Trigger Point Anatomy authored by Janet Travell which shows examples of the most common trigger points and their associated referred pain locations. It can be downloaded for any android or apple phone, tablet or computer.



TREATMENT TECHNIQUES AND INTERVALS

Technique is the most important component to successful outcomes as they affect dose and tissue saturation.

As mentioned previously, size of treatment area and time are components of dosing. Therefore rate of movement of hand-piece, the size of the area being treated and the total time the light is delivered all affect total dose.

- The faster the pace, the lower the dose being delivered that particular area
- The faster the pace, the more shallow the depth of penetration.
- The larger the treatment area, the lower the dose being delivered into that treatment area.

TREATMENT AREA SIZES

3" x 5" All Musculoskeletal conditions

2" x 7" Long narrow targets ie: Spine or Achilles Tendons

5" x 7" Off skin and 0-1cm deep targets. IE: Tattoos, wounds, bruises, fine lines and wrinkles.

TREATMENT TIMES

1. If pain < 5 on initial presentation, begin with 2.5 min, then recheck every 2.5 min
2. If pain \geq 5 on initial presentation, begin with 5 min, then recheck every 2.5 min
3. Treat until pain 1 or less - maximum 10min per treatment area
 - 5 min / treatment area is most common
 - 7.5 min / treatment area occasionally necessary
 - 10 min / treatment area rare
4. If pain remains unchanged after recheck 2 times consecutively, move to different location

TREATMENT RATE OF MOVEMENT

Always keep hand-piece moving as slowly as possible - client should feel gentle warming, however never uncomfortable heat. This ensures deepest possible depth of penetration.

Check with client every 1-2 minutes to ensure area not getting too warm. Remind them "hot" is not acceptable, and will actually not work as well.

If client unable to feel heat, or has reduced sensation due to neuropathy, move handpiece slightly faster and use setting 1 level below "normal" for that target depth.

TREATMENT PATTERN OF MOVEMENT

1. Always keep hand-piece in direct contact and flat against skin unless otherwise noted in protocol to reduce reflection which reduces dose being delivered.
2. Treat in a Grid pattern - Left to right...or... top to bottom within the treatment area.
3. Allows light to be uniformly distributed across treatment area.
4. DO NOT TREAT IN A CIRCULAR PATTERN!

SAFETY

1. Never allow untrained personnel to operate this device unless directly supervised by a properly trained and experienced individual. Per state requirements, the Laser System should never be used by someone that has not been trained on the proper safety and protocol guidelines. Anyone operating the laser must have proper training by an ASPEN Certified Trainer ONLY. If you have a new Laser Technician or Medical Professional within your practice, call 877.78.ASPEN or the ASPEN Certified Trainer who did your training to get them trained and certified. (Fees will apply)
2. Please read the Safety Section of the Users Manual before operating this equipment.
3. Protective eyewear is necessary at all times during the treatment, this includes both the patient and the administrator. Safety Goggles should not be removed until the administrator of the laser has turned off the laser treatment and provided notification that it is safe to remove them. It is advised to remove reflective objects, such as rings, metal watchbands and jewelry prior to treatment with the laser.
4. Select a secure, properly equipped and well-ventilated location in which to install and operate the laser.
5. Place "Laser in use" signs at location entrances where people will use the Aspen Laser System.
6. Never leave this device in the READY mode unattended. See the STANDBY to READY Mode in the Operations section of this manual.
7. Remove the key from the device's key switch when not in use to prevent unauthorized and/or unqualified use of the device as well as inadvertent laser emissions.
8. During any laser procedure, do not allow any nonessential personnel into the treatment area.
9. Designate at least one person at each facility that utilizes this device as laser safety supervisor, responsible for providing training on all operating and safety procedures.
10. All patients must sign the provided Patient Consent Form provided in the APPENDIX. This form must be reviewed by the Health Care Professional before treating the patient.
11. Each Laser Treatment must be performed in a closed room. This designated room must have the provided "WARNING Sign" posted on the outside of the door of this room. It should be removed when laser is not in operation.

CONTRAINDICATIONS AND PRECAUTIONS

CONTRAINDICATIONS

1. Eyes - Direct Viewing of Laser Beam: This laser emits near infrared laser energy that is invisible to the human eye and can be an extreme hazard to the eye if directly viewed or exposed to reflected laser energy. Protective eyewear is necessary at all times during the treatment, this includes both the patient and the administrator. Safety Goggles should not be removed until the administrator of the laser has turned off the laser treatment and provided notification that it is safe to remove them. It is advised to remove reflective objects, such as rings, metal watchbands and jewelry prior to treatment with the laser.
2. Cancer - Do not treat over known or suspected cancerous lesions. For example: If a client has an active diagnosis of bone cancer, so not treat over spine or tissue that covers shallow bone ie shins, elbows, etc. Refer client to his / her oncologist for permission to use for palliative care prior to beginning therapy.
3. Pregnancy - Do not treat over Uterus. Laser may be used over any other part of the body as appropriate.
4. Do not treat over any material - ie clothing, dressings, gauze etc as these block absorption of light and will eliminate benefits.

PRECAUTIONS

Additional information must be gathered prior to making a decision if laser therapy is appropriate, or where it must be used with additional care.

1. Implanted devices such as Pacemaker, nerve stimulator, defibrillator etc: Laser treatments should not be performed directly over or within a 3" radius. There are NO Contraindications for treating over directly over the spine or surgically implanted metal such as pins, plates, cages, or stents.
2. Photosensitizing medications: A test spot should be performed and evaluate in 1-2 hours prior to completing a full therapy.
3. Tattoos can be treated, but treatment technique must be adjusted due to the high absorption rate of the tattoo ink.
4. Post Op stitches, glue, steri-strips or staple: The incision line will heal very quickly and stitches and staples can be difficult to remove. The adhesive in steri-strips can heat up quickly under laser therapy and cause a burn.

GETTING STARTED - INITIAL CONSULTATION

1. **WHILE IN THE WAITING ROOM:** Ask client to review What is Laser Therapy form, Laser FAQs form, then complete the Consent and Contraindication Form and Intake Form. (See Appendix)

2. GREET CLIENT, ASK “WHAT ARE WE WORKING ON TODAY?”

Encourage client to allow you to rate pain and ROM and begin treating asap so as much time available as possible for therapy. Reassure them you will answer all of their questions while treating.

3. RATE PAIN

1. At rest

2. With ROM

1. ROM that activates the condition but does not increase injury.
2. Ask them to let you know when the pain increase
3. Always stop before ROM will worsen the condition.
4. Use this to Rate ROM (See page 12)

3. With Palpation

1. Identify areas that are worse with palpation
2. Refer to individual protocols for guidance on where to palpate.

4. BEGIN THERAPY AS OUTLINED IN PREVIOUS SECTION

5. EXPLAIN GOAL OF INITIAL SESSION

Explain that initial goal is to reduce pain and improve ROM by at least 50%. If that can be accomplished, consistent care over 2-3 weeks will greatly improve condition.

IMPORTANT: Explain to the client that it **DOES NOT MATTER how long the relief lasts**. The only factor that matters as it relates to overall outcomes is that the condition can be improved during the therapy. Benefits are cumulative. Relief will last longer with each subsequent visit as the components contributing to pain are addressed. (IE, trigger points, inflammation, tissue healing etc) 2-3 weeks of therapy is required for sustainable outcomes

6. SET EXPECTATIONS FOR OUTCOMES

Explain typical therapy program is like peeling back layers of an onion. As each layer (root cause) is reduced/healed,, pain relief lasts longer and longer.

Explain the rate of improvement AND how fully the condition can be expected to improve is dependent upon Human Variables:

1. How long they have had the condition
 - The longer they have had it, the longer it may take for best outcomes
2. What is causing the condition
 - Underlying disease
 - Underlying skeletal dysfunction
 - Lasers address soft tissue, cannot fix skeletal dysfunction. That requires adjustment, surgery.
 - Lasers can manage the symptoms caused by dysfunction.
3. Consistency / compliance by client. Treatment intervals are set with purpose. Therapy triggers healing, which is cumulative. Large gaps (greater than 2 days) between care reduces overall outcomes.

7. EXPLAIN HOW LASER THERAPY WORKS

1. Much like photosynthesis, our cells absorb light of particular colors to displace a molecule that blocks oxygen absorption at the cellular level which increases inflammation and oxidative stress. If left unresolved Oxidative Stress can damage cells. PBM displaces the molecule, and the blood vessels absorb in, resulting in increased

circulation. This allows cells to begin to repair as they are programmed to do, resulting in cell specific cellular responses:

- Reduction of inflammation at the cellular level
- Increased circulation
- Increased energy production inside cell
- Increased rate and quality of tissue repair
- Reduction of pain through the healing process OR through down regulation of nerves

8. SET EXPECTATIONS FOR TREATMENT TIMES:

1. Each visit is typically 15 minutes.
2. The client should be on time so as to not lose any of their therapy time.
3. Client should come with clothing that allows access to the area needing to be treated. Loose fitting clothing essential to therapy that protects client privacy.

9. SET EXPECTATIONS FOR TREATMENT INTERVALS:

1. Therapies ideally are delivered 2 days in a row then very other day as scheduling allows
2. Therapies must be delivered minimally 2 x per week to be effective.
3. 2-3 weeks of therapy is typically required for sustainable outcomes
 1. Acute conditions less than 6 weeks old typically take 2-3 weeks for quality long term outcomes
 2. Chronic conditions typically take 2-3 weeks for long term quality outcomes then are placed on maintenance phase

10. EXPLAIN MAINTENANCE PHASE

1. Chronic conditions with underlying mechanical dysfunction typically need to ongoing care with treatments as needed based on their lifestyle. This is unique to each client, and the sooner a client returns for care when pain begins to return, the faster it will respond.
 1. If client returns when symptoms begin to recur, 1-2 sessions will return them to maintenance
 2. If client lets symptoms fully recur, they may need 6-10 sessions again for best outcomes.

TREATMENT STEPS

1. Identify and rate location of most dominant pain
 - At Rest
 - Through Active Motion without further injuring condition.
 - With palpation - individual protocols will identify areas to palpate with a **X**.
2. Document on treatment record.
3. Ensure laser goggles are worn - use black out goggles as well as laser goggles if treating near eyes.
4. Select setting based on depth of target and intention
 - Use key on individual protocols.
5. Treat most dominant pain first. When that pain is reduced to 1 or less, move to next area. Treat as many areas as possible in time available.
2. Treatment technique:
 - Always keep hand-piece in direct contact and flat against skin
 - Treat with firm pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
 - Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.
6. Treatment time will be outcome based.
 1. Treat in 2.5 min increments, maximum 10 min per treatment area
 - If pain is <5, treat for 2.5 min then re-evaluate pain and ROM.
 - If pain > 5 treat for 5 minutes then re-evaluate pain and ROM..
 2. Repeat as needed until pain scale is at less than 1 at rest, with ROM **AND** with palpation, **OR** until 10 minutes of therapy has been delivered - **WHICHEVER IS FIRST**.
7. Repeat step 1-6 as needed to treat all areas contributing to that condition (as time allows).
 - Treating multiple locations may be appropriate depending on complexity of case. IE - there may be 3-4 painful locations in a shoulder condition.
8. Document FINAL Pain and ROM after therapy complete on treatment record.

SPECIAL NOTE:

A typical treatment appointment is 15 minutes. You may not be able to treat all areas that present with pain in that amount of time. This is why a 2-3 week plan of care is recommended. At each appointment - start where the pain is most dominant at that presentation.

POST THERAPY

Resume normal activity, however do not perform activities known to aggravate condition for at least 2 weeks

If unable to avoid aggravating activities, long term benefits may take longer than if they can reduce aggravating activities for 1-2 weeks.

INDIVIDUAL PROTOCOLS

The ASPEN Laser Systems are FDA CLEARED to emit energy in the infrared spectrum for:

- temporary relief of muscle and joint pain
- temporary relief of muscle spasms
- temporary relief of pain and stiffness associated with minor arthritis
- promoting relaxation of muscle tissue
- temporary increase local blood circulation

The following protocols fall within these FDA approvals of ASPEN Laser Systems.

User License Agreement - By using this manual, you are accepting this agreement

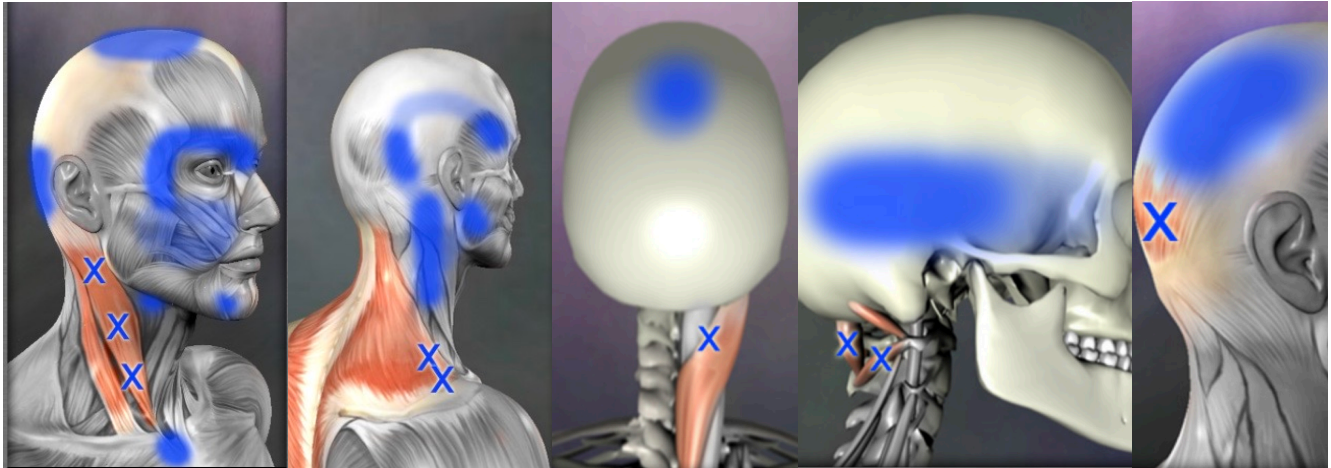
Unless otherwise stated; ALL protocols are based on our current understanding of irradiation and dose parameters (wavelength, power, irradiance, time, pulses, energy and treatment targets) for improving tissue regeneration, reducing inflammation and inducing pain relief. These protocols are updated from time to time.

You must apply your own professional clinical judgment as to whether High Intensity Laser Therapy (HILT) is an appropriate treatment for your patient taking into account the safety and Contraindications guidelines and the medical or other training you have had, only treating conditions you are trained to and insured to treat. Read SAFETY SECTION to review precautions and Contraindications.

These treatment protocols are not presented as a replacement for drugs, surgery or other therapy.

HEAD PAIN

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.



1. Identify location of most dominant pain
2. Ask client to rate pain:
 1. At Rest
 2. Through Active Motion without further injuring condition.
 3. With palpation - **test all areas marked above with X.**
3. Select setting using key below.

KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT	GOAL
X	<p>Treat any X areas with active pain</p> <ul style="list-style-type: none"> • at rest • with motion • with palpation 	20-25W	10 Hz	3x5 or 2x7	2.5 min Max 10 min	Pain ≤ 1

SPECIAL NOTES

1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.
2. For people with Indications of nerve compression (Numbness, tingling, electrical, radiating pain), start with Power Setting **50% below** setting recommended above and treat for **maximum 5 min.**

1. TREATMENT TECHNIQUE:

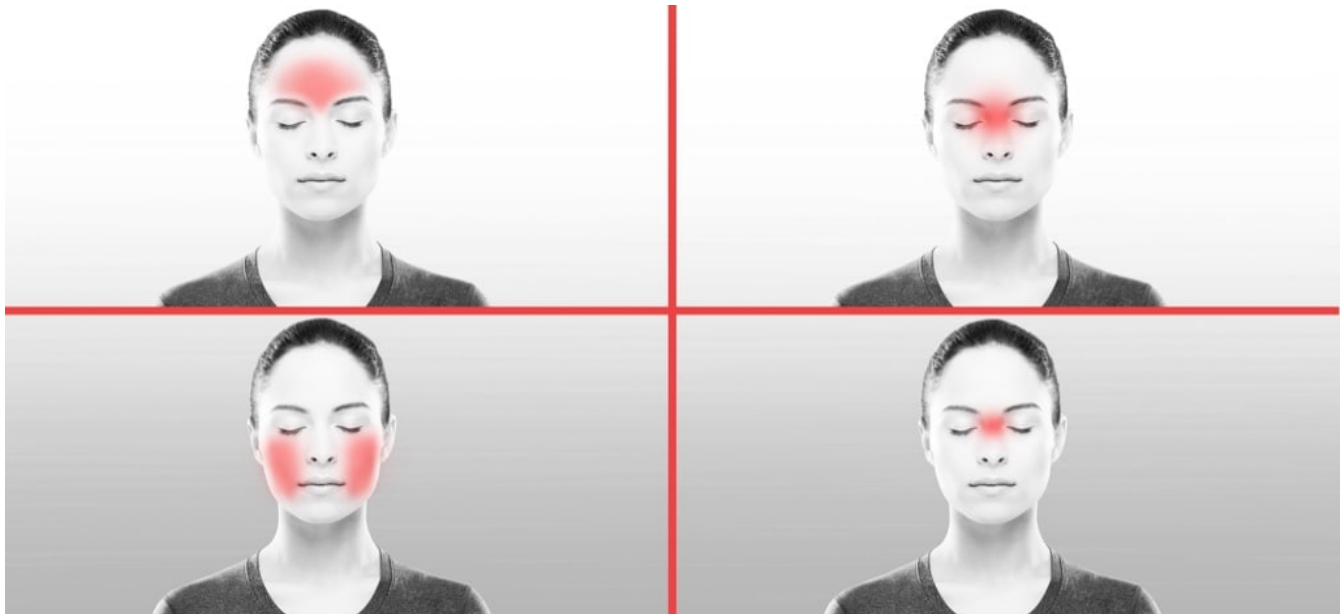
1. Treat most dominant pain first.
2. Always keep hand-piece in direct contact and flat against skin
3. Treat with firm pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
4. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 2 days consecutively then, every other day.
 1. May treat a maximum of 2 x per day.
2. Treat until pain is zero at presentation in all areas with ROM and palpation.
 1. Chronic typically 6-10 sessions.
 2. Acute typically 4-6 sessions

HEAD PAIN - SINUS

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.

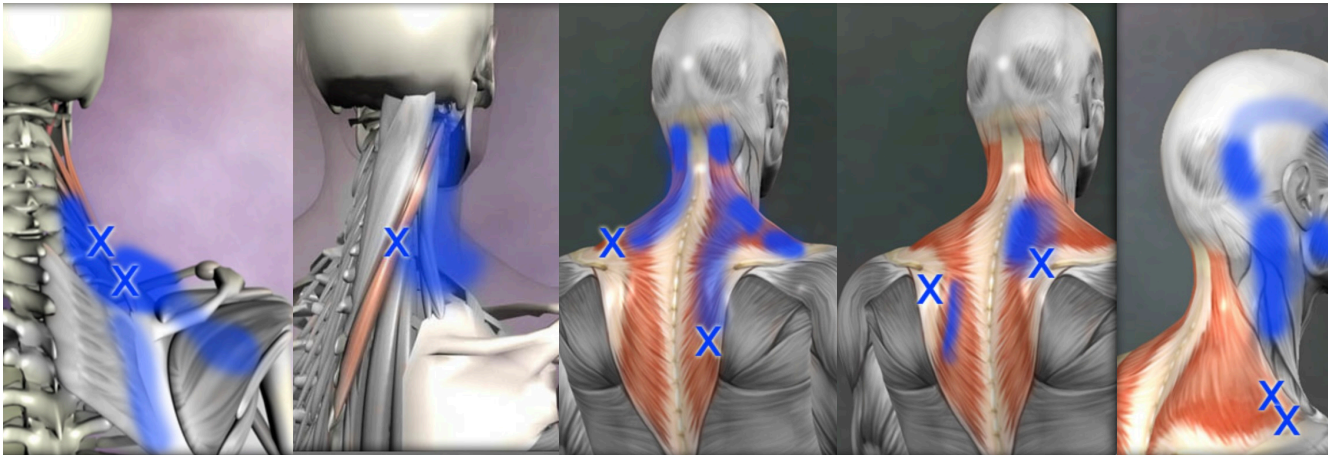


1. Identify location of most dominant pain
2. Ask client to rate pain:
 1. At Rest
 2. With palpation - test all areas marked above with **X**.
3. Select setting using key below.
4. **TREATMENT TECHNIQUE:**
 1. Treat most dominant pain first.
 2. Always keep hand-piece in direct contact and flat against skin
 3. Treat with firm pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
 4. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.
5. **TREATMENT INTERVAL:**
 1. Treat preferably 2 days consecutively then, every other day.
 1. May treat a maximum of 2 x per day.
 2. Treat until pain is zero at presentation in all areas with ROM and palpation.
 1. Chronic typically 6-10 sessions.
 2. Acute typically 4-6 sessions

KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT	GOAL
Red shaded areas	Treat only areas with active pain. Blue X are sites commonly involved.	15 W	10 Hz	3x5 or 2x7	2.5 min Max 10 min	Pain ≤ 1

NECK PAIN

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.



1. Identify location of most dominant pain
2. Ask client to rate pain:
 1. At Rest
 2. Through Active Motion without further injuring condition.
 3. With palpation - **test all areas marked above with X.**
3. Select setting using key below.

KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT	GOAL
X	Treat any X areas with active pain <ul style="list-style-type: none"> • at rest • with motion • with palpation 	25-30W	10 Hz	3x5 or 2x7	2.5 min Max 10 min	Pain ≤ 1

SPECIAL NOTES

1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.
2. For people with Indications of nerve compression (Numbness, tingling, electrical, radiating pain), start with Power Setting **50% below** setting recommended above and treat for **maximum 5 min.**

1. TREATMENT TECHNIQUE:

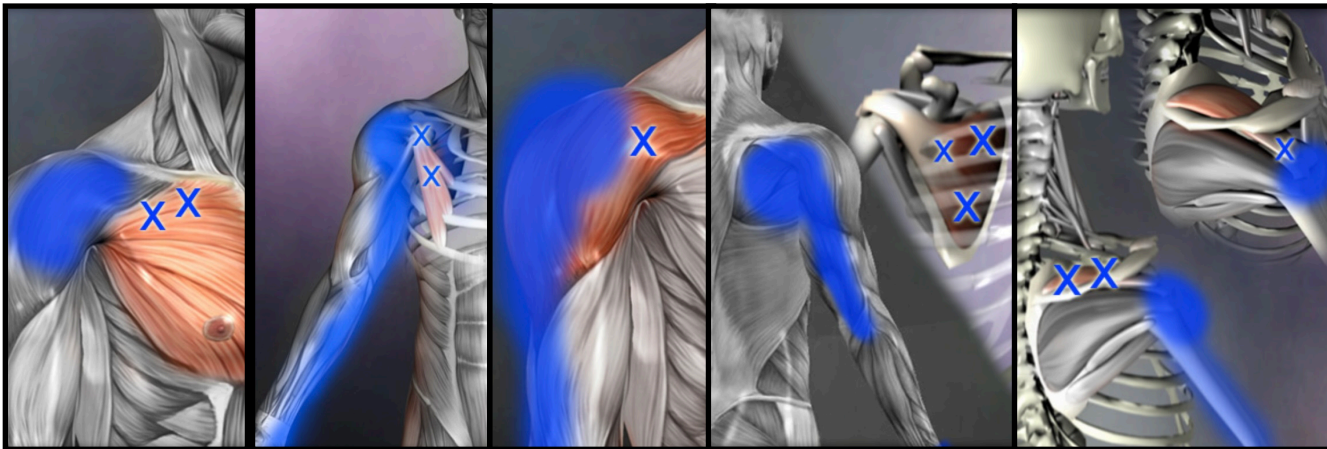
1. Treat most dominant pain first.
2. Always keep hand-piece in direct contact and flat against skin
3. Treat with firm pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
4. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 2 days consecutively then, every other day.
 1. May treat a maximum of 2 x per day.
2. Treat until pain is zero at presentation in all areas with ROM and palpation.
 1. Chronic typically 6-10 sessions.
 2. Acute typically 4-6 sessions

SHOULDER PAIN

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.



1. Identify location of most dominant pain
2. Ask client to rate pain:
 1. At Rest
 2. Through Active Motion without further injuring condition.
 3. With palpation - **test all areas marked above with X.**
3. Select setting using key below.

KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT	GOAL
X	<p>Treat any X areas with active pain</p> <ul style="list-style-type: none"> • at rest • with motion • with palpation 	20-25W	10 Hz	3x5 or 2x7	2.5 min Max 10 min	Pain ≤ 1

SPECIAL NOTES

1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.
2. For people with Indications of nerve compression (Numbness, tingling, electrical, radiating pain), start with Power Setting **50% below** setting recommended above and treat for **maximum 5 min.**

1. TREATMENT TECHNIQUE:

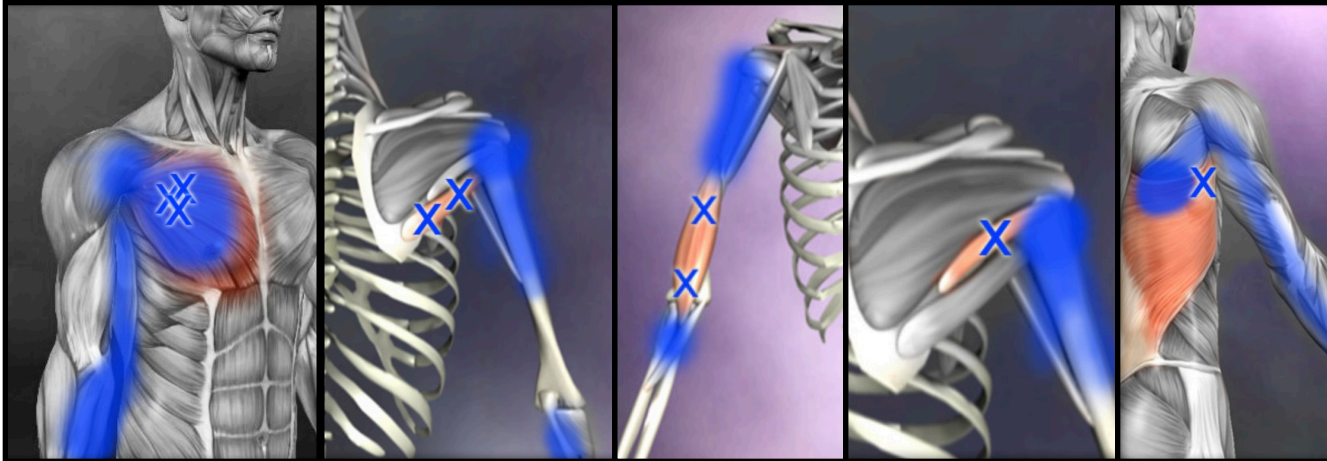
1. Treat most dominant pain first.
2. Always keep hand-piece in direct contact and flat against skin
3. Treat with firm pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
4. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 2 days consecutively then, every other day.
 1. May treat a maximum of 2 x per day.
2. Treat until pain is zero at presentation in all areas with ROM and palpation.
 1. Chronic typically 6-10 sessions.
 2. Acute typically 4-6 sessions

ARM PAIN - UPPER

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.



1. Identify location of most dominant pain
2. Ask client to rate pain:
 1. At Rest
 2. Through Active Motion without further injuring condition.
 3. With palpation - **test all areas marked above with X.**
3. Select setting using key below.

KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT	GOAL
X	Treat any X areas with active pain <ul style="list-style-type: none"> • at rest • with motion • with palpation 	20-25W	10 Hz	3x5 or 2x7	2.5 min Max 10 min	Pain ≤ 1

SPECIAL NOTES

1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.
2. For people with Indications of nerve compression (Numbness, tingling, electrical, radiating pain), start with Power Setting **50% below** setting recommended above and treat for **maximum 5 min.**

1. TREATMENT TECHNIQUE:

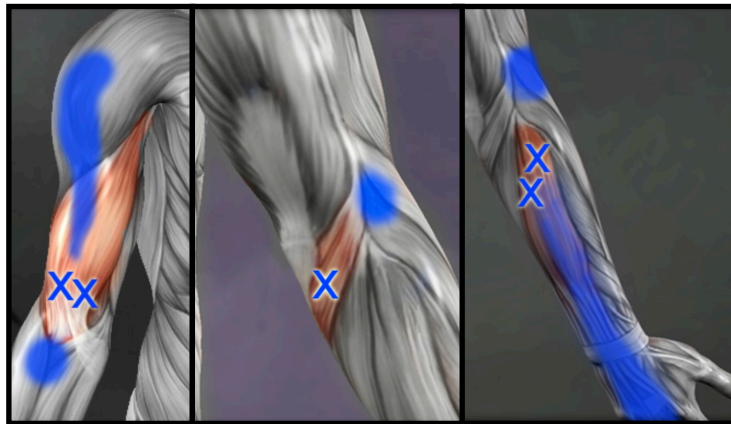
1. Treat most dominant pain first.
2. Always keep hand-piece in direct contact and flat against skin
3. Treat with firm pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
4. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 2 days consecutively then, every other day.
 1. May treat a maximum of 2 x per day.
2. Treat until pain is zero at presentation in all areas with ROM and palpation.
 1. Chronic typically 6-10 sessions.
 2. Acute typically 4-6 sessions

ARM PAIN - ELBOW

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.



1. Identify location of most dominant pain
2. Ask client to rate pain:
 1. At Rest
 2. Through Active Motion without further injuring condition.
 3. With palpation - **test all areas marked above with X.**
3. Select setting using key below.

KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT	GOAL
X	<p>Treat any X areas with active pain</p> <ul style="list-style-type: none"> • at rest • with motion • with palpation 	20-25W	10 Hz	3x5 or 2x7	2.5 min Max 10 min	Pain ≤ 1

SPECIAL NOTES

1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.
2. For people with Indications of nerve compression (Numbness, tingling, electrical, radiating pain), start with Power Setting **50% below** setting recommended above and treat for **maximum 5 min.**

1. TREATMENT TECHNIQUE:

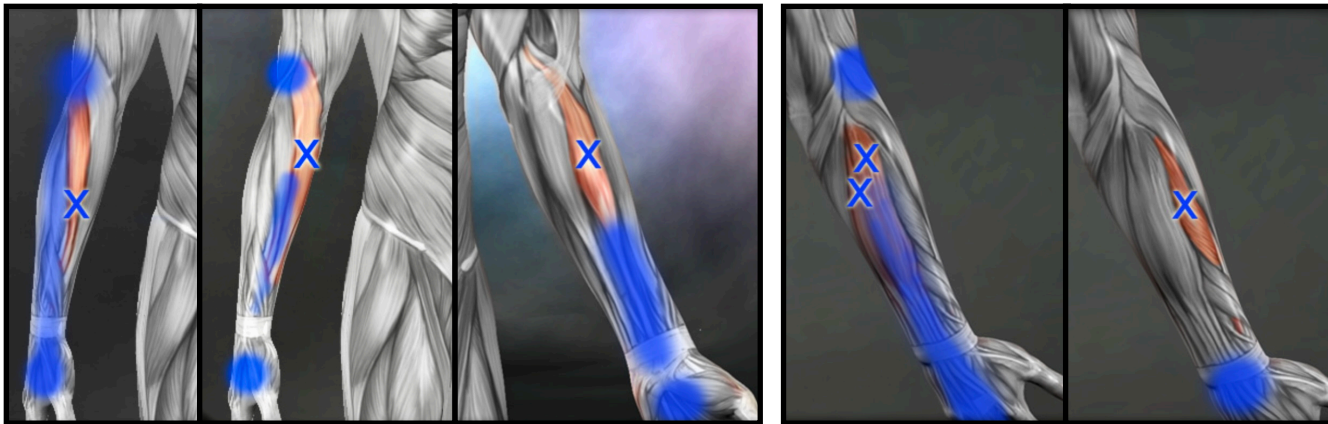
1. Treat most dominant pain first.
2. Always keep hand-piece in direct contact and flat against skin
3. Treat with firm pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
4. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 2 days consecutively then, every other day.
 1. May treat a maximum of 2 x per day.
2. Treat until pain is zero at presentation in all areas with ROM and palpation.
 1. Chronic typically 6-10 sessions.
 2. Acute typically 4-6 sessions

LOWER ARM AND WRIST PAIN

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.



1. Identify location of most dominant pain
2. Ask client to rate pain:
 1. At Rest
 2. Through Active Motion without further injuring condition.
 3. With palpation - **test all areas marked above with X.**
3. Select setting using key below.

KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT	GOAL
X	<p>Treat any X areas with active pain</p> <ul style="list-style-type: none"> • at rest • with motion • with palpation 	20-25W	10 Hz	3x5 or 2x7	2.5 min Max 10 min	Pain ≤ 1

SPECIAL NOTES

1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.
2. For people with Indications of nerve compression (Numbness, tingling, electrical, radiating pain), start with Power Setting **50% below** setting recommended above and treat for **maximum 5 min.**

1. TREATMENT TECHNIQUE:

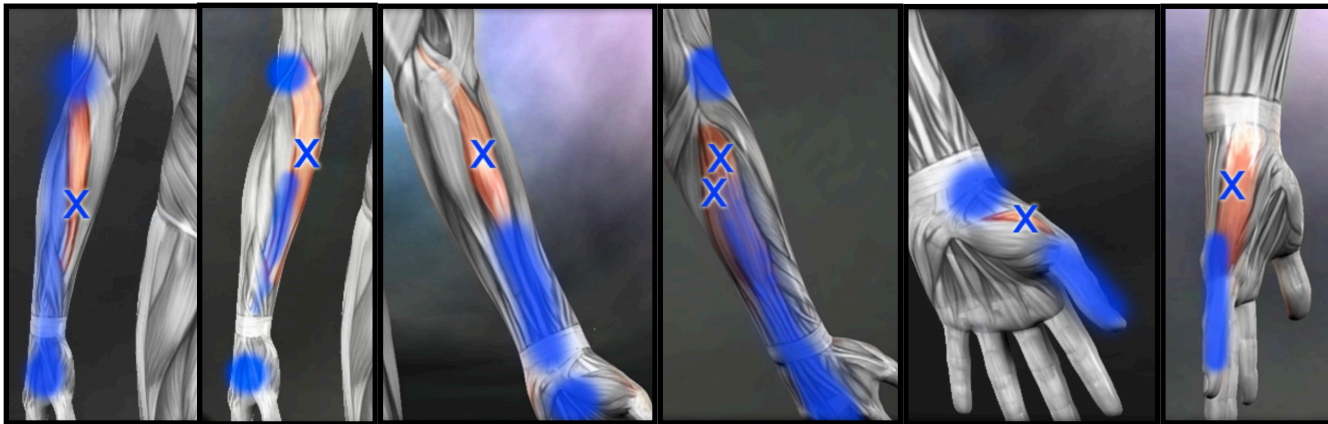
1. Treat most dominant pain first.
2. Always keep hand-piece in direct contact and flat against skin
3. Treat with firm pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
4. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 2 days consecutively then, every other day.
 1. May treat a maximum of 2 x per day.
2. Treat until pain is zero at presentation in all areas with ROM and palpation.
 1. Chronic typically 6-10 sessions.
 2. Acute typically 4-6 sessions

HAND PAIN

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.



1. Identify location of most dominant pain
2. Ask client to rate pain:
 1. At Rest
 2. Through Active Motion without further injuring condition.
 3. With palpation - **test all areas marked above with X.**
3. Select setting using key below.

KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT	GOAL
X	<p>Treat any areas with active pain</p> <ul style="list-style-type: none"> • at rest • with motion • with palpation 	20W	10 Hz	3x5 or 2x7	2.5 min Max 10 min	Pain ≤ 1

SPECIAL NOTES

1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.
2. For people with Indications of nerve compression (Numbness, tingling, electrical, radiating pain), start with Power Setting **50% below** setting recommended above and treat for **maximum 5 min.**

1. TREATMENT TECHNIQUE:

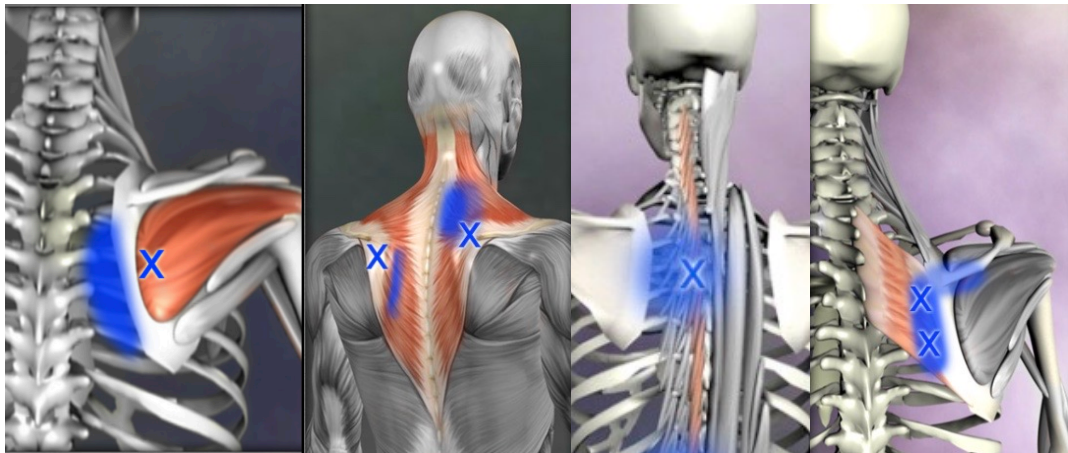
1. Treat most dominant pain first.
2. Always keep hand-piece in direct contact and flat against skin
3. Treat with firm pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
4. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 2 days consecutively then, every other day.
 1. May treat a maximum of 2 x per day.
2. Treat until pain is zero at presentation in all areas with ROM and palpation.
 1. Chronic typically 6-10 sessions.
 2. Acute typically 4-6 sessions

BACK PAIN - UPPER

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.



1. Identify location of most dominant pain
2. Ask client to rate pain:
 1. At Rest
 2. Through Active Motion without further injuring condition.
 3. With palpation - **test all areas marked above with X.**
3. Select setting using key below.

KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT	GOAL
X	<p>Treat any X areas with active pain</p> <ul style="list-style-type: none"> • at rest • with motion • with palpation 	25-30W	10 Hz	3x5 or 2x7	2.5 min Max 10 min	Pain ≤ 1

SPECIAL NOTES

1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.
2. For people with Indications of nerve compression (Numbness, tingling, electrical, radiating pain), start with Power Setting **50% below** setting recommended above and treat for **maximum 5 min.**

1. TREATMENT TECHNIQUE:

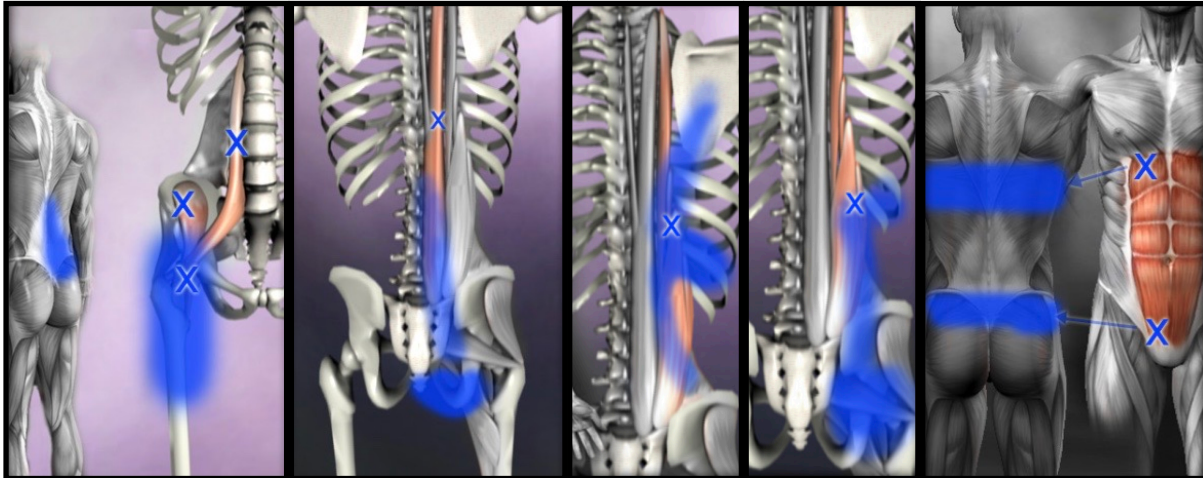
1. Treat most dominant pain first.
2. Always keep hand-piece in direct contact and flat against skin
3. Treat with firm pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
4. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 2 days consecutively then, every other day.
 1. May treat a maximum of 2 x per day.
2. Treat until pain is zero at presentation in all areas with ROM and palpation.
 1. Chronic typically 6-10 sessions.
 2. Acute typically 4-6 sessions

BACK PAIN - MID AND LOW

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.



1. Identify location of most dominant pain
2. Ask client to rate pain:
 1. At Rest
 2. Through Active Motion without further injuring condition.
 3. With palpation - **test all areas marked above with X.**
3. Select setting using key below.

KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT	GOAL
X	Treat any X areas with active pain <ul style="list-style-type: none"> • at rest • with motion • with palpation 	25-30W	10 Hz	3x5 or 2x7	2.5 min Max 10 min	Pain ≤ 1

SPECIAL NOTES

1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.
2. For people with Indications of nerve compression (Numbness, tingling, electrical, radiating pain), start with Power Setting **50% below** setting recommended above and treat for **maximum 5 min.**

1. TREATMENT TECHNIQUE:

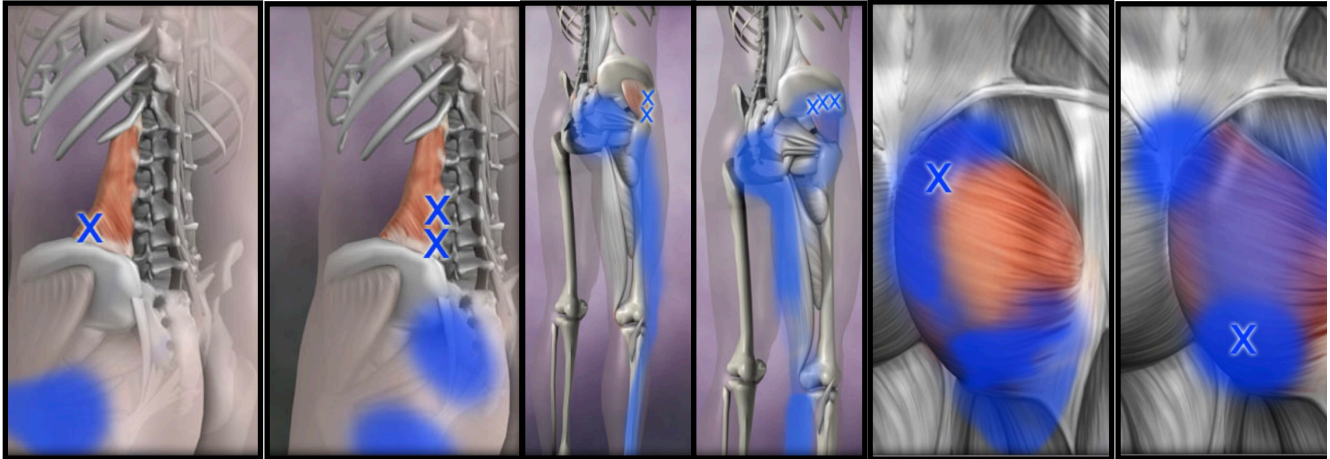
1. Treat most dominant pain first.
2. Always keep hand-piece in direct contact and flat against skin
3. Treat with firm pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
4. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 2 days consecutively then, every other day.
 1. May treat a maximum of 2 x per day.
2. Treat until pain is zero at presentation in all areas with ROM and palpation.
 1. Chronic typically 6-10 sessions.
 2. Acute typically 4-6 sessions

BUTTOCK PAIN

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.



1. Identify location of most dominant pain
2. Ask client to rate pain:
 1. At Rest
 2. Through Active Motion without further injuring condition.
 3. With palpation - **test all areas marked above with X.**
3. Select setting using key below.

KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT	GOAL
X	<p>Treat any X areas with active pain</p> <ul style="list-style-type: none"> • at rest • with motion • with palpation 	30-35W	10 Hz	3x5 or 2x7	2.5 min Max 10 min	Pain ≤ 1

SPECIAL NOTES

1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.
2. For people with Indications of nerve compression (Numbness, tingling, electrical, radiating pain), start with Power Setting **50% below** setting recommended above and treat for **maximum 5 min.**

1. TREATMENT TECHNIQUE:

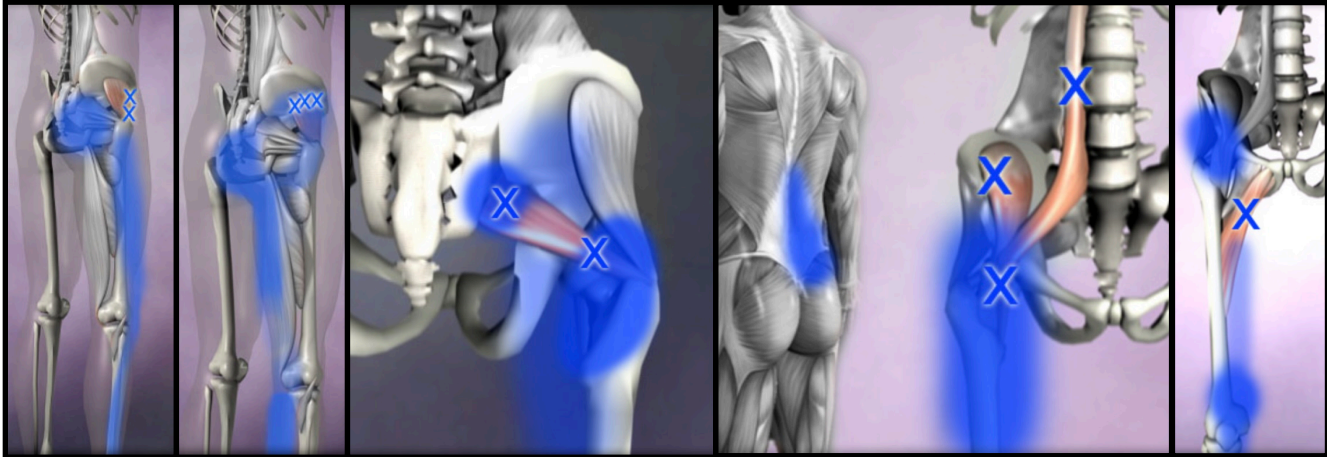
1. Treat most dominant pain first.
2. Always keep hand-piece in direct contact and flat against skin
3. Treat with firm pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
4. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 2 days consecutively then, every other day.
 1. May treat a maximum of 2 x per day.
2. Treat until pain is zero at presentation in all areas with ROM and palpation.
 1. Chronic typically 6-10 sessions.
 2. Acute typically 4-6 sessions

HIP PAIN

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.



1. Identify location of most dominant pain
2. Ask client to rate pain:
 1. At Rest
 2. Through Active Motion without further injuring condition.
 3. With palpation - **test all areas marked above with X.**
3. Select setting using key below.

KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT	GOAL
X	<p>Treat any X areas with active pain</p> <ul style="list-style-type: none"> • at rest • with motion • with palpation 	30-35W	10 Hz	3x5 or 2x7	2.5 min Max 10 min	Pain ≤ 1

SPECIAL NOTES

1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.
2. For people with Indications of nerve compression (Numbness, tingling, electrical, radiating pain), start with Power Setting **50% below** setting recommended above and treat for **maximum 5 min.**

1. TREATMENT TECHNIQUE:

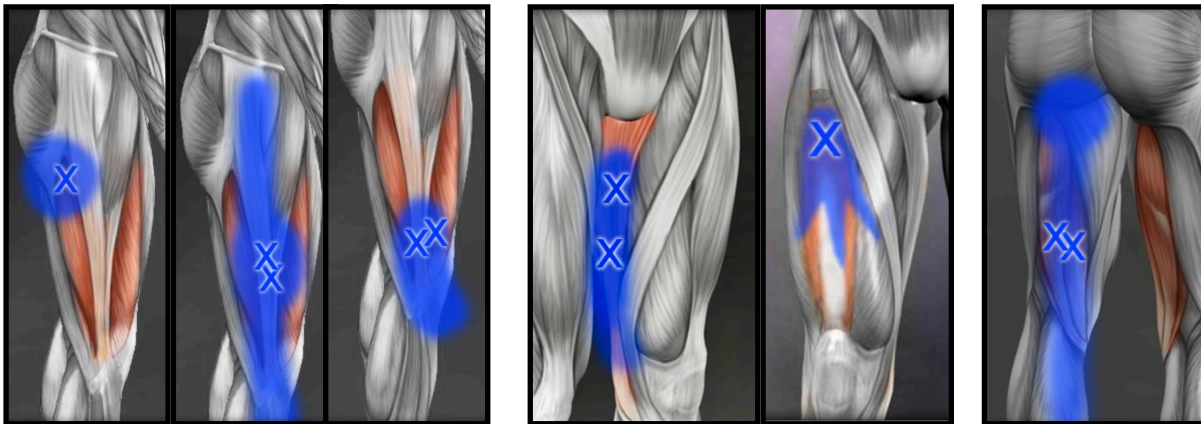
1. Treat most dominant pain first.
2. Always keep hand-piece in direct contact and flat against skin
3. Treat with firm pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
4. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 2 days consecutively then, every other day.
 1. May treat a maximum of 2 x per day.
2. Treat until pain is zero at presentation in all areas with ROM and palpation.
 1. Chronic typically 6-10 sessions.
 2. Acute typically 4-6 sessions

UPPER LEG AND GROIN PAIN

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.



1. Identify location of most dominant pain
2. Ask client to rate pain:
 1. At Rest
 2. Through Active Motion without further injuring condition.
 3. With palpation - **test all areas marked above with X.**
3. Select setting using key below.

KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT	GOAL
X	<p>Treat any X areas with active pain</p> <ul style="list-style-type: none"> • at rest • with motion • with palpation 	30-35W	10 Hz	3x5 or 2x7	2.5 min Max 10 min	Pain ≤ 1

SPECIAL NOTES

1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.
2. For people with Indications of nerve compression (Numbness, tingling, electrical, radiating pain), start with Power Setting **50% below** setting recommended above and treat for **maximum 5 min.**

1. TREATMENT TECHNIQUE:

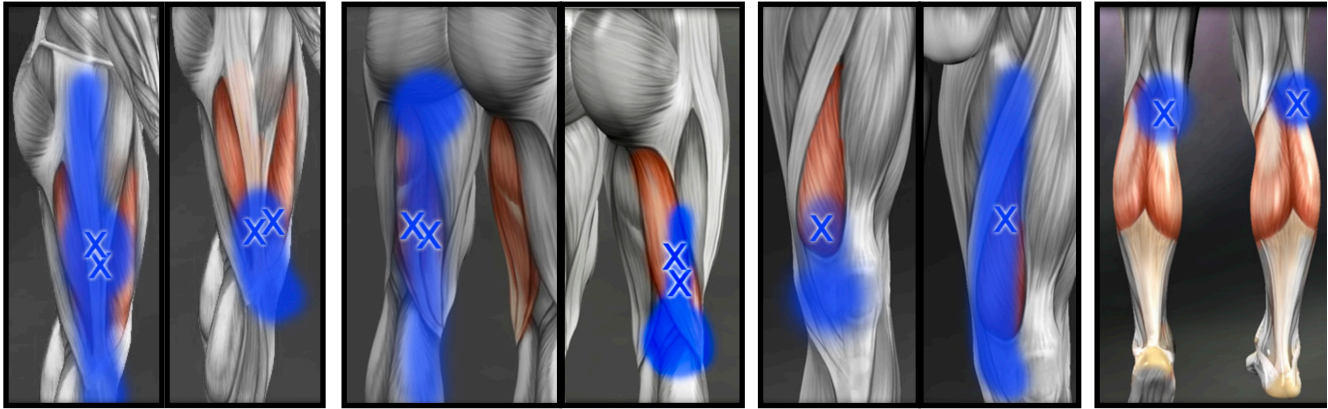
1. Treat most dominant pain first.
2. Always keep hand-piece in direct contact and flat against skin
3. Treat with firm pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
4. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 2 days consecutively then, every other day.
 1. May treat a maximum of 2 x per day.
2. Treat until pain is zero at presentation in all areas with ROM and palpation.
 1. Chronic typically 6-10 sessions.
 2. Acute typically 4-6 sessions

KNEE PAIN

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.



1. Identify location of most dominant pain
2. Ask client to rate pain:
 1. At Rest
 2. Through Active Motion without further injuring condition.
 3. With palpation - **test all areas marked above with X.**
3. Select setting using key below.

KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT	GOAL
X	Treat any X areas with active pain <ul style="list-style-type: none"> • at rest • with motion • with palpation 	20-35W	10 Hz	3x5 or 2x7	2.5 min Max 10 min	Pain ≤ 1

SPECIAL NOTES

1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.
2. For people with Indications of nerve compression (Numbness, tingling, electrical, radiating pain), start with Power Setting **50% below** setting recommended above and treat for **maximum 5 min.**

1. TREATMENT TECHNIQUE:

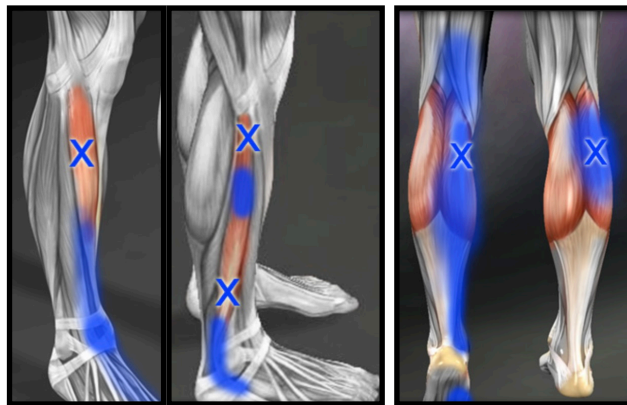
1. Treat most dominant pain first.
2. Always keep hand-piece in direct contact and flat against skin
3. Treat with firm pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
4. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 2 days consecutively then, every other day.
 1. May treat a maximum of 2 x per day.
2. Treat until pain is zero at presentation in all areas with ROM and palpation.
 1. Chronic typically 6-10 sessions.
 2. Acute typically 4-6 sessions

LOWER LEG PAIN

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.



1. Identify location of most dominant pain
2. Ask client to rate pain:
 1. At Rest
 2. Through Active Motion without further injuring condition.
 3. With palpation - **test all areas marked above with X.**
3. Select setting using key below.

KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT	GOAL
X	<p>Treat any X areas with active pain</p> <ul style="list-style-type: none"> • at rest • with motion • with palpation 	20-35W	10 Hz	3x5 or 2x7	2.5 min Max 10 min	Pain ≤ 1

SPECIAL NOTES

1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.
2. For people with Indications of nerve compression (Numbness, tingling, electrical, radiating pain), start with Power Setting **50% below** setting recommended above and treat for **maximum 5 min.**

1. TREATMENT TECHNIQUE:

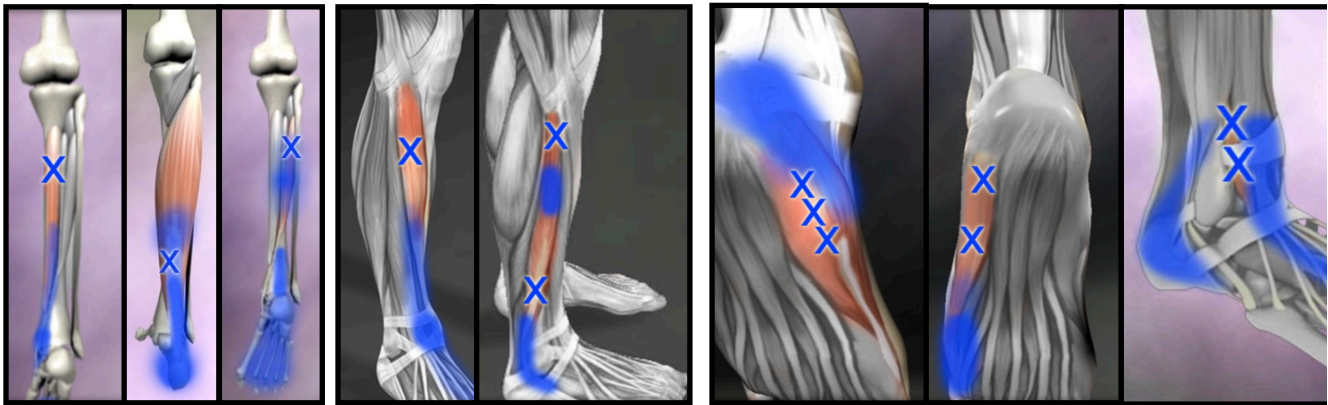
1. Treat most dominant pain first.
2. Always keep hand-piece in direct contact and flat against skin
3. Treat with firm pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
4. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 2 days consecutively then, every other day.
 1. May treat a maximum of 2 x per day.
2. Treat until pain is zero at presentation in all areas with ROM and palpation.
 1. Chronic typically 6-10 sessions.
 2. Acute typically 4-6 sessions

ANKLE AND FOOT PAIN

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.



1. Identify location of most dominant pain
2. Ask client to rate pain:
 1. At Rest
 2. Through Active Motion without further injuring condition.
 3. With palpation - **test all areas marked above with X.**
3. Select setting using key below.

KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT	GOAL
X	<p>Treat any X areas with active pain</p> <ul style="list-style-type: none"> • at rest • with motion • with palpation 	20-35W	10 Hz	3x5 or 2x7	2.5 min Max 10 min	Pain ≤ 1

SPECIAL NOTES

1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.
2. For people with Indications of nerve compression (Numbness, tingling, electrical, radiating pain), start with Power Setting **50% below** setting recommended above and treat for **maximum 5 min.**

1. TREATMENT TECHNIQUE:

1. Treat most dominant pain first.
2. Always keep hand-piece in direct contact and flat against skin
3. Treat with firm pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
4. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 2 days consecutively then, every other day.
 1. May treat a maximum of 2 x per day.
2. Treat until pain is zero at presentation in all areas with ROM and palpation.
 1. Chronic typically 6-10 sessions.
 2. Acute typically 4-6 sessions

NAIL FUNGUS

1. Ensure Consent Form is signed
 2. Ensure client is in a position that is as comfortable as possible.
 3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.
1. Explain to the patient the following:
 1. Only the toes will be treated
 2. The laser treatment is safe with no side effects, and will take just a few minutes for each toe
 3. The laser treatment is very warm, and it is very important the client let the technician know immediately if there is discomfort from heat.
 4. Upon completion of the treatment(s) the patient can resume normal activities.
 5. There will be no immediate change in the condition of the nail. The indicator of success will be the re-growth of new nail in 6 weeks to 3+ month
 2. Make sure shoes are not infected with fungus.

KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT
X	Treat any nail beds that are affected as well as nailed on either side.	7W	CONTINUOUS	Nail Bed	UNTIL NAIL GETS HOT Max 30 seconds

1. TREATMENT TECHNIQUE:

1. Take pictures before treatment
2. Treatment must be delivered directly to the exposed toenail. Do not treat through clothing or bandages.
3. Hold the hand-piece in direct contact with the surface of the toenail. Do not angle the treatment beam.
4. Move the hand-piece semi quickly in a "painting" motion.
5. The hand-piece should be moved at a rate of approximately 1-3 inches per second.
6. When the patient feels thermal discomfort, stop the treatment for 30+45 seconds
7. Repeat 3 x for each nail bed. NOTE - toenail will get hot more quickly with each application.

2. TREATMENT INTERVAL:

1. Treat 2 x in week 1, then 1 x in week 2.
2. Recheck every 6 weeks as toenail grows out.
 - 1.If margins are clean you are finished.
 - 2.If not, repeat process 2 additional times.
 3. If unresolved - refer to podiatrist.

OFF LABEL PROTOCOLS

User License Agreement - By using this manual, you are accepting this agreement

Unless otherwise stated; The treatment protocols in this section of the protocol manual have no regulatory approval in any country and ASPEN has not tested them in controlled clinical trials for safety or efficacy, however these or similar protocols have been used in multiple clinical practices with multiple types of practitioners with great success.

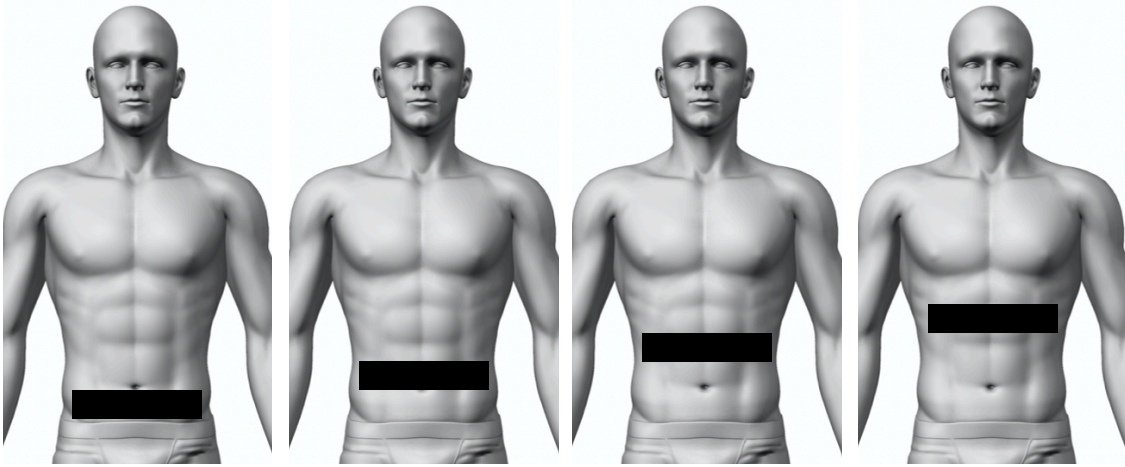
These protocols are considered "OFF USE", in that they do not fall under FDA 510K clearances of the ASPEN Lasers System.

You must apply your own professional clinical judgment as to whether High Intensity Laser Therapy (HILT) is an appropriate treatment for your patient taking into account the safety and Contraindications guidelines and the medical or other training you have had, ***only treating conditions you are trained to and insured to treat***. Read SAFETY SECTION to review precautions and Contraindications.

These treatment protocols are not presented as a replacement for drugs, surgery or other therapy.

ABDOMINAL PAIN

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.



1. Identify location of most dominant pain
2. Ask client to rate pain:
 1. At Rest
 2. Through Active Motion without further injuring condition.
 3. With palpation - **test all areas marked above with X.**
3. Select setting using key below.

KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT	GOAL
X	Treat any areas with active pain <ul style="list-style-type: none"> • at rest • with motion • with palpation 	30-35W	10 Hz	3x5 or 2x7	2.5 min Max 10 min	Pain ≤ 1

SPECIAL NOTES

1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.
2. For people with Indications of nerve compression (Numbness, tingling, electrical, radiating pain), start with Power Setting **50% below** setting recommended above and treat for **maximum 5 min.**

1. TREATMENT TECHNIQUE:

1. Treat most dominant pain first.
2. Always keep hand-piece in direct contact and flat against skin
3. Treat with firm pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
4. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 2 days consecutively then, every other day.
 1. May treat a maximum of 2 x per day.
2. Treat until pain is zero at presentation in all areas with ROM and palpation.
 1. Chronic typically 6-10 sessions.
 2. Acute typically 4-6 sessions

CYSTITIS

User License Agreement - By using this manual, you are accepting this agreement

- **Unless otherwise stated;** The treatment protocols in this section of the protocol manual have no regulatory approval in any country and ASPEN has not tested them in controlled clinical trials for safety or efficacy, however these or similar protocols have been used in multiple clinical practices with multiple types of practitioners with great success.
- These protocols are considered "OFF USE", in that they do not fall under FDA 510K clearances of the ASPEN Lasers System.
- You must apply your own professional clinical judgment as to whether High Intensity Laser Therapy (HILT) is an appropriate treatment for your patient taking into account the safety and Contraindications guidelines and the medical or other training you have had, **only treating conditions you are trained to and insured to treat**. Read SAFETY SECTION to review precautions and Contraindications.
- These treatment protocols are not presented as a replacement for drugs, surgery or other therapy

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.

1. Identify location of most dominant pain
2. Ask client to rate pain:
 1. At Rest
 2. Through Active Motion without further injuring condition.
 3. With palpation - **test all areas marked above with X**.
3. Select setting using key below.



KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT	GOAL
X	Treat any areas with active pain <ul style="list-style-type: none"> • at rest • with motion • with palpation 	30-35W	10 Hz	3x5 or 2x7	2.5 min Max 10 min	Pain ≤ 1

1. TREATMENT TECHNIQUE:

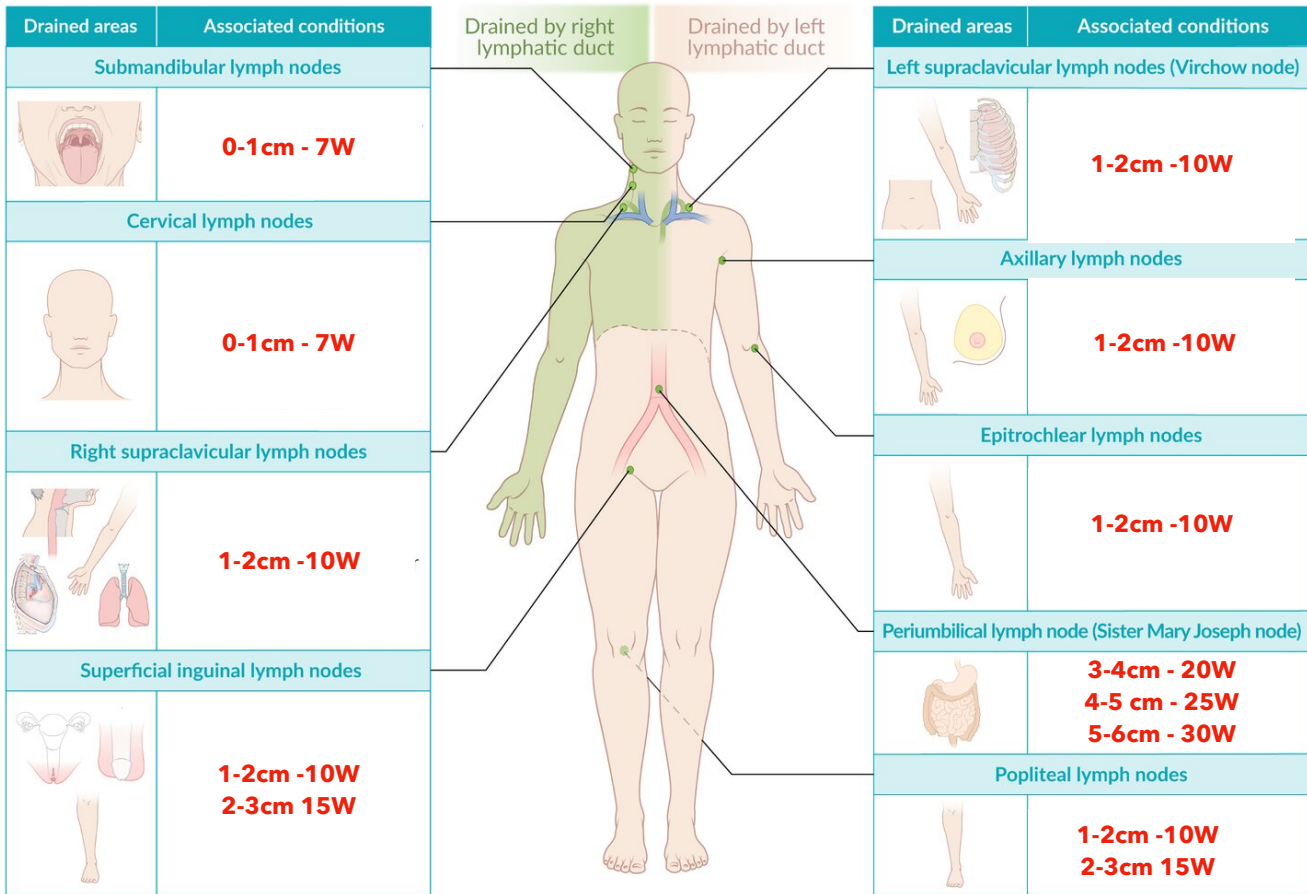
1. Treat most dominant pain first.
2. Always keep hand-piece in direct contact and flat against skin
3. Treat with firm pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
4. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 2 days consecutively then, every other day.
 1. May treat a maximum of 2 x per day.
2. Treat until pain is zero at presentation in all areas with ROM and palpation.
 1. Chronic typically 6-10 sessions.
 2. Acute typically 4-6 sessions

EDEMA

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.



KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT
-----	-----------------	-------	----	----------------	---------------------

	Lymph Nodes that drain the area affected	See Chart above	10 Hz	3x5	1 min
	The area affected	Based on Depth 0-1cm - 7W 1-2cm -10W 2-3cm - 15W 3-4cm - 20W 4-5 cm - 25W 5-6cm - 30W	10 Hz	3x5	1-2 min per treatment area

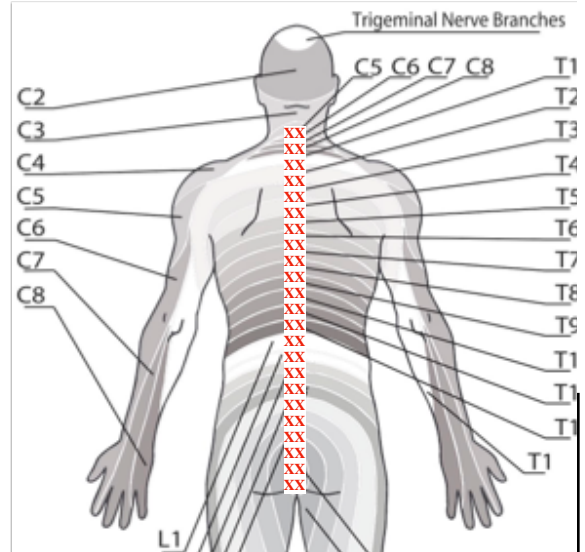
User License Agreement - By using this manual, you are accepting this agreement

- **Unless otherwise stated;** The treatment protocols in this section of the protocol manual have no regulatory approval in any country and ASPEN has not tested them in controlled clinical trials for safety or efficacy, however these or similar protocols have been used in multiple clinical practices with multiple types of practitioners with great success.
- These protocols are considered "OFF USE", in that they do not fall under FDA 510K clearances of the ASPEN Lasers System.
- You must apply your own professional clinical judgment as to whether High Intensity Laser Therapy (HILT) is an appropriate treatment for your patient taking into account the safety and Contraindications guidelines and the medical or other training you have had, **only treating conditions you are trained to and insured to treat**. Read SAFETY SECTION to review precautions and Contraindications.
- These treatment protocols are not presented as a replacement for drugs, surgery or other therapy

FIBROMYALGIA

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.

KEY	TREATMENT AREAS	POWER
X	Treat over spinous process and para-spinal muscles	25W
	Treat local pain points	25-30W
HZ	TREATMENT AREA	TREATMENT INCREMENT
10 Hz	Treat from base of skull to tip of tailbone.	15 minutes for entire area
10 Hz	Painful Trigger Points	2.5 to 5 min per point
SPECIAL NOTES		
1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.		

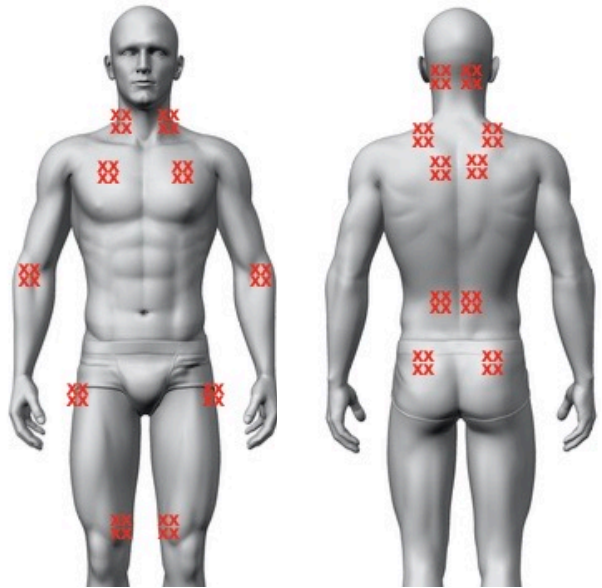


1. TREATMENT TECHNIQUE:

1. Always keep hand-piece in direct contact and flat against skin
2. Treat with firm pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
3. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 2 days consecutively then, every other day.
 1. May treat a maximum of 2 x per day.
2. Treat until pain is zero at presentation in all areas with ROM and palpation.
 1. Typically 6-10 weeks.



User License Agreement - By using this manual, you are accepting this agreement

- **Unless otherwise stated;** The treatment protocols in this section of the protocol manual have no regulatory approval in any country and ASPEN has not tested them in controlled clinical trials for safety or efficacy, however these or similar protocols have been used in multiple clinical practices with multiple types of practitioners with great success.
- These protocols are considered "OFF USE", in that they do not fall under FDA 510K clearances of the ASPEN Lasers System.
- You must apply your own professional clinical judgment as to whether High Intensity Laser Therapy (HILT) is an appropriate treatment for your patient taking into account the safety and Contraindications guidelines and the medical or other training you have had, **only treating conditions you are trained to and insured to treat.** Read SAFETY SECTION to review precautions and Contraindications.
- These treatment protocols are not presented as a replacement for drugs, surgery or other therapy

HAIR REGENERATION

User License Agreement - By using this manual, you are accepting this agreement

- **Unless otherwise stated;** The treatment protocols in this section of the protocol manual have no regulatory approval in any country and ASPEN has not tested them in controlled clinical trials for safety or efficacy, however these or similar protocols have been used in multiple clinical practices with multiple types of practitioners with great success.
- These protocols are considered "OFF USE", in that they do not fall under FDA 510K clearances of the ASPEN Lasers System.
- You must apply your own professional clinical judgment as to whether High Intensity Laser Therapy (HILT) is an appropriate treatment for your patient taking into account the safety and Contraindications guidelines and the medical or other training you have had, **only treating conditions you are trained to and insured to treat**. Read SAFETY SECTION to review precautions and Contraindications.
- These treatment protocols are not presented as a replacement for drugs, surgery or other therapy

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.

1. Identify location of most dominant pain
2. Ask client to rate pain:
 1. At Rest
 2. Through Active Motion without further injuring condition.
 3. With palpation - **test all areas marked above with X**.
3. Select setting using key below.

KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT	GOAL
X	<p>Treat any areas with active pain</p> <ul style="list-style-type: none"> • at rest • with motion • with palpation 	30-35W	10 Hz	3x5 or 2x7	2.5 min Max 10 min	Pain ≤ 1

SPECIAL NOTES

1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.
2. For people with Indications of nerve compression (Numbness, tingling, electrical, radiating pain), start with Power Setting **50% below** setting recommended above and treat for **maximum 5 min**.

1. TREATMENT TECHNIQUE:

1. Treat most dominant pain first.
2. Always keep hand-piece in direct contact and flat against skin
3. Treat with firm pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
4. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 2 days consecutively then, every other day.
 1. May treat a maximum of 2 x per day.
2. Treat until pain is zero at presentation in all areas with ROM and palpation.
 1. Chronic typically 6-10 sessions.
 2. Acute typically 4-6 sessions

NEUROREGENERATION - BRAIN ACUTE INJURY

Treat any areas injured or inflamed Use this key as a guide to using this manual, you are accepting this agreement

- **Unless otherwise stated;** The treatment protocols in this section of the protocol manual have no regulatory approval in any country and ASPEN has not tested them in controlled clinical trials for safety or efficacy, however these or similar protocols have been used in multiple clinical practices with multiple types of practitioners with great success.
- These protocols are considered "OFF USE", in that they do not fall under FDA 510K clearances of the ASPEN Lasers System.
- You must apply your own professional clinical judgment as to whether High Intensity Laser Therapy (HILT) is an appropriate treatment for your patient taking into account the safety and Contraindications guidelines and the medical or other training you have had, **only treating conditions you are trained to and insured to treat**. Read SAFETY SECTION to review precautions and Contraindications.
- These treatment protocols are not presented as a replacement for drugs, surgery or other therapy

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.



KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT	GOAL
X	Treat any areas injured or inflamed	15W	50 Hz	3x5 or 2x7	5 min	

SPECIAL NOTES

1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.

1. TREATMENT TECHNIQUE:

1. Always keep hand-piece in direct contact and flat against skin
2. Treat with slight pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
3. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat minimum daily - ideally every 4 hours x 5-7 days.
2. Reduce to daily for 5-7 days
3. Reduce to 3 x per week 10-20 sessions based on progress.
4. Maintenance phase may be indicated for clients over 40. 1-4 x per month ongoing.

NEUROREGENERATION - BRAIN CHRONIC DEGENERATIVE

User License Agreement - By using this manual, you are accepting this agreement

- **Unless otherwise stated;** The treatment protocols in this section of the protocol manual have no regulatory approval in any country and ASPEN has not tested them in controlled clinical trials for safety or efficacy, however these or similar protocols have been used in multiple clinical practices with multiple types of practitioners with great success.
- These protocols are considered "OFF USE", in that they do not fall under FDA 510K clearances of the ASPEN Lasers System.
- You must apply your own professional clinical judgment as to whether High Intensity Laser Therapy (HILT) is an appropriate treatment for your patient taking into account the safety and Contraindications guidelines and the medical or other training you have had, **only treating conditions you are trained to and insured to treat**. Read SAFETY SECTION to review precautions and Contraindications.
- These treatment protocols are not presented as a replacement for drugs, surgery or other therapy

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.



KEY	TREATMENT AREAS	POWER	HZ	TREATMENT AREA	TREATMENT INCREMENT	GOAL
X	Treat any areas with HISTORY of injury or inflammation	15W	50 Hz	3x5 or 2x7	5 min	

SPECIAL NOTES

1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.

1. TREATMENT TECHNIQUE:

1. Always keep hand-piece in direct contact and flat against skin
2. Treat with slight pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
3. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 2 days consecutively then, every other day.
2. Treat 10-20 sessions based on progress.
3. Maintenance phase may be indicated for clients over 40. 1-4 x per month ongoing.

NEUROREGENERATION - SPINAL CORD - ACUTE INJURY

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.

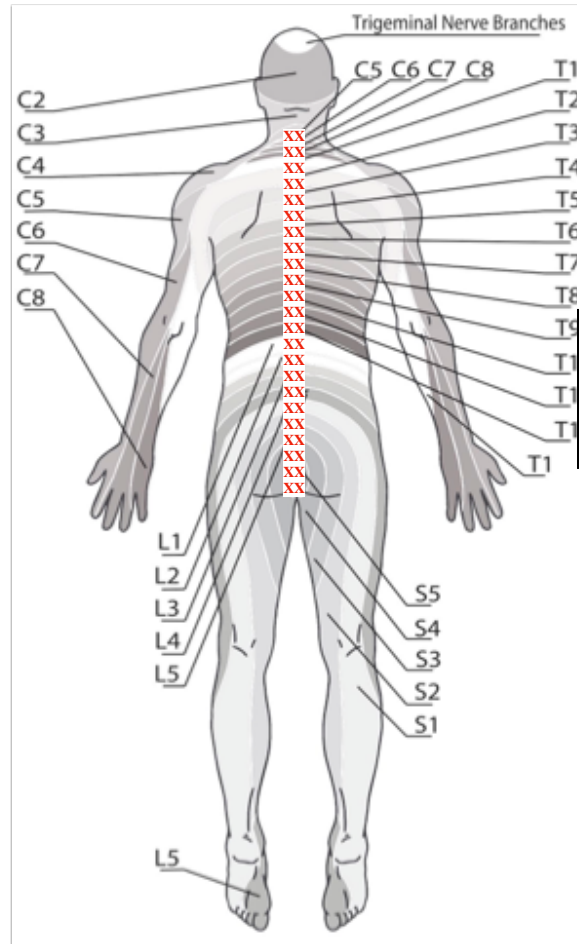
KEY	TREATMENT AREAS	POWER
X	Treat over affected spinous process and para-spinal muscles	15W
HZ	TREATMENT SIZE	TREATMENT INCREMENT
50 Hz	3x5	5 minutes
Repeat as necessary to cover entire affected area.		
SPECIAL NOTES		
<ol style="list-style-type: none"> 1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting. 		

1. TREATMENT TECHNIQUE:

1. Always keep hand-piece in direct contact and flat against skin
2. Treat with slight pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
3. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat minimum daily - ideally every 4 hours x 5-7 days.
2. Reduce to daily for 5-7 days
3. Reduce to 3 x per week 10-20 sessions based on progress.
4. Maintenance phase may be indicated for clients over 40. 1-4 x per month ongoing.



User License Agreement - By using this manual, you are accepting this agreement

- **Unless otherwise stated;** The treatment protocols in this section of the protocol manual have no regulatory approval in any country and ASPEN has not tested them in controlled clinical trials for safety or efficacy, however these or similar protocols have been used in multiple clinical practices with multiple types of practitioners with great success.
- These protocols are considered "OFF USE", in that they do not fall under FDA 510K clearances of the ASPEN Lasers System.
- You must apply your own professional clinical judgment as to whether High Intensity Laser Therapy (HILT) is an appropriate treatment for your patient taking into account the safety and Contraindications guidelines and the medical or other training you have had, **only treating conditions you are trained to and insured to treat**. Read SAFETY SECTION to review precautions and Contraindications.
- These treatment protocols are not presented as a replacement for drugs, surgery or other therapy

NEUROREGENERATION - SPINAL CORD - CHRONIC DEGENERATIVE

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.

KEY	TREATMENT AREAS	POWER
X	Treat over affected spinous process and para-spinal muscles	15W
HZ	TREATMENT SIZE	TREATMENT INCREMENT
50 Hz	3x5	5 minutes
Repeat as necessary to cover entire affected area.		

SPECIAL NOTES

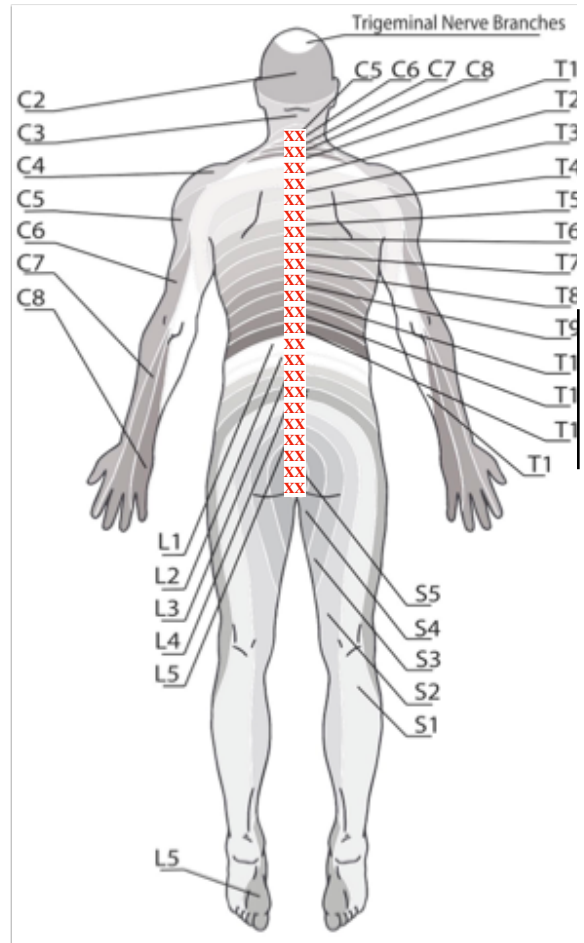
1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.

1. TREATMENT TECHNIQUE:

1. Always keep hand-piece in direct contact and flat against skin
2. Treat with slight pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
3. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 2 days consecutively then, every other day.
2. Treat 10-20 sessions based on progress.
3. Maintenance phase may be indicated for clients over 40. 1-4 x per month ongoing.



User License Agreement - By using this manual, you are accepting this agreement

- **Unless otherwise stated;** The treatment protocols in this section of the protocol manual have no regulatory approval in any country and ASPEN has not tested them in controlled clinical trials for safety or efficacy, however these or similar protocols have been used in multiple clinical practices with multiple types of practitioners with great success.
- These protocols are considered "OFF USE", in that they do not fall under FDA 510K clearances of the ASPEN Lasers System.
- You must apply your own professional clinical judgment as to whether High Intensity Laser Therapy (HILT) is an appropriate treatment for your patient taking into account the safety and Contraindications guidelines and the medical or other training you have had, **only treating conditions you are trained to and insured to treat.** Read SAFETY SECTION to review precautions and Contraindications.
- These treatment protocols are not presented as a replacement for drugs, surgery or other therapy

NEUROREGENERATION - PERIPHERAL NERVE INJURY ACUTE

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.

KEY	TREATMENT AREAS	POWER
X	Treat over affected area	Based on Depth 0-1cm - 5W 1-2cm - 7W 2-3cm - 10W 3-4cm - 15W

HZ	TREATMENT SIZE	TREATMENT INCREMENT
10 Hz	3x5	5 minutes

Repeat as necessary to cover entire affected area.

SPECIAL NOTES

1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.

1. TREATMENT TECHNIQUE:

1. Always keep hand-piece in direct contact and flat against skin
2. Treat with slight pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
3. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat minimum daily - ideally every 4 hours x 5-7 days.
2. Reduce to daily for 5-7 days
3. Reduce to 3 x per week 10-20 sessions based on progress.
4. Maintenance phase may be indicated for clients over 40. 1-4 x per month ongoing.

User License Agreement - By using this manual, you are accepting this agreement

- **Unless otherwise stated;** The treatment protocols in this section of the protocol manual have no regulatory approval in any country and ASPEN has not tested them in controlled clinical trials for safety or efficacy, however these or similar protocols have been used in multiple clinical practices with multiple types of practitioners with great success.
- These protocols are considered "OFF USE", in that they do not fall under FDA 510K clearances of the ASPEN Lasers System.
- You must apply your own professional clinical judgment as to whether High Intensity Laser Therapy (HILT) is an appropriate treatment for your patient taking into account the safety and Contraindications guidelines and the medical or other training you have had, **only treating conditions you are trained to and insured to treat**. Read SAFETY SECTION to review precautions and Contraindications.
- These treatment protocols are not presented as a replacement for drugs, surgery or other therapy

NEUROREGENERATION - PERIPHERAL NERVE INJURY - CHRONIC

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.

KEY	TREATMENT AREAS	POWER
X	Treat over affected spinous process and para-spinal muscles	Based on Depth 0-1cm - 7W 1-2cm - 10W 2-3cm - 15W 3-4cm - 20W

HZ	TREATMENT SIZE	TREATMENT INCREMENT
50 Hz	3x5	5 minutes

Repeat as necessary to cover entire affected area.

SPECIAL NOTES

1. For clients with low muscle mass ie seniors and small children, start with Power Setting 1 level below Standard Setting.

1. TREATMENT TECHNIQUE:

1. Always keep hand-piece in direct contact and flat against skin
2. Treat with slight pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
3. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 2 days consecutively then, every other day.
2. Treat 10-20 sessions based on progress.
3. Maintenance phase may be indicated for clients over 40. 1-4 x per month ongoing.

User License Agreement - By using this manual, you are accepting this agreement

- **Unless otherwise stated;** The treatment protocols in this section of the protocol manual have no regulatory approval in any country and ASPEN has not tested them in controlled clinical trials for safety or efficacy, however these or similar protocols have been used in multiple clinical practices with multiple types of practitioners with great success.
- These protocols are considered "OFF USE", in that they do not fall under FDA 510K clearances of the ASPEN Lasers System.
- You must apply your own professional clinical judgment as to whether High Intensity Laser Therapy (HILT) is an appropriate treatment for your patient taking into account the safety and Contraindications guidelines and the medical or other training you have had, **only treating conditions you are trained to and insured to treat**. Read SAFETY SECTION to review precautions and Contraindications.
- These treatment protocols are not presented as a replacement for drugs, surgery or other therapy

ORGANS/GLANDS - CHRONIC DEGENERATIVE CONDITIONS

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.

KEY	TREATMENT AREAS	POWER
	Treat over affected area	Based on Depth 0-1cm - 5W 1-2cm - 7W 2-3cm - 10W 3-4cm - 15W 4-5 cm - 20W 5-6cm - 25W
HZ	TREATMENT SIZE	TREATMENT INCREMENT
10 Hz	3x5	2.5 minutes 0-3 cm 5 min > 3 cm deep

Repeat as necessary to cover entire affected area.

1. **TREATMENT TECHNIQUE:**

1. Always keep hand-piece in direct contact and flat against skin
2. Treat with slight pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
3. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. **TREATMENT INTERVAL:**

1. Treat preferably 2 days consecutively then, every other day.
2. Treat 10-20 sessions based on progress.
3. Maintenance phase may be indicated for clients over 40. 1-4 x per month ongoing.

User License Agreement - By using this manual, you are accepting this agreement

- **Unless otherwise stated;** The treatment protocols in this section of the protocol manual have no regulatory approval in any country and ASPEN has not tested them in controlled clinical trials for safety or efficacy, however these or similar protocols have been used in multiple clinical practices with multiple types of practitioners with great success.
- These protocols are considered "OFF USE", in that they do not fall under FDA 510K clearances of the ASPEN Lasers System.
- You must apply your own professional clinical judgment as to whether High Intensity Laser Therapy (HILT) is an appropriate treatment for your patient taking into account the safety and Contraindications guidelines and the medical or other training you have had, **only treating conditions you are trained to and insured to treat**. Read SAFETY SECTION to review precautions and Contraindications.
- These treatment protocols are not presented as a replacement for drugs, surgery or other therapy

PRE-OP TREATMENT

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.

KEY	TREATMENT AREAS	POWER
	Treat over area that will have incision and at least 3-4 inches in every direction	Based on Depth 0-1cm - 5W 1-2cm - 7W 2-3cm - 10W 3-4cm - 15W 4-5 cm - 20W 5-6cm - 25W
HZ	TREATMENT SIZE	TREATMENT INCREMENT
10 Hz	3x5	5 min

Repeat as necessary to cover entire affected area.

1. **TREATMENT TECHNIQUE:**

1. Always keep hand-piece in direct contact and flat against skin
2. Treat with slight pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
3. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. **TREATMENT INTERVAL:**

1. Treat preferably 3 days consecutively prior to surgery.

User License Agreement - By using this manual, you are accepting this agreement

- **Unless otherwise stated;** The treatment protocols in this section of the protocol manual have no regulatory approval in any country and ASPEN has not tested them in controlled clinical trials for safety or efficacy, however these or similar protocols have been used in multiple clinical practices with multiple types of practitioners with great success.
- These protocols are considered "OFF USE", in that they do not fall under FDA 510K clearances of the ASPEN Lasers System.
- You must apply your own professional clinical judgment as to whether High Intensity Laser Therapy (HILT) is an appropriate treatment for your patient taking into account the safety and Contraindications guidelines and the medical or other training you have had, **only treating conditions you are trained to and insured to treat.** Read SAFETY SECTION to review precautions and Contraindications.
- These treatment protocols are not presented as a replacement for drugs, surgery or other therapy

POST OP HEALING

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.

KEY	TREATMENT AREAS	POWER
	Treat over area that will have incision and at least 3-4 inches in every direction	Based on Depth 0-1cm - 5W 1-2cm - 7W 2-3cm - 10W 3-4cm - 15W 4-5 cm - 20W 5-6cm - 25W
HZ	TREATMENT SIZE	TREATMENT INCREMENT
10 Hz	3x5	5 min

Repeat as necessary to cover entire affected area.

1. **TREATMENT TECHNIQUE:**

1. Always keep hand-piece in direct contact and flat against skin
2. Treat with slight pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
3. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. **TREATMENT INTERVAL:**

1. Treat preferably 3-5days consecutively postoperatively then, every other day until fully healed.

User License Agreement - By using this manual, you are accepting this agreement

- **Unless otherwise stated;** The treatment protocols in this section of the protocol manual have no regulatory approval in any country and ASPEN has not tested them in controlled clinical trials for safety or efficacy, however these or similar protocols have been used in multiple clinical practices with multiple types of practitioners with great success.
- These protocols are considered "OFF USE", in that they do not fall under FDA 510K clearances of the ASPEN Lasers System.
- You must apply your own professional clinical judgment as to whether High Intensity Laser Therapy (HILT) is an appropriate treatment for your patient taking into account the safety and Contraindications guidelines and the medical or other training you have had, **only treating conditions you are trained to and insured to treat**. Read SAFETY SECTION to review precautions and Contraindications.
- These treatment protocols are not presented as a replacement for drugs, surgery or other therapy

SCARS / CONTRACTURES

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.

KEY	TREATMENT AREAS	POWER
	Treat over affected area	Based on Depth 0-1cm - 7W 1-2cm - 10W 2-3cm - 15W 3-4cm - 20W 4-5 cm - 25W 5-6cm - 30W
HZ	TREATMENT SIZE	TREATMENT INCREMENT
10 Hz	3x5 or 2x7	2.5 minutes 0-3 cm 5 min > 3 cm deep

Repeat as necessary to cover entire affected area.

1. **TREATMENT TECHNIQUE:**

1. Always keep hand-piece in direct contact and flat against skin
2. Treat with slight pressure, moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
3. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. **TREATMENT INTERVAL:**

1. Treat preferably 2 days consecutively then, every other day.
2. Treat ongoing based on progress.

User License Agreement - By using this manual, you are accepting this agreement

- **Unless otherwise stated;** The treatment protocols in this section of the protocol manual have no regulatory approval in any country and ASPEN has not tested them in controlled clinical trials for safety or efficacy, however these or similar protocols have been used in multiple clinical practices with multiple types of practitioners with great success.
- These protocols are considered "OFF USE", in that they do not fall under FDA 510K clearances of the ASPEN Lasers System.
- You must apply your own professional clinical judgment as to whether High Intensity Laser Therapy (HILT) is an appropriate treatment for your patient taking into account the safety and Contraindications guidelines and the medical or other training you have had, **only treating conditions you are trained to and insured to treat**. Read SAFETY SECTION to review precautions and Contraindications.
- These treatment protocols are not presented as a replacement for drugs, surgery or other therapy

SKIN - ACNE

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.

KEY	TREATMENT AREAS	POWER
	Treat over area that will have incision and at least 3-4 inches in every direction	Based on Depth 0-1cm - 5W
HZ	TREATMENT SIZE	TREATMENT INCREMENT
10 Hz	3x5	2.5 min

Repeat as necessary to cover entire affected area.

1. TREATMENT TECHNIQUE:

1. Always keep hand-piece in direct contact and flat against skin
2. **Treat off skin to prevent cross contamination for any open areas** moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
3. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 3-5days consecutively postoperatively then, every other day until fully healed.

User License Agreement - By using this manual, you are accepting this agreement

- **Unless otherwise stated;** The treatment protocols in this section of the protocol manual have no regulatory approval in any country and ASPEN has not tested them in controlled clinical trials for safety or efficacy, however these or similar protocols have been used in multiple clinical practices with multiple types of practitioners with great success.
- These protocols are considered "OFF USE", in that they do not fall under FDA 510K clearances of the ASPEN Lasers System.
- You must apply your own professional clinical judgment as to whether High Intensity Laser Therapy (HILT) is an appropriate treatment for your patient taking into account the safety and Contraindications guidelines and the medical or other training you have had, **only treating conditions you are trained to and insured to treat**. Read SAFETY SECTION to review precautions and Contraindications.
- These treatment protocols are not presented as a replacement for drugs, surgery or other therapy

SKIN - ABRASIONS / OPEN WOUNDS

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.

KEY	TREATMENT AREAS	POWER
	Treat over area that will have incision and at least 3-4 inches in every direction	Based on Depth 0-1cm - 5W 1-2cm - 7W 2-3cm - 10W 3-4cm - 15W
HZ	TREATMENT SIZE	TREATMENT INCREMENT
10 Hz	3x5	2.5 min

Repeat as necessary to cover entire affected area.

1. TREATMENT TECHNIQUE:

1. Always keep hand-piece in direct contact and flat against skin
2. **Treat off skin to prevent cross contamination for any open areas** moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
3. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 3-5days consecutively then, every other day until fully healed.

User License Agreement - By using this manual, you are accepting this agreement

- **Unless otherwise stated;** The treatment protocols in this section of the protocol manual have no regulatory approval in any country and ASPEN has not tested them in controlled clinical trials for safety or efficacy, however these or similar protocols have been used in multiple clinical practices with multiple types of practitioners with great success.
- These protocols are considered "OFF USE", in that they do not fall under FDA 510K clearances of the ASPEN Lasers System.
- You must apply your own professional clinical judgment as to whether High Intensity Laser Therapy (HILT) is an appropriate treatment for your patient taking into account the safety and Contraindications guidelines and the medical or other training you have had, **only treating conditions you are trained to and insured to treat.** Read SAFETY SECTION to review precautions and Contraindications.
- These treatment protocols are not presented as a replacement for drugs, surgery or other therapy

SKIN - FINE LINES AND WRINKLES

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.

Will reduce fine lines and wrinkles only if used consistently.

KEY	TREATMENT AREAS	POWER
	Treat over area that will have incision and at least 3-4 inches in every direction	Based on Depth 0-1cm - 5W
HZ	TREATMENT SIZE	TREATMENT INCREMENT
10 Hz	3x5	2.5 min

Repeat as necessary to cover entire affected area.

1. TREATMENT TECHNIQUE:

1. Always keep hand-piece in direct contact and flat against skin
2. **Treat ON skin** moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
3. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 3-5 days consecutively then, every other day until goals are met.
2. Will need to use minimally 1-2 x per week to maintain benefits.

User License Agreement - By using this manual, you are accepting this agreement

- **Unless otherwise stated;** The treatment protocols in this section of the protocol manual have no regulatory approval in any country and ASPEN has not tested them in controlled clinical trials for safety or efficacy, however these or similar protocols have been used in multiple clinical practices with multiple types of practitioners with great success.
- These protocols are considered "OFF USE", in that they do not fall under FDA 510K clearances of the ASPEN Lasers System.
- You must apply your own professional clinical judgment as to whether High Intensity Laser Therapy (HILT) is an appropriate treatment for your patient taking into account the safety and Contraindications guidelines and the medical or other training you have had, **only treating conditions you are trained to and insured to treat**. Read SAFETY SECTION to review precautions and Contraindications.
- These treatment protocols are not presented as a replacement for drugs, surgery or other therapy

VARICOSE VEINS

1. Ensure Consent Form is signed
2. Ensure client is in a position that is as comfortable as possible.
3. Ensure laser goggles are worn by anyone in the room (within 6 feet) unless client is face down.

Will reduce discomfort however will not eliminate varicosities.

KEY	TREATMENT AREAS	POWER
	Treat over area that will have incision and at least 3-4 inches in every direction	Based on Depth 0-1cm - 5W 1-2cm -7W
HZ	TREATMENT SIZE	TREATMENT INCREMENT
10 Hz	3x5	2.5 min

Repeat as necessary to cover entire affected area.

1. TREATMENT TECHNIQUE:

1. Always keep hand-piece in direct contact and flat against skin
2. **Treat ON skin** moving in slow steady grid pattern (Left to right or top to bottom) within the treatment area. This allows the light to be uniformly distributed into the treatment area
3. Always keep hand-piece moving as slowly as possible skin should feel warm, never hot. This ensures deepest possible depth of penetration.

2. TREATMENT INTERVAL:

1. Treat preferably 3-5days consecutively postoperatively then, every other day until fully healed.

User License Agreement - By using this manual, you are accepting this agreement

- **Unless otherwise stated;** The treatment protocols in this section of the protocol manual have no regulatory approval in any country and ASPEN has not tested them in controlled clinical trials for safety or efficacy, however these or similar protocols have been used in multiple clinical practices with multiple types of practitioners with great success.
- These protocols are considered "OFF USE", in that they do not fall under FDA 510K clearances of the ASPEN Lasers System.
- You must apply your own professional clinical judgment as to whether High Intensity Laser Therapy (HILT) is an appropriate treatment for your patient taking into account the safety and Contraindications guidelines and the medical or other training you have had, **only treating conditions you are trained to and insured to treat.** Read SAFETY SECTION to review precautions and Contraindications.
- These treatment protocols are not presented as a replacement for drugs, surgery or other therapy

APPENDIX

Consent and Indication Form	63
Intake Form	64
Patient Education Form: Laser FAQs	70
Patient Education Form: What is Laser Therapy?	71
Recommended Pricing	72
Treatment Record	73

INTAKE FORM

PRIMARY REASON YOU ARE HERE:

- | | |
|--|---|
| <input type="checkbox"/> Chronic Discomfort/Pain | <input type="checkbox"/> Sports Performance |
| <input type="checkbox"/> New Discomfort/Pain | <input type="checkbox"/> Wellness |

IS THIS PROBLEM

- | | |
|---|---|
| <input type="checkbox"/> Less than 5 days old | <input type="checkbox"/> Getting better |
| <input type="checkbox"/> More than 5 days | <input type="checkbox"/> Not changing |
| <input type="checkbox"/> less than 30 days | <input type="checkbox"/> Getting worse |
| <input type="checkbox"/> More than 30 days | |

IS YOUR PAIN LOCALIZED OR GENERAL?

- | | |
|---|--|
| <input type="checkbox"/> Localized - small centralized area of pain - I can point right to it | <input type="checkbox"/> Generalized - involves all or most of a body part |
|---|--|

HOW OFTEN DOES THE PAIN OCCUR?

- | | |
|---|---|
| <input type="checkbox"/> Changes in severity but always present | <input type="checkbox"/> Intermittent comes and goes Constant |
|---|---|

INDICATE ALL OF THE FOLLOWING THAT DESCRIBE YOUR PAIN: SELECT ALL THAT APPLY

- | | | | |
|------------------------------------|--|--|--|
| <input type="checkbox"/> Dull | <input type="checkbox"/> Squeezing | <input type="checkbox"/> Tingling | <input type="checkbox"/> Radiates down arm (Right Left Both) |
| <input type="checkbox"/> Achey | <input type="checkbox"/> Hot/Burning | <input type="checkbox"/> Tender to touch | <input type="checkbox"/> Radiates down leg (Right Left Both) |
| <input type="checkbox"/> Sharp | <input type="checkbox"/> Stinging or Jabbing | | |
| <input type="checkbox"/> Shooting | | | |
| <input type="checkbox"/> Throbbing | <input type="checkbox"/> Numb | | |

DOES CONDITION HAVE OR CAUSE

- | | | | |
|-----------------------------------|-----------------------------------|---|---|
| <input type="checkbox"/> Weakness | <input type="checkbox"/> Swelling | <input type="checkbox"/> Balance Problems | <input type="checkbox"/> Not Applicable |
| <input type="checkbox"/> Cramping | | | |

DO YOU USE THE FOLLOWING PHYSICAL AIDES FOR ANY CONDITION?

CANE

- | | | |
|---------------------------------------|---------------------------------------|---------------------------------|
| <input type="checkbox"/> Never | <input type="checkbox"/> Occasionally | <input type="checkbox"/> Always |
| <input type="checkbox"/> Occasionally | <input type="checkbox"/> Often | |
| <input type="checkbox"/> Often | <input type="checkbox"/> Always | |
| <input type="checkbox"/> Always | | |

CRUTCHES

- Never

WALKER

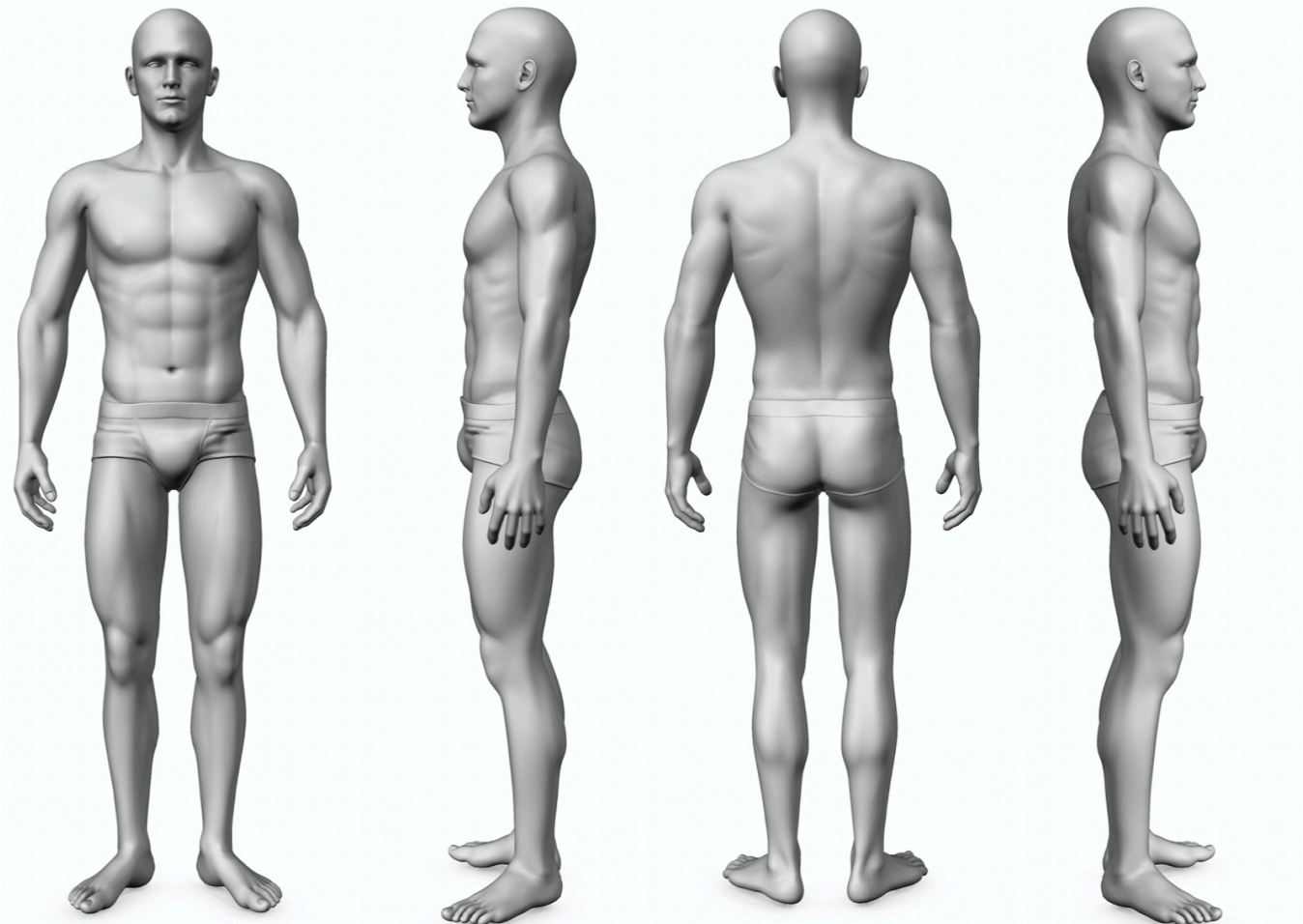
- Never
 Occasionally
 Often

WHEELCHAIR/ SCOOTER

- Never
 Occasionally
 Often
 Always

LOCATION OF PAIN

Circle the EXACT area where pain/discomfort is located **RIGHT NOW**. Please be very specific and do not circle entire body part.



CHOOSE THE LINE THAT BEST DESCRIBES THE PAIN YOU FEEL RIGHT NOW - SELECT ONLY ONE PER ROW

AT REST

- ABSENT**
- VERY MILD** - Very light barely noticeable pain
- UNCOMFORTABLE** - Minor pain - irritating
- TOLERABLE** - Moderate pain, however you have adapted to it
- DISTRESSING** - Strong, deep pain, like an average toothache
- VERY DISTRESSING** - Notice the pain all the time
- INTENSE** - Dominates your senses some of the time
- VERY INTENSE** - Dominates your senses at least half of the time
- HORRIBLE** - Pain so intense you can no longer think clearly at all
- UNBEARABLE** - Pain so intense you demand pain killers or surgery no matter the risk
- UNIMAGINABLE** - Pain so intense you will go unconscious shortly

WITH MOTION

- ABSENT**
- VERY MILD** - Very light barely noticeable pain
- UNCOMFORTABLE** - Minor pain - irritating
- TOLERABLE** - Moderate pain, however you have adapted to it
- DISTRESSING** - Strong, deep pain, like an average toothache
- VERY DISTRESSING** - Notice the pain all the time
- INTENSE** - Dominates your senses some of the time
- VERY INTENSE** - Dominates your senses at least half of the time
- HORRIBLE** - Pain so intense you can no longer think clearly at all
- UNBEARABLE** - Pain so intense you demand pain killers or surgery no matter the risk
- UNIMAGINABLE** - Pain so intense you will go unconscious shortly

**CHECK THE BOX(ES) THAT CORRESPONDS TO THINGS THAT MAKE YOUR PAIN WORSE
(SELECT ALL THAT APPLY)**

- | | |
|---|---|
| <input type="checkbox"/> Looking upward | <input type="checkbox"/> Lifting an object |
| <input type="checkbox"/> Looking downward | <input type="checkbox"/> Lying on Right Side |
| <input type="checkbox"/> Stretching Exercises | <input type="checkbox"/> Lying on Left Side |
| <input type="checkbox"/> Standing | <input type="checkbox"/> Getting up from sitting down |
| <input type="checkbox"/> Bending Over | <input type="checkbox"/> Getting up from lying down |
| <input type="checkbox"/> Flexion - Bending motion that decreases the angle of the joint | <input type="checkbox"/> Sitting down into a chair |
| <input type="checkbox"/> Extension - Straightening motion that increases the angle of the joint | <input type="checkbox"/> Sitting for short periods |
| <input type="checkbox"/> Abduction - Motion of body part away from the body | <input type="checkbox"/> Sitting for long periods |
| <input type="checkbox"/> Adduction - Motion of body part toward the body | <input type="checkbox"/> Walking for short distances Walking for long distances |
| <input type="checkbox"/> Pulling | <input type="checkbox"/> Athletic Exercise - comment below |
| <input type="checkbox"/> Pushing | <input type="checkbox"/> Driving for long distances |
| <input type="checkbox"/> Pronation - Twisting Left | <input type="checkbox"/> Computer Use |
| <input type="checkbox"/> Rotation - Twisting Right | <input type="checkbox"/> Repetitive motions (be specific in comment box) |
| | <input type="checkbox"/> Almost any movement |

**CHECK THE BOX(ES) THAT CORRESPONDS TO THE THINGS THAT MAKE YOUR PAIN BETTER
(SELECT ALL THAT APPLY)**

- | | |
|--|---|
| <input type="checkbox"/> Nothing | <input type="checkbox"/> Over the counter medications |
| <input type="checkbox"/> Physical Therapy or Massage | <input type="checkbox"/> Prescription medications |

RANGE OF MOTION - SELECT ONLY ONE PER ROW

- 1. Describe range of motion AT REST in left column
- 2. Move affected area in natural range of motion.
- 3. Stop where pain begins to increase - describe ROM on scale listed below

AT REST

- 0 None No Joint Movement
- 1 Poor Severe Joint Restriction
- 2 Fair Moderate Joint Restriction
- 3 Good Mild Joint Restriction
- 4 Normal No Joint Restriction

WITH MOTION

- 0 None No Joint Movement
- 1 Poor Severe Joint Restriction
- 2 Fair Moderate Joint Restriction
- 3 Good Mild Joint Restriction
- 4 Normal No Joint Restriction

EVALUATION OF CONDITION BY A HEALTH PROFESSIONAL

Tell us what specialists you have consulted for your current pain problems AND HOW LONG AGO: Put NA not applicable if you have not seen a health professional for this condition.

- MD -Medical Doctor _____
- DO - Doctor of Osteopathy _____
- NP - Nurse Practitioner _____
- PA - Physician Assistant _____
- DC - Doctor of Chiropractic _____
- ND - Naturopathic Doctor _____
- LAc - Licensed Acupuncturist _____
- LMT - Licensed Massage Therapist _____
- PT - Physical Therapist _____

TESTS YOU HAVE HAD FOR THIS CONDITION WITHIN THE LAST YEAR

- X-Ray
- MRI
- Neither
- Both
- OTHER _____

ASPEN LASER

LASER THERAPY CONSENT & CONTRAINDICATION FORM

Aspen Class IV Laser Therapy Treatment

I hereby authorize and provide permission to perform an Aspen Class IV Laser Therapy treatment.

I understand that the Aspen Class IV Laser Therapy is a safe and non-invasive treatment and has been cleared by the FDA to emit photon energy for the relief of minor muscle and joint pain, muscle spasm, pain and stiffness associated with minor arthritis, promoting relaxation of muscle tissue, and increase local blood circulation.

I understand that every individual responds uniquely to laser therapy treatments. Some patients may see immediate results after the first treatment or depending on the severity of their condition, may require several treatments before they begin to feel results. Most patients experience a decrease in pain and an increase in range of motion within the first few hours (and up to 36 hours) from the first treatment.

Note: Increased soreness may occur after your first laser therapy treatment session. This is a normal healing phenomenon known as retracing. If soreness occurs following your treatment, use ice for 5 minutes every 30 minutes, and no more than 5 minutes every 30 minutes. Repeat the icing as necessary. If soreness persists after icing, please contact this office.

EYE SAFETY

I understand that Class IV Therapy Lasers emit both visible and invisible light. Protective eyewear is necessary at all times during the treatment. I will not remove the Safety Goggles until the administrator of the laser has turned off the laser treatment and provided notification that it is safe to remove them. You may be asked to remove reflective objects, such as rings, metal watchbands, and jewelry prior to treatment with the laser.

ACKNOWLEDGEMENT

I have read and understand the foregoing. This Laser Therapy Consent Form applies to subsequent visits and treatments. I understand that there is no promise or guarantee regarding the results of the treatment, and that to achieve maximum clinical results, I may need multiple treatments.

Patient Name _____ Date: _____
PLEASE PRINT

Patient Signature _____

Guardian Name _____ Date: _____
PLEASE PRINT

Guardian Signature _____

Health Care Professional _____ Date: _____
PLEASE PRINT

Health Care Professional Signature _____

CONTRAINDICATIONS:

To the best of my knowledge, I may have, or am, one or more of the following:

- Are you pregnant? Yes No
- Do you have cancer? Yes No
- Have you had cancer within the past 12 months? Yes No
- Are you currently taking photosensitizing medications? Yes No
- If yes, can you be in the sun for 10 min. without having itchiness, redness, blotchiness or pigmentation issues? Yes No

PRECAUTIONS:

To the best of my knowledge, I may have one or more of the following:

- Do you have a pacemaker or other implanted medical device (morphine pump, neurostimulator, etc)? Yes No
If yes, where is it located? _____
- Have you had steroid injection(s) within the past 7 days? Yes No
If yes, where? _____
- Is your pain directly over an epiphyseal plate (growth plate) in children under 15 years of age. Yes No
- Is your pain over the Ovaries, Thyroid Gland or Testes? Yes No

TREATMENT RECORD

ASPEN LASER

FREQUENTLY ASKED QUESTIONS FOR PATIENTS

Q

How does laser therapy work?

When the photons of laser light penetrate the skin and underlying tissue, they are absorbed by the cells and converted into energy. This energy is key to helping the cells to become normal and healthy. As the cell membrane permeability is altered, a cascade of cellular events is triggered including:

- Stimulation of ATP
- Stimulation of respiratory chain
- Increased DNA and RNA synthesis
- Enhanced collagen synthesis
- Increased levels of beta-endorphins and serotonin

Q

What advantage does laser therapy have over other forms of treatment?

A laser therapy treatment does not require the use of drugs or surgery, and there are no dangerous side effects or risks. Unlike many therapy products that only treat the symptoms and mask the pain temporarily, the therapy laser is able to treat the cause of the pain and injury, helping the body to heal itself.

In addition, Laser therapy provides enhanced treatment outcomes faster than any other treatment modality. Each laser therapy treatment will:

- Decrease inflammation
- Decreased muscle tightness and soreness
- Decrease pain
- Increase range of motion and movement
- Increase faster recovery and healing

Q

How is “High Intensity Class IV Laser Therapy” better than “Cold Laser Therapy” treatments?

Cold Laser Therapy (Low Level Light Therapy LLLT) was cleared by the FDA in 2001 with low power levels and low dosage treatments. Since that time new scientific and clinical discoveries have led to the development of higher power lasers, including the new High Intensity Class IV therapy laser which can provide significantly higher dosage levels, a key for positive clinical outcomes.

Q

How are laser therapy treatments administered?

Treatments are performed by positioning the laser handpiece either directly on the skin or approximately ½” above the skin and surrounding the area of injury and pain with the laser treatment beam. Various areas may be treated including:

- Directly over the site of injury or lesion
- Acupuncture points
- Trigger points or tender points
- Nerve roots or superficial nerve trunks

Q

How long will the laser therapy treatment take?

Depending on the condition, treatment times for this drug-free, non-invasive procedure will last on average 5-10 minutes but is based on the size of area, depth of penetration needed and condition being treated.

YOUR HEALTH MATTERS

ABOUT LASER THERAPY ASPEN LASER

AN EPIDEMIC OF PAIN

Pain is one of the top health problems in the United States. An estimated 50 million Americans live with chronic pain caused by disease, disorder or accident. An additional 25 million people suffer acute pain resulting from surgery or accident. Approximately two thirds of these individuals in pain have been living with this pain for more than five years.

The most common types of pain include arthritis, lower back, bone/joint pain, muscle pain and fibromyalgia. The loss of productivity and daily activity due to pain is substantial. In a study done in 2000, it was reported that 36 million Americans missed work in the previous year due to pain, and that 83 million indicated that pain affected their participation in various activities.

People with chronic pain have difficulty finding doctors who can effectively treat their pain. *The Chronic Pain in America: Roadblocks to Relief* study found that one out of four pain patients had changed doctors at least three times, reporting that the primary reason for change was that they still experienced pain.

Laser therapy is a safe, pain-free treatment that only takes a few minutes per visit.

NEW TREATMENT OPTIONS WITH LASER THERAPY

Laser therapy is a safe, pain-free treatment that only takes a few minutes per visit. Laser Therapy does not require the use of drugs or surgery, and there are no side effects or risks that may occur with other forms of treatment. In addition, it can often achieve results faster and better than other treatment modalities. Many conditions show signs of improvement in even the first or second treatments.

The primary mechanism of laser therapy is photobiomodulation which causes a stimulation of cells and tissue repair that is based on scientific research which has demonstrated positive physiological effects of infrared wavelengths on cellular organelles and electron chain molecules.

RESEARCH RESULTS FROM LASER THERAPY

- *Injuries treated with laser therapy heal faster*
- *Laser Therapy has a strengthening effect on tissue repair*
- *Laser Therapy improves blood flow & lymphatic drainage*
- *It is an effective means of relief for many pain syndromes*
- *It can improve immune response*

PATIENT FAQS

HOW ARE TREATMENTS ADMINISTERED?

Treatments are performed by positioning the laser hand-piece approximately 1/2" directly above the skin and surrounding the area of injury and pain with the laser treatment beam.

HOW MANY TREATMENTS ARE NEEDED?

The Class IV Laser Therapy produces results quickly. For most ACUTE conditions 5-6 treatments is all that is needed. CHRONIC conditions take longer and might require 6-12 treatments. While these are the averages, each person is unique and healing time varies by person and condition. For those with lifelong conditions your doctor may recommend 1 or 2 follow-up treatments each month.

HOW LONG WILL THE TREATMENT TAKE?

Depending on the condition, treatment times for this drug-free, non-invasive procedure will last on average 5-10 minutes but is based on the size of area, depth of penetration needed and condition being treated.

WILL THE TREATMENT HURT?

Most patients notice a warm, often soothing feeling. There is no pain associated with a treatment. Many patients also experience reduced muscle tension and tightness, reduced inflammation and improved range of motion.

WHEN CAN NORMAL ACTIVITY BEGIN AGAIN?

The moment a person leaves the clinic, they may resume normal daily activity. It is important to remember to not overexert for a few days, as the body is still healing.

WILL INSURANCE COVER TREATMENTS?

Laser therapy may not be covered by insurance plans. If insurance does not cover the cost of treatments, there are affordable payment plans available.

HOW DOES CLASS IV LASER THERAPY WORK?

When the photons of laser light penetrate the skin and underlying tissue, they are absorbed by the cells, and converted into energy. The cell membrane permeability is altered, which triggers a cascade of cellular events including:

- Stimulation of ATP
- Stimulation of respiratory chain
- Increased DNA and RNA synthesis
- Increased levels of beta endorphins and serotonin
- Enhanced collagen synthesis

WHAT ADVANTAGE DOES CLASS IV LASER THERAPY HAVE OVER OTHER FORMS OF TREATMENT?

The treatment does not require the use of drugs or surgery, and there are no dangerous side effects or risks. In addition, Laser therapy provides enhanced treatment outcomes faster than any other treatment modality.

HOW IS CLASS IV BETTER THAN "COLD LASER THERAPY" TREATMENTS?

Cold Laser Therapy (or LLLT – Low Level Light Therapy) was introduced into the USA in 2001 with low power levels. Since that time new scientific and clinical discoveries have led to the development of the higher power lasers, including the new Class IV Laser Therapy.

877-782-7736 • info@aspenslasers.com • aspenslasers.com

ASPEN LASER

LASER THERAPY TREATMENT PLANS

SILVER PLAN

SINGLE (1) TREATMENT

\$75

GOLD PLAN

SIX (6) TREATMENTS

\$360

SAVINGS OF \$90

PLATINUM PLAN

TEN (10) TREATMENTS

\$500

SAVINGS OF \$250

FOR BEST RESULTS: Multiple treatments over a 1 to 4 week period are required to help the body to heal better and recover faster. Single or infrequent applications of laser therapy treatments will not allow this to happen when initially dealing with an acute or chronic condition. It is recommend to treat 3 times the first week, 2 times the second week, and 1 time every week after until condition improves.

WELLNESS FOLLOW UP: Upon completion of initial analysis, many patients make arrangements for routine follow up laser therapy treatments. To maintain optimal health and wellness, 1 to 2 times per month is recommended. Consult with your health care professional to build your wellness plan.

COST SAVINGS: Compared to costly medications and surgeries, laser therapy provides real cost savings and offers a safe and affordable new approach to pain relief and rapid recovery from injury, surgery and acute or chronic pain. Laser therapy works through a process called Photobiomodulation, which works to restore normal cellular function in damaged cells and provides the energy needed to help the body heal itself. Treatments are quick, painless, soothing and free of side effects.

LASER CUSTOMER FOR LIFE: Once a laser package is purchased, you become a laser customer for life! This entitles you to ANY treatment, ANY time for \$50, without the purchase of another package.

Want to earn free treatments? Ask us about our Referral Card Program!

ASPEN LASER Aspen Laser Therapy Treatments

DRUG FREE | SURGERY FREE | PAIN FREE

CLIENT NAME	
TREATMENT DATE	
TREATMENT #	

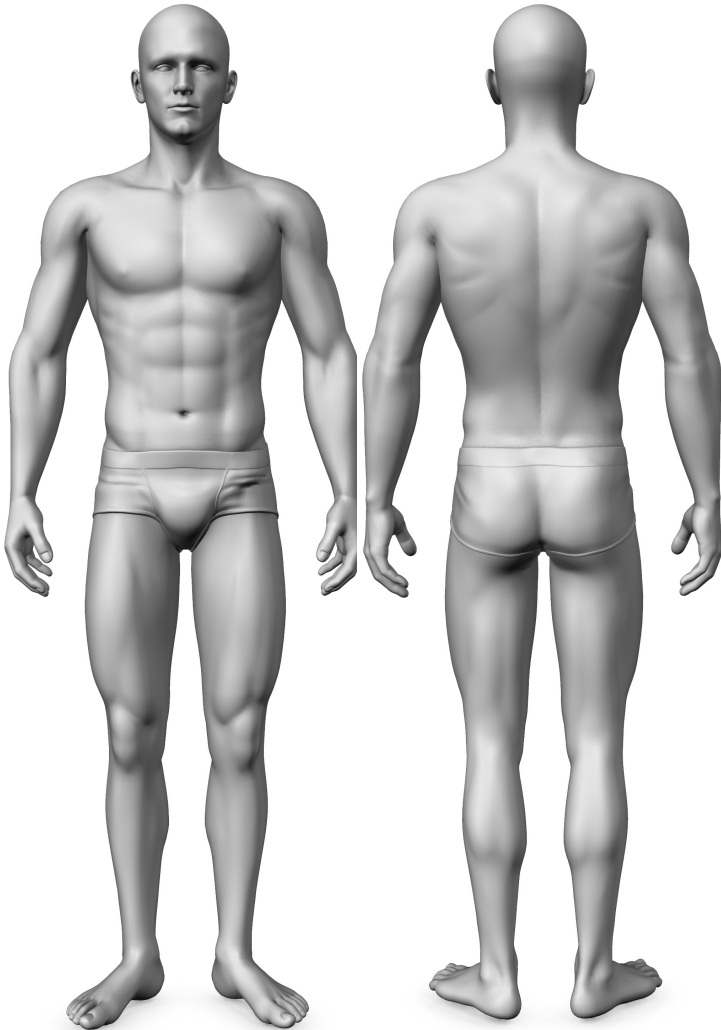
TECHNICIAN	
CHIEF COMPLAINT	

CONSENT FORM SIGNED?	Yes	No
CONSENT FORM CHANGE?	Yes	No
GOGGLES WORN?	Yes	No

TREATED AREA #1		
LASER SETTINGS	W HZ	
	PIOR TO TX	AFTER TX
ROM		
PAIN AT REST		
PAIN W ROM		
PAIN W PALPATION		
TOTAL TIME TREATED		

RANGE OF MOTION (ROM)			PAIN SCALE	
0	None	No joint movement	Absent	
1	Poor	Severe joint restriction	Mild	
3	Fair	Moderate joint restriction	Moderate	
4	Good	Mild joint restriction	Severe	
5	Normal	Full ROM - No joint restriction		

TREATED AREA #2		
LASER SETTINGS	W HZ	
	PIOR TO TX	AFTER TX
ROM		
PAIN AT REST		
PAIN W ROM		
PAIN W PALPATION		
TOTAL TIME TREATED		



TREATED AREA #3		
LASER SETTINGS	W HZ	
	PIOR TO TX	AFTER TX
ROM		
PAIN AT REST		
PAIN W ROM		
PAIN W PALPATION		
TOTAL TIME TREATED		

SIGNATURE	
------------------	--

COMMENTS	See Back of form. Yes No
-----------------	--