Weekly clinical pearl # 1

Development of a master PT

An important component of becoming an exceptional PT is the development of each of our portals of sensory input. We will discuss each of them individually in the near future. But ask yourself the following questions.

- How is your skill of touch developing? Are you able to easily determine end-feel of all structures and precisely localize the restrictions?
- How are your visual skills of seeing posture and movement progressing?
- Is your ability to hear and differentiate gait sounds growing?
- Are you improving in your ability to analyze what your patient is telling you?
- How well are you doing at analyzing your gut sense that is your intuition?

Our quest should be to daily grow in each of these skills.

Weekly clinical pearl: #2

Striving for excellence

"Striving for excellence is a passion not a job"

I often am asked how do I develop the passion.

Well if you have it express it!

If you do not have it choose it!

If that does not work, "Ask yourself what are you afraid of"?

Weekly clinical pearl: #3

Our whole body manual therapy

We call ourselves manual therapists, but to truly produce the most effective results we need to be full body manual therapists. What do I mean by that? Well, the most effective manual care should be performed from the base of support. Which means our whole body participates in the performance of each procedure.

Weekly clinical pearl: #4

A basic premise of the IPA

"Who you are for your patient is often more important than what you do!"

Weekly Clinical Pearl #5

Pelvic girdle insights

Insights into why we consider the pelvic girdle in all treatments. It is a unique structure in its function and structure.

"The pelvic girdle is the foundation of the upper body and the source of movement and control for the lower extremities.

- Mechanical dysfunctions of the pelvic girdle create widespread tensions and torsions which often alters the functional capacity of the system as a whole. These dysfunctions provide an asymmetrical foundation for the upper body and impact the functional capacity of the lower extremities.
- When the postural (stabilizing) muscles of the pelvis are impaired the upper body does not have a stable foundation on which to balance and the motion of the lower extremities are forced to function independently of the trunk ().
- And when the pelvic girdle lacks motor control the upper body and lower extremities are not being directed by the structural source of most motions.

That is why the FMT approach looks to the pelvis as a source of system-wide impairments."

Weekly clinical pearl: #6

A passion for excellence

We have often discussed the importance of a passion for excellence and the intention to achieve your goals.

We will never achieve our professional potential unless it is our goal and intention.

And remembering that achievement occurs through daily focus and recognizing that achieving your potential is a journey and not a destination.

Weekly clinical pearl: #7

Fascia

We have always understood that fascia invests and envelops all structures and is a major system of force transmission and proprioception. That is why we consider fascia as a component in all musculoskeletal dysfunctions. Now we also understand that it is the scaffolding in which all other structures are developed. So, the fascia developmentally is formed first and is the scaffolding in which all the organs, bones, and muscles are formed. Amazing!! Clinical pearl. Do not forget to assess fascial mobility.

Weekly clinical pearl: #8

Empathy and compassion

How we experience our patient's pathos contributes to our effectiveness or serving them. Let's explore the definitions of 4 words which define human responses to others suffering.

- Pity the feeling of sorrow and compassion caused by the suffering and misfortunes of others.
- Sympathy feelings of pity and sorrow for someone else's misfortune.
- Compassion sympathetic pity and concern for the sufferings or misfortunes of others.
- Empathy is the ability to experience the feelings of another person

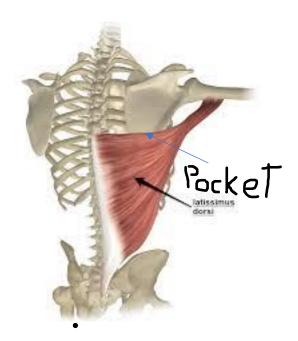
Of these four emotions I encourage you to seek and develop Empathy. The first three requires a judgment (pity, sympathy, and compassion) where empathy is a direct experience of the truth about another person's journey. Through empathy we can discover our patients' true needs.

Weekly clinical pearl: #9

The power of your thoughts

Do you recognize the power of your thoughts? Have you observed what happens when you clearly intend to produce results? Have you noticed what happens when you have negative thoughts about your patients? Have you experienced the results when you experience empathy for your patient? Have you witnessed the impact of your negative or positive thoughts? This week notice your thoughts and attitudes and analyze their impact.

Weekly clinical pearl: #10



The latissimus Pocket

Group: As many of you know Ryan and I attended a 5-day dissection class with Tom Myers. During that class he demonstrated how the inferior boarder of scapula slides into a "pocket" between the latissimus and the rib cage when the scapula is in posterior depression. This position helps to stabilize the scapula and limit winging. We have found many of patients who have a winging scapula during and Elbow Flexion Test (EFT) are not getting the inferior boarder of the scapula into the "pocket". We have discovered three reasons contributing to this problem.

- 1. **AC joint limitation** Scapula is not able to go into posterior depression
- 2. Latissimus adherence to the rib cage We have had many patients that immediately stabilize their scapula once we mobilize the latissimus to allow the lower board to slide in the pocket.
- 3. **Posterior depression motor control** We often have to train patients how to set their scapula in a way that slides the lower angle into the pocket. Then the latissimus and scapular depressors need to be retrained to maintain scapula stability.

So please start evaluating all your patients for winging scapula and determine if they are not accessing the latissimus pocket. Please let us know what you find!!

This Week's Clinical Pearl: #11

Enhancing your skill of observation

The skill of **critical observation** is one of the most important tools in the master manual therapist's evaluation arsenal ... but for many this is not a skill that is easy to develop and refine. We all see, but to develop the skill of critical observation may take many years of work and practice.

So, many ask us, "What is the fastest way for me to develop my ability to critically observe my patients posture and movement?" Our response to that question: "It is not a question of fastest, but of what is the most 'effective' process to develop your skills of critical observation!"

A highly developed skill of critical observation can provide the master with a mechanism to more quickly identify the primary cause of a patient's challenges, and determine the effectiveness of the chosen intervention.

How do you develop the skill of being able to quickly differentiate an efficient posture or movement from those that are dysfunctional? The master is able to quickly discern through observation which components are missing and which components are unnecessary for optimal function. The master is able to differentiate through observation why! We will explore observational skill, and develop procedures in future Clinical Pearls postings. But in the meantime, practice observing posture and movement as a full picture and not just the parts. Or in other words, try to see the whole person.

Weekly clinical pearl: #12

Global gait observation

This week we will continue our discussion on the purposeful development of advanced observational skills. Last week's skill enhancement drill was to practice seeing a body as a whole (global view). Being able to broaden your view to see the top of the head and the feet at the same time. This skill assists us in being able to see the whole person and note general efficiencies and dysfunctions.

This week our observational skill enhancement drill will be to train yourself to see your whole patient while they walk. First of all, you must be willing to take the time to see. Developing your ability to observe will be most effective if you purposefully relax and effortlessly breath diaphragmatically. When you are in this relaxed state you will not interrupt your development by trying too hard. Now have your patient walk naturally and just note what you see about their overall motion and continue just absorbing what you see for their first couple of rounds (they should be walking away from you and towards you). Then, still without analyzing let your eyes naturally focus on a part of the motions they are attracted to. You may note you are

looking at a component that you would not have guided yourself to see. Trust your eyes to focus an aspect of the motion that requires analyze and then assess that component.

So, this week's drill is viewing gait globally and then allowing yourself to focus on a specific component of motion and then noting what you are seeing.

Weekly clinical pearl: #13

Lateral postural analysis - A long one due to nature of subject

We are continuing our series of developing advance observation skills. Our first two posts provided drills to develop your ability to see posture and movement from a global view. Would love to hear your feedback as how you are doing in developing these skills.

This week we will enter into the phase of developing observational analytical skills.

Our first analytical skill is analyzing postural alignment from the lateral view. This view is confirmed through the application of the Vertical Compression Test (VCT).

- 1. Position your patient against a clean uncluttered background. It is easiest to learn postural evaluation when the patient does not have on baggy clothing and they should not be wearing shoes.
- 2. Position yourself at a distance from them that you can see, using a global view, their feet and the top of their head. When I first developed my skill of viewing a lateral view, I would sit on a stool so that my eyes were at the level of their pelvis. I also took a lot of polaroid pictures to study later.
- 3. First take a global view to determine their pattern of alignment. Here is where you would infer what their score would be with the VCT. Also, again notice where in the structure your eyes are drawn to (i.e. hyperextended knees, anterior pelvic tilt, increased or decreased lordosis, position of thoracic cage, forward head). Also note any rotations which occur between the thorax and pelvis.
- 4. Now the **Segmental analytical phase:**
 - a. Feet Ideal Weight in middle of feet.
 Observe where they are placing pressure through their feet (posterior (heels), middle of foot (ideal), and front of foot). A guide is the direction of their tibia. If you still cannot figure out place your fingertips under the heel and front of foot and determine where they are placing their weight. The whole structure above will be influenced by how they place pressure through their feet.
 - Knees Ideal A vertical femur stacks on top of vertical tibia.
 Observe position (flexed, neutral, or hyperextension) If not in neutral try to analyze why? (weight in feet, pelvic position, active contraction?)

- c. Pelvis Ideal Horizontal position so that L-5 can rest upon sacrum. Observe for a horizontal structure and vertical sacrum. When analyzing the pelvis be cognizant that it is suspended between two heads of a femur through the innominate and supports the upper body weight through the lumbar spine into the sacrum. Analyze is it tilted (rotated on femurs anteriorly or posteriorly) or in neutral.
 - If it is tilted, try to analyze why? Is the position secondary from the lower extremities position or from the upper body?
 - Is the mispositioning from myofascial tightness?
 - i. Anterior thigh muscles limited mobility tend to anteriorly tilt the pelvis.
 - ii. Psoas limited mobility tend to create increased lumbar lordosis.
 - iii. Lumbar myofascial tissues tend to create decreased lumbar lordosis
 - Posturing Can you infer if the patient is holding that position as a Functional Holding Pattern as a habit to "look a certain way?"
- d. **Lumbar spine Ideal –** A gentle curve between a horizontal pelvis and vertical thoracic cage.

Observe the general relationship of the pelvis and the thoracic cage to the lumbar spine. The pelvis we have already covered for the thoracic spine a backward bending rib cage posture will generally create and increased lordosis. This position is classified as either an anterior or posterior/posterior through the (Saliba Postural Classification system (SPCS)). We will cover this in more depth in the next section. Also note the shape of the abdomen and determine if that shape may be influencing the posture. Some possible observations are:

- i. A large protruded abdomen which can pull the lumbar spine forward.
- ii. A tensed abdomen (6 Pack functional holding pattern) which changes posture and creates rigidity (among other side effects).
- iii. A relaxed well-formed abdomen with regular diaphragmatic breathing.
- e. **Thoracic cage Ideal –** Vertical with no holding patterns.

The emphasis of the Saliba Postural Classification system. (SPCS)

- i. First of all, note is it vertical or angled forwards or backwards.
- ii. Second note if they are posturing (functional holding pattern):
 - 1. Chest lifted upward (indicating holding an inspiratory state (Posterior SPCS) confirm this state by requesting that they breath out completely and observe the change. If the rib cage is angulated backwards it would be defined as a Posterior/Posterior.
 - 2. Chest depressed and often associated with anterior shoulder girdles (Indicative of holding a state of exhalation Anterior SPCS)
- iii. Third note the posture of the thoracic spine. A kyphotic spine is often related to a state of chronic exhalation while a flattened or reversed kyphosis is mostly related to a state of chronic inhalation. Note if it has a consistent shape or one region is more covered while another is flattened.
- f. **Shoulder girdles Ideal –** Resting on rib cage in a neutral position allowing humerus to hang vertical.

Observe for any elevation, protraction, retraction or winging.

- g. **Cervical Spine and cranium Ideal –** Should rest upon an almost vertical upper thoracic spine forming a slight lordotic curve with the cranium balanced on top.
 - i. First of all, note the verticality
 - 1. Forward -termed a forward's head often extends off a kyphotic upper thoracic region with adaptive backward bending of the cranium.
 - 2. Vertical limited lordosis and often associated with a forward bending of the cranium.
- 5. Now having looked at each segment observe for relationships, patterns and drivers.

Weekly clinical pearl: #14

Developing your skill to observe gait!

Over the past several weeks we have provided you drills designed to assist you in developing advanced observation skills. This week we will explore how to observe a patient's gait. We have previously guided you to position yourself at the level of your patient pelvis and observe them ambulating towards and away from you. We previously instructed you how to develop your global view of your patient to determine overall movement patterns.

Today we will focus on the pelvis and the upper extremities.

We believe that optimal gait is driven from the trunk and this is expressed through the pelvis lifting the lower extremity through anterior elevation and the pelvis adding propulsion to push-off through posterior depression. You can also identify the pelvic motions of posterior elevation at the beginning of toe off and anterior depression while reaching for foot strike. This motion of the pelvis allows for longer weight bearing (there are many advantages to balance through this motion) and decreased striking force at foot contact. Observe your patient (and you can also palpate their pelvis during gait) to identify their individual pattern. You can often determine pelvic use through a lateral view.

In a future post we will cover efficient use of the upper trunk and extremities, but today we want you to focus upon the motion that is occurring in the upper extremities.

Observe for:

- Are they moving in a symmetrical or asymmetrical fashion? (one arm moving more than the other)
- Is the motion occurring primarily proximal or are they bending their elbows?
- Are their movements in diagonal to the body or straight?

When we have efficient pelvic motions, you will note that the arms compliment that motion through reciprocal movement and upper trunk rotation. And if you have that person cross their arms (to determine how much their upper extremity motion is necessary for their quality of gait) you will not notice any changes in their gait pattern. However, if they are depending on their upper extremity motion to reinforce their gait pattern (a dysfunctional state) you will be able to note changes in their ambulatory pattern.

This observation should help you to identify some of the functional capacity limitation related to your patients presenting symptoms and help you to evaluate the effectiveness of your interventions through the enhancement of their gait patterns.

CLINCAL PEARL #15

DISCOVERING THE UNDERLYING PRINCIPLES OF HUMAN FUNCTIOON

We practice evaluation and treatment techniques to discover the impact of impairments. We explore organization to understand the underlying principles of human function. Once you understand the principles you gain mastery and manage each person according to their mechanical, neuromuscular, motor control, mental, and emotional needs to achieve more efficient mechanical capacity and enjoyment of their life.

This week's clinical pearl #16

Exploring the FMT treatment algorithm

What if running the plan (utilizing the progressions) does not produce the results you are expecting. How should you proceed from this point?

Well this is where problems solving and clinical reasoning skills becomes an essential aspect of advanced level of patient care.

Some components of the thought process and components you should assess.

• Non-Physical Therapy problem

- o Am I sure there are not any underlying medical processes driving the presenting symptoms that might need to be referred out for further medical assessment?
- Have I checked for reflex, sensory and strength changes?

Are the symptoms driven by inflammation?

- Have I provided them the skills trained primarily in CFS and Taming Pain to selfmanage their inflammation?
- When are their symptoms worse and better might I be missing a life style precipitating factor?
- Have I considered diet and environmental issues that may be driving their inflammation?
- o Might we need medical management for medication or injections?

• Is it possible their symptoms are related to referral from another region?

First of all, assess neural tension (slump/extension sitting, SLR with neck flexion in supine, upper limb neural tension). Do any of these end range positions increase presenting symptoms or create greater mechanical impairments in the affected region?
 Is it possible that myofascial or articular referral patterns are perpetuating the presenting symptoms?

- Is it possible I have missed a postural component to the symptoms?
 - Just observe them during sitting, standing and functional movements (especially if they report those activities increase their symptoms) and treat the mechanical and neuromuscular components.
 - This is a global evaluation of your patient which may guide you to another region. We have been covering this assessment in previous clinical pearls.
- Is it possible that I have not facilitated their core and their Automatic core engagement (locally, regionally, and globally)?
 - Utilize LPM or other core evaluation tests to determine if they have an efficient feedforward mechanism and core control. Are their responses demonstrate proper timing. If you identify dysfunctions then consider focusing on neuromuscular function for a full session and emphasize this component in their home exercise program.
- Have you thoroughly explored their life style and habits to assure they are not selfperpetuating their symptoms?
 - o If you determine this is possible focus your treatment on CFS training.
- Finally return to assessing and treating their mechanical impairments.
 - o Reassess what you have already treated. Did you miss something? Or have the dysfunctions returned? If they have returned, try to determine why? (more on this subject in a future post)
 - o If it is a spinal problem, perform assessment in sitting through flexion and extension motions
 - o Palpate during standing weight shifting or functional activities to determine if you have missed a related mechanical dysfunction.
 - o Is it possible that instability of the region is the driving problem? Then work on regional hypomobilities to decrease stress and emphasize your prolong holds and strengthening of the region of instability. If this problem continues consider prolotherapy, PRP, stem cells, etc.

I'm sure I have forgetting components that you could add (and please do send those thoughts to the group) and next week we will return to drills for improving your observation of gait.

THIS WEEK'S CLINICAL PEARL #17

Watching your patients' eyes as they access their memory.

We all use our eyes to assist our brain in remembering. So you can gain information related to how your patient stores and access the fact you are attempting to gather.

So notice: Do they look up, straight ahead or down? Do they gaze right or left?

- Right and left
 - If they tend to move their eyes to the right, they may be trying to retrieve information from the right side of their brain. (More creative thinking, artistic less linear than the left)

- If they tend to move their eyes to the left, they may be trying to retrieve information from the left side of the brain. (more logical and linear)
- Up, forward and down
 - If they look up, they may be attempting to retrieve visual information.
 (they stored the memory primarily in pictures visual memory)
 - If they look forwards, they may be attempting to retrieve auditory information. (they stored the memory in words)
 - If they look down thy may be attempting to retrieve kinesthetic information. (How they stored the memory as feelings)

This helps us understand how the patient stores and accesses their memories. If they tend to use one access method predominately that information can assist us in our care of them. We adjust our language by utilizing;

- visual words (see, visualize, picture etc.) for those who predominately gaze upward
- Auditory words (hear, understand, listen) for those who predominately gaze ahead
- Kinesthetic (feel, sense, gut) for those who predominately gaze downward
- Artistic/creative/ flowing words for those who tend to gaze right.
- Logical/clear/step-by-step for those who gaze left.

The purpose is to enter their world to more effectively communicate, train and empower.

THIS WEEK'S CLINICAL PEARL #18

Assessing Cervical Rotation

Most references relate that the optimal range of motion of the cervical spine is for the head to move approximately 90 degrees left and right. So if your patient presents with limited rotation it is important to understand where that motion may be limited.

The majority of this rotation occurs as C1 rotates on C2. Different studies ascribe from 50 to 65 degrees (or 58% in another study) at this segment alone. While the rest of the cervical spine contributes around 20 degrees (or 23% in another study). The remainder (approx. 30 degrees) occur through rotation of the thoracic spine. Knowing these motions assists you in determining which levels may be the culprit limiting your patients range. In our FMUQ class we begin with enhancing upper thoracic mobility prior to focusing on the cervical spine.

This is a great article by Bogduk for JOSPT for your study on this subject. https://www.jospt.org/doi/pdf/10.2519/jospt.2001.31.4.174

THIS WEEK'S CLINICAL PEARL #19

Developing your sense of touch

As we teach in the FM II course – we need to develop the skill of knowing how much pressure is appropriate to treat each individual dysfunction. This pressure is also determined by your individual patients' ability to stay relaxed with the procedure. However, in the process of developing you sense of touch it is important to emphasize the ability to identify the depth, direction, and angle of dysfunction through the lightest pressure you can apply and still feel. This use of light pressure is the most effective means of learning to differentiate structures and determine impairments. Being heavy handed in all your palpations will retard your development of advance palpations skills.

This week's clinical pearl #20

In the hectic treatment environment, most of us work in, it is difficult sometimes to detach ourselves from the challenges of our circumstances. But to truly connect with our patient it is essential to train ourselves to disconnect from the stresses of our day and focus on being with the person we are serving.

I have found the following process to assist me when I am revved up.

- First of all, I have had to train myself to recognize when I am in a state of overwhelm. I have accomplished this by taking a moment when I first sit down with an individual to note my breathing, heart rate and general level of tension in my system. I often note that I am holding my breath, my heart is racing, and my key muscles and organs are being held in a state of tension.
- Once I have discovered that I am in this state, I take a moment to take a deep clearing breath, relax my muscles and attempt to connect with my patient.
- It is amazing how just recognizing tension and purposely intending to calm myself enhances my ability to be with my patient.
- This process provides a quick transition from a sympathetic autonomic state of "fight and flight" to a calming parasympathetic state.
- The thought of the week is to take a moment before you begin engaging your patient to assess what type of state you are in.

Have fun letting go and being in the moment.

CLINICAL PEARL #21

An uncomfortable subject

CDC has reported that about 20% of Americans have chronic pain and 8% have high impact chronic pain. Research has shown that individuals who have suffered repeated abuse (domestic violence) or suffer from a major trauma will have a greater likelihood (40.2%) of suffering from chronic pain, asthma, diabetes, and IBS, than those who have not. Here are some sobering statistics.

- 18% of women have been raped and 1.4% of men.
- 25% of women and 14% of men have experienced physical violence by an intimate partner.
- Studies have shown that up to 40% of children will suffer abuse up to 70% of those will be sexual
- Research has shown that in those who have unresolved trauma in their past will have greater likelihood of developing autoimmune disorders.

This is just the tip of the iceberg of these types of statistics. Therefore, there is a good chance that several of your chronic pain patients will have experienced past trauma(s) that have not been resolved. We must develop the skills to identify these individuals and we must continue to develop tools in which to assist them in becoming whole again. These individuals usually require a team of specialist to assist in the management of their problems and it is usually our responsibility as PT's to identify community resources for such patients.

Through our communication and manual skills, we can help many of these individuals to experience a more meaningful life. We are able to resolve many of their physical problems, unlock the responsible neurotags, and balance their autonomic system. Many of our courses address these issues and I will be posting more in the future of the impact of abuse on the autonomic nervous system and some of the skills we can develop to address these impairments.

Clinical Pearl # 22

Clarifying neural tension tests

All of us utilize these tests for many different assessment protocols. For the FMT approach we focus more on the type and quality of the tension at end range (a springy end-feel is noted as an optimal state) and what related structures are impacted (which may be vertebra, cranium, bones, soft tissues, visceral organs, etc.), than on the reproduction of presenting symptoms. We theorize that dysfunctional fascia is the primary source of this state of limited mobility and tension, and we utilize very specific techniques to enhance mobility.

However, how do we know that when we feel tension, or the patient reports a sensation of pulling what structures are involved?

There are several mechanisms we use to clarify our investigation.

- Tracing and isolating There are two forms of tracing and isolating
 - Through gently oscillating the part (or component of the part) we are assessing at end range and feeling through the tension where the locations of the restriction are located.
 - Using the same oscillations but freeing one hand to trace the nerve and determine locations where the restrictions are located.
- **Use of contract or hold relax** There are many factors which create tension at end range. One of them being protective or reflex muscle contraction. The mechanism we use to determine if the muscle is contracting is to perform a contract or hold relax to that muscle. If we gain range, we know that at this point we were not assessing the nerve or fascial mobility. Continue perform this procedure until you do not gain any further range and then assess the tissue tension in this new range.
- Symptomatic structure assessment One of the foundational principles of FMT is that once the impairments of a symptomatic structure has been resolved in non-weightbearing that we progress to assessment of that structure in weightbearing positions and during the performance of functional and symptomatic activities. Another competent of this assessment is to assess the impact of end range neural tension testing positions on that structure's mobility. We do not believe that we have reinstated an efficient state in the symptomatic structure until mobility is attained through each of these assessments.

Clinical Pearl # 23

Altering the context of pain

Research and pain science demonstrate that the human mind of a chronic pain sufferer overreacts, and the autonomic nervous system shifts towards a sympathetic state with the use of the word pain. In addition, the traditional mechanisms of describing the experience of pain are lacking in creating a stable context for the individual to recognize their symptoms and practitioners to understand their experience. We all have learned to reduce the use of the word pain in our communications with our patients.

The following system of analysis provides the individual and practitioner greater understanding and ability to manage chronic symptoms. The following is a process which will enhance your ability to serve this challenging patient population. I'd recommend if you have symptoms to initially practice this process.

• **Relax** - Assume a posture or position in which to experience the primary symptoms. If possible use sitting or supine.

- **Observation** Spend a moment in silence and in a relaxed state noticing the symptoms
- **Shape** All pain has a 3-D shape. Observe and discover what is the shape of the pain? (amoeba, hand, crescent, octopus, triangle, elephant, snake, square) are just a few of the shapes patients have described. Be sure you have them observe for tentacles extending from the shape and for its depth.
- **Color** All pain can be experienced as color Observe and discover what colors are associated with the pain? (Most often shades of red but have had patients report blues and greens) Be sure to have them explore the various different shades. The more they explore and define their pain the more likely the process will decrease the severity and the more the practitioner knows about their symptoms.
- **Type** All pain has a specific quality Observe and discover what types of pain. (sharp, throbbing, burning, aching, etc.)
- Volume All pain has volume (much more descriptive than the pain analogue scale) I
 have tried many difference containers from barrels to drinking glass and have found a
 gallon or quart beaker to the most faciliatory of an accurate response.
- Past memories and emotions Most pain is associated with past memories and emotions Spend a moment to discover what comes up while observing the symptoms.
- **Observe again** Often the pain will change once it has been described in this depth and the process can be repeated until the pain remains stable or resolves.

Clinical Pearl #24

Discovering the principles of human function

One of the reasons we develop an organizational approach and practice techniques on a wide variety of human problems is to personally develop and understanding of the underlying principles of human optimal function and dysfunction. Once you understand the underlying principle of human function and dysfunction you attain mastery of evaluation and treatment of all patient populations.

Clinical Pearl #25

Pattern recognition

We often discuss the journey from pattern matching to pattern recognition. One of the critical habits to develop in this journey to develop the pattern of testing, treating and then testing again. It is an essential component of the journey.

Clinical Pearl #26

Purveyors of hope

For many the journey of chronic pain and physical problems is a journey of hopelessness and depression. Many of the individuals we treat with chronic conditions are seeking help, answers, and someone to believe in and trust. Part of our quest of becoming a master physical therapist is to develop the skills of discovering and appropriately addressing a patients physical, mental, emotional, and spiritual needs. As just addressing their physical needs may fall short of the full rehabilitation we desire. We are not only facilitators of efficient function, but we should also be purveyors of hope. Becoming practitioners who know how to listen, point out, encourage, be trustworthy and yes be able to truly have them know we care.

Clinical Pearl #27

CIRCUMFERENTIAL THROUGH THE ROM

In the FM II course we present the circumferential technique for treatment of the soft tissues of the extremities. This is a very powerful and effective technique for enhancing muscle play and fascial mobility.

- The technique is initially applied in a neutral position for the extremity.
- The evaluation is performed by placing pressure with both hands to as much of the tissues around the underlying bone and testing the end feel for rotating those tissues to internal and external rotation. If one of those directions is identified to have a hard end-feel further localize in diagonal directions to the hardest end fee.
- Take up all the slack (and you may find Dysum will assist you in not sliding over the underlying surface) and then have the patient attempt to rotate the underlying bone in the opposite direction.
- Upon relaxation take up the slack.
- Once the tissues are mobile in the neutral position begin assessing and treating through the full ROM
- In the upper extremities it can be helpful to have the patient holding a dowel in both hands to have the technique applied while they move through the full ROM.
- In the lower extremities you can have the patient assist by holding the leg up from behind their knees in supine. In side lying the technique can be done through active movements. And also very effective in standing while performing squatting.
- You may find significant improvement in ROM without ever having to take the part to the end range.

Clinical Pearl #28

Asking permission

Remember to ask permission to touch but also sense when you touch the body if you have permission from the tissues.

Clinical Pearl #29

Sherlock Holmes (gathering the facts)

We often discuss the importance of clinical reasoning and problem solving. These interrelated components of patient care are important. We must develop skills like a police detective, a physical therapist Sherlock Holmes attempting to solve complex problems (especially chronic pain) affecting our patients' system instead of a crime.

We need to:

- Be told what the problem is.
- Begin the process of discovering all the components of that problem by initiating the gathering of evidence. This evidence gathering continues throughout the course of care. Some of the components are listed below.

History

- What do they believe their problem is and what are the factors that caused it?
- Do they have any past history of similar symptoms?
- What have MD's said about it (diagnosis)?
- What is their past medical history? Illnesses, surgeries, traumas, accidents, etc.
- What medications have they and are they taking?
- Physically There are many components to be addressed in analyzing their symptoms.
 - What are the physical aspects?
 - How is their function being impacted?
 - Where are their symptoms?
 - Do those symptoms spread?
 - Have they changed over time?
 - Do they alter during the course of their day?
 - What activities (sleeping, sitting, standing, bending, work, sports, etc.) make them worse?
 - If complex consider having them define the symptoms color, shape, volume. (covered in a previous pearl)
 - How do they sleep?
 - What do they eat?

Mentally

- How does this problem affect them?
- What are their thoughts about its impact on their lives?
- Is it affecting their mental processing and memory?
- How much of their time is spent thinking about their problem?

Emotionally

• Are they displaying attributes of emotional problems are they attached to this problem?

- Does it have a traumatic history that is still impacting their healing?
- Are they depressed about their problem?
- Do they experience themselves as a victim of someone or something that they believe are responsible for the symptoms?

Spiritually

- Have they lost some of the components of their social engagement?
- Have they become hopeless?
- Are they losing faith in overcoming their problem?
- Do they believe these symptoms are a punishment?

Like Sherlock Holmes we need to gather the facts from all these components and put them together to develop a treatment plan. Next weeks clinical pearl will be related to the process of developing a treatment plan.

Clinical Pearl #30

Sherlock Holmes (Developing a plan of action)

If you have watch or read about the problem solving that a good detective go through you know they put facts together and then develop a theory. Once they have a theory they then determine a course of action further confirm or refute the theory.

We as problem solving physical therapists are similar. We gather facts about our patients presenting problems, then we develop a theory about what the problems may be and then we design a course of action. That course of action must be to address the most important data we have discovered through the patient's history, physical mechanisms, mental factors, emotional components, and spiritual status. Through these components we must first develop a time-table plan addressing which problems should be addressed first and which one's can be addressed at a future time. We must be able to develop the pattern matching ability to determine what are the driving factors that should be addressed during our initial interaction. At this point the master clinician will have mapped out in their mind what can be addressed during this initial visit and what they plan to address in their next three visits. This component is critical in developing a holistic treatment plan. Even thought this plan may change with fluctuating symptoms, exacerbations, missed appointments, and new facts it is an essential component of a master clinician. Next week we will explore the components of the treatment plan.

Clinical Pearl # 31

Sherlock Holmes (Considering the components of the treatment plan)

So now we have discussed gathering the facts and developing a plan of action. This week we are going to consider the components of the treatment plan.

- 1. Determine what is the patient's greatest needs and attempt to meet those needs.
 - a. If pain is the primary concern attempt to begin with a strategy that addresses pain reduction (Mechanical, Neuromuscular, and Motor Control) and a wow experience.
 - b. If being trained to perform an activity with less aggravation (i.e. sleeping, sitting, carrying, bending, etc.) plan to reserve enough time to provide them training that a wow experience.
 - c. If you determine that education and encouragement is their greatest need then plan enough time to allow them to leave the appointment with knowledge and hope.
 - d. If they are post-surgical it is important to determine their present knowledge of the procedure performed and what they are expecting for a recovery timeframe. If they do not have that knowledge it is important to begin that process on the initial visit.
- 2. Determine what their goals would be for a successful outcome.
 - a. What level of pain?
 - b. What activities to return to?
 - c. What functional gains?
- 3. Be able to provide the patient with some understanding of frequency of visit and approximate total visits that may be required to achieve their goals.
- 4. Determine if they are going to require an in-house exercise program to reinforce their home program. (As always, we recommend determining with the patient how much time they are willing to agree on performing daily exercises).
- 5. Determine if you can address all their issues through treating their problems on the local management strategy or if you need to consider regional or global interventions.
- 6. Plan out a potential treatment progression over the next several visits, determining which dysfunctions or training need to be addressed sooner or can be addressed at a future time.
 - a. Progression of exercise program
 - b. Progression of addressing mechanical needs. (articular, myofascial, visceral, neural/vascular, autonomic NS, vestibular, lymphatic, etc.)
 - c. Progression of addressing neuromuscular function (core facilitation, initiation, strength, endurance, and connecting the segments)
 - d. Progression of addressing motor control components (advanced posture and movement strategies).

e. Progression of addressing their functional needs of their employment, lifestyle, recreational demands, and functional enhancement goals. So within this framework the Sherlock Holmes PT continues to reason, apply the evidence and think out of the box to achieve the patients and your objectives.