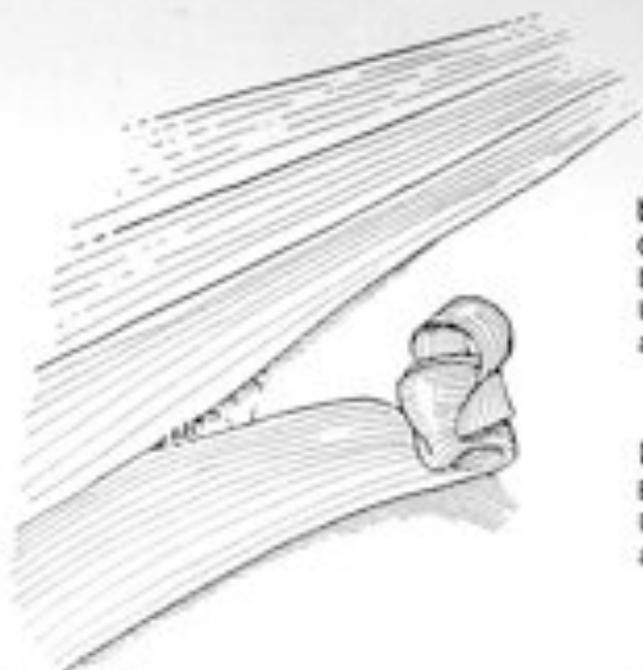


# Introducing the Fascial Distortion Model



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## Introduction

The fascial distortion model is a new anatomical model in which many musculoskeletal injuries are thought to be the result of specific alterations of the body's fascia. It was developed in an attempt to improve current treatments by basing them on a more anatomical approach. Many of the most commonly seen musculoskeletal injuries are vaguely defined and often respond poorly to conventional treatments. One example of this is a pulled muscle. It is difficult to visualize what a pulled muscle is, and therefore most treatments are not specifically designed to correct the underlying dysfunction. In the fascial distortion model a pulled muscle is defined as a muscle that has a triggerband wedged within its belly at a perpendicular angle to the axis of

the muscle. This definition allows us to conceptualize the pathology and to speculate on how our treatment choices might affect the dysfunction. Another example is tendonitis. The traditional definition implies that it is the result of inflammation of an involved tendon, but clinically this rarely occurs. In the fascial distortion model tendonitis is defined as a triggerband or less commonly a continuum distortion present in an involved tendon. The dysfunction now becomes tangible, and the treatment modality can be specifically selected for that particular distortion type. This change in terminology perspective can often lead to significantly more effective treatment results.

There are four principle distortion types and several subtypes which are considered to be the etiological cause

of a whole host of commonly seen dysfunctions from ankle sprains to whiplash injuries. These distortions are presented and discussed over the next several pages. Some of the terms used will be familiar to the reader, but in the fascial distortion model they take on other meanings and have implications that the reader may not appreciate at first. This paper defines terminology so assumptions are not derived from other medical models. A glossary of fascial distortion model terminology is presented at the end of this paper. All of the drawings are based on as much clinical and anatomical information as is currently available. In time as more data accumulates through surgical and clinical investigations, more specific representations of fascial distortions can be made.

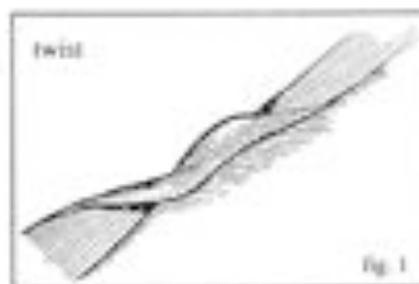
## Principle types of Fascial Distortions

All fascial distortions currently known are of one of four types: triggerbands, triggerpoints, continuum distortions or folding distortions. These are reviewed and compared in Table 1. Note that each principle type is differentiated by the etiology of its distortion.

### Triggerbands

Triggerbands are clinically the most commonly encountered fascial distortion and occur as fascial bands become pathologically altered. An important difference between triggerbands and the other principle fascial distortion types is that during treatment triggerbands move and the others do not. In the fascial distortion model movement is considered to occur when the tender area of a fascial band or its palpable distortion is able to change its location during treatment. Therefore any fascial distortion that can be induced to move is by definition a triggerband and is best treated with modalities that correct distorted fascial bands.

There are six clinically recognized subtypes of triggerbands: twists, crumples, knots, peas, grains of salt and waves. Note that these subtypes were named by my patients based on what these distortions felt like to them.



CLINICAL COMPARISON OF PRINCIPLE TYPES OF FASCIAL DISTORTIONS

Table 1

DISTORTION TYPE	Etiology	Movement during treatment	Common location	Most specific treatment
TRIGGERBANDS 	Distorted Fascial Bands	Yes	Specific pathways throughout the body	Triggerband technique
TRIGGERPOINTS 	Removal of tissue through fascial plane	No	Abdomen, pelvic area, supraclavicular fossa	Index technique or triggerpoint therapy
CONTINUUM DISTORTIONS 	Alteration of transition zone between tissue types	No	Near joints at the origin and insertion of tendons or ligaments and costo-chondral junction	Continuum technique
FOLDING DISTORTIONS 	Three dimensional distortion of fascial planes	No	Inside joints, intermuscular membranes	Myofascial release technique

The triggerband subtypes are compared in Table 2. An important point to realize is that regardless of the specific subtype all are treated essentially the same way, that is by using triggerband technique. The palpatory differentiation of the subtypes is necessary so they are not confused with other distortions and treated inappropriately. Their treatment is the subject of the accompanying paper *Triggerband Technique*.

Twists (fig. 1) are the most common of the triggerband subtypes and can appear anywhere in the body along specific, well-demarcated pathways. To the physician they feel like the edge of a twisted ribbon. A crumple (fig. 2) is a distorted fascial band that is wedged between two muscle layers. During treatment, patients describe these as causing a burning type of pain. Like all of the subtypes, twists and crumples are capable of travelling through tissues or joints into other fascial planes. Once a crumple is pushed through the muscle, it then is palpated as a twist.



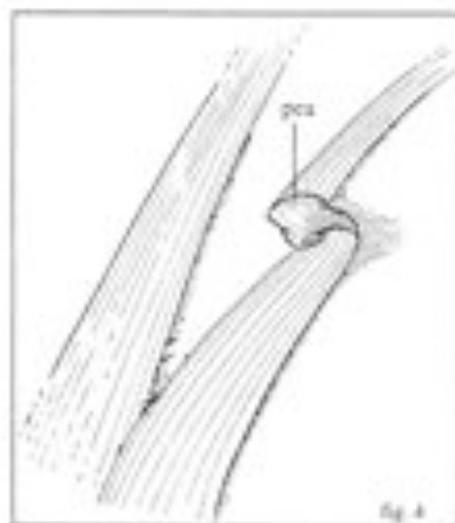
Knots (fig. 3) are the largest of all the triggerband subtypes and are caused by either a portion of a fascial band becoming irregularly folded on itself or occur when a portion of the band that has been ripped off its attachment becomes knotted on top of itself. Knots tend to be found at crossbands, which are fascial bands that intersect the triggerband at an angle. The crossbands seem to stop the progression of the tearing between

fascial fibers and thus stop the knot from becoming larger.



Peas (fig. 4) and grains of salt (fig. 5) are seemingly just smaller versions of knots. Peas are smooth, and are obviously pea-sized, while grains of salt are much smaller with irregular borders. As a general rule, knots are found the most centrally, peas are found in the neck, upper arms and thighs and grains of salt are found in the face, scalp, hands and feet.

The wave that is seen when a

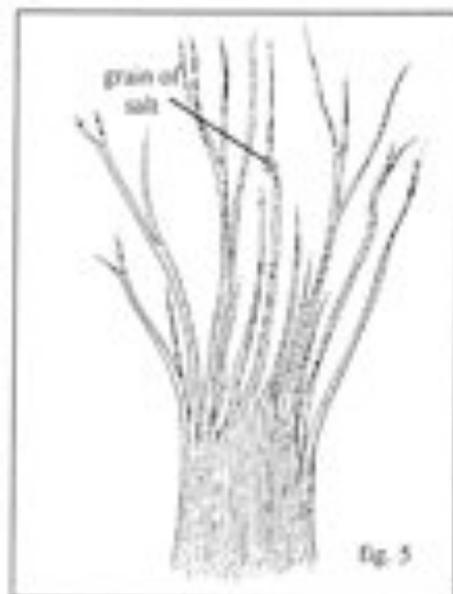


triggerband occurs is found on the fascial bands that connect to the

Table 2

Subtype	Palpation description	Patient's description during treatment	Palpation dimensions	Associated with other triggerband types?	Common locations
Twist	Rubbed edge	Well defined demarcated point of resistance that moves with the treatment	Ballon or pencil width	No	Anywhere including through joints
Chronic	Electrical sensation	Burning	1/4" to 1/2" wide	Yes, becomes taut during treatment	Between muscle layers
Knot	Knot	Tender lump	Round or ball-delta diameter	Yes, becomes pea-grain of salt or twist	Throats and lumbar areas
Pea	Soft, smooth and round, pea-like	Tender lump	pea-sized	Yes, becomes grain of salt or twist during treatment	Neck, thighs, and upper arms
Grain of salt	Small with hard irregular borders	Snapping sensation	Salt grain-sized	No	Face, scalp, hands, and feet
Wave	Waviness	Tenderness or tightness in treatment area	Barely palpable	Yes, any distorted band can have a wave	Anywhere, but particularly near joints

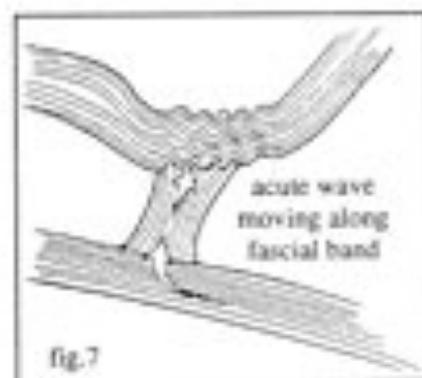
injured band (fig. 6). The triggerband, because of its distorted or twisted fibers, becomes shortened. This shortening causes the adjoining fascial bands (usually crossbands) to be pulled toward the distortion at their point of attachment to the injured band. This results in the formation of the wave that is present with most triggerbands. The wave is therefore a distortion in its own right and it can take on a life of its own. It can be pulled or pushed by forces that may act upon it (including triggerband technique, stretching and high velocity low amplitude osteopathic manipulation). When waves occur in ligaments that are close to joints, they tend to become pulled by everyday normal motion in toward the joint. As they become closer physically to the joint, the patient experiences a sense of tightness of the joint because the



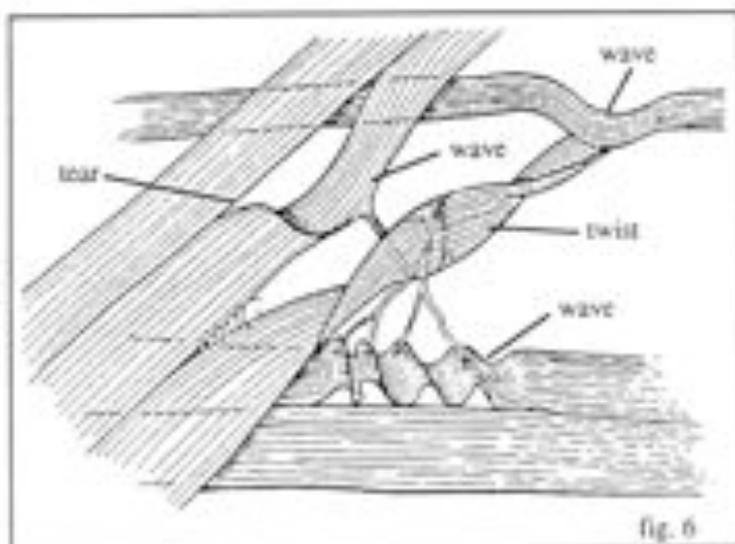
wave is now interacting on the structures on and near the joint causing a restriction of joint function. This is

objectively seen as a loss of motion of the involved joint. In acute conditions (i.e., distortions in which no fascial adhesions have formed) the wave is able to travel freely to and from the joint as the forces act upon it (fig. 7), but in general without intervention it is pulled in a direction toward the joint. In chronic pain (i.e., fascial distortions in which adhesions are present) the wave is held firmly in place by adhesions and is immobile (fig. 8). The degree of immobility of chronic pain is determined in part by how far the locked wave is from the joint. The closer the wave is to the joint the less motion the joint will have.

The acute wave can be corrected or moved by certain soft tissue



techniques, such as triggerband technique, myofascial release, rolfing, traction or stretching. I prefer triggerband technique because it is the most specific; it follows the distortion until it is far from the injury site and corrects it at the conclusion of its pathway (fig. 9). Myofascial release, rolfing, stretching and traction merely pull it away from the joint to a distant area, but since the distortion is not actually corrected, it may eventually be pulled back into its prior location. In chronic pain, normally only triggerband technique will be effective because it is specifically designed not only to correct the wave but also to break the fascial adhesions.



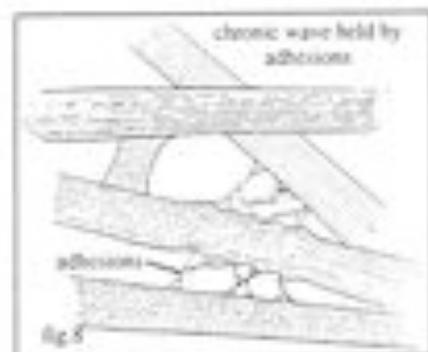
High velocity low amplitude osteopathic manipulation (HVLA) is a technique that uses the vertebrae or other bony structures as a fulcrum to slingshot the acute wave away from the joint at a very high speed. If the direction and speed of the wave reach a certain threshold the joint will manipulate and a popping sound can be heard. If the thrust does not generate enough speed, the wave will not be moved successfully and the joint will not be manipulated.

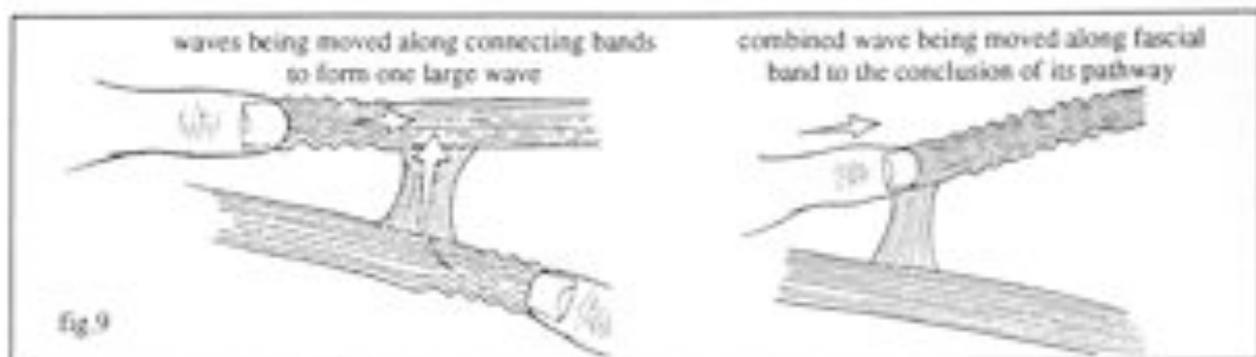
In the fascial distortion model the two clinical concerns with HVLA are 1) the wave has been forced away, but may in time be pulled back into its previous location and 2) adhesions would be expected to thwart the speed of the wave propagation, thus making HVLA an impractical treatment to use in chronic pain. The problem with the wave eventually returning is the same one that several other modalities have. This is seen most commonly in those patients that feel they need to be popped frequently. For other patients manipulation appears to be curative. This may be because the wave was pushed away into another location where the forces acting upon it were able to straighten it out. In chronic pain, a successful manipulative thrust is difficult to achieve, and the patient

often expresses discomfort with the treatment itself. This is in contrast to acute pain in which the patient normally experiences a dramatic subjective improvement at the instant of the manipulation. As is expected from this model, once the adhesions are broken with triggerband technique, then even the most difficult to manipulate patients become easy to manipulate, and the manipulation is then a positive subjective experience. HVLA's role in the fascial distortion model is primarily in acute pain and in chronic pain after it has been made acute by destruction of the adhesions.

## Triggerpoints

The term triggerpoint has been used in the past for a variety of fascial

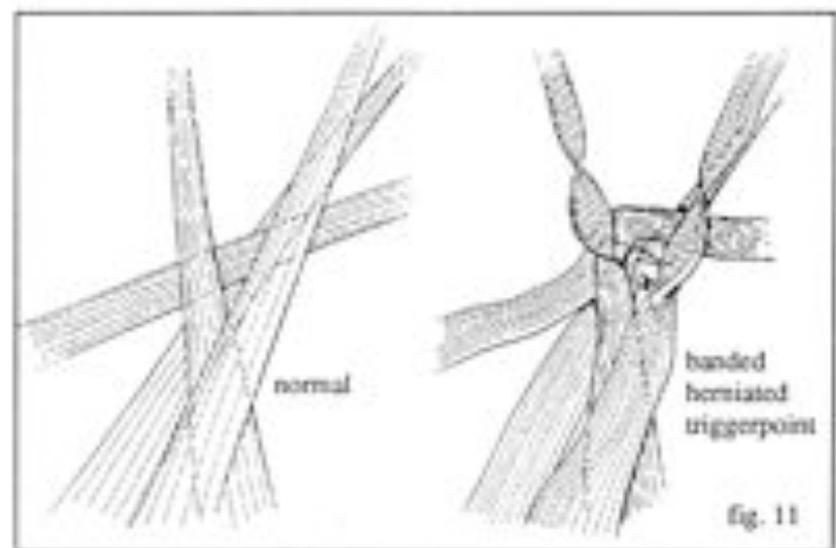
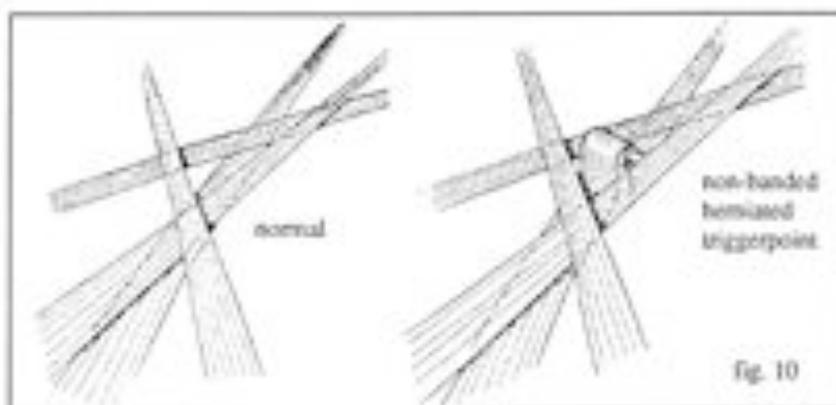




distortions that have different etiologies and treatments. I prefer fascial distortion as a general term, and then I use terms such as triggerband, continuum distortion, triggerpoint and folding distortion as more specific descriptions. I believe that there is only one type of true triggerpoint. This is the one I refer to as a **herniated triggerpoint**.

However, there are two subtypes of these. One involves a fascial band distortion (i.e., triggerband) that results in a herniated triggerpoint and is therefore a combination of a triggerpoint and a triggerband, and the other involves herniation without a fascial band distortion. The treatment of a **non-banded herniated triggerpoint** (fig. 10) is to force the protruding tissue below the fascial plane. This is accomplished by holding firm pressure onto the affected area with the physician's thumb until a release is felt. Correction of the **banded herniated triggerpoints** (fig. 11) is initially the same. Following the release the triggerband is then corrected using triggerband technique. The two triggerpoint subtypes are compared in Table 3.

Triggerpoint distortions are clinically the cause of many types of abdominal and pelvic pain, particularly those that do not respond to surgical intervention. In addition, they are important factors in fascially frozen shoulders (see *Triggerband Technique*) and in bursitis-like injuries of the upper thighs and gluteal areas. Differentiating them from other



principle distortion types is critical in obtaining successful treatment results.

Another type of fascial distortion is a **banded pseudo-triggerpoint** (fig. 12). It is a raised and tender area of fascia that is caused by two or more

triggerbands becoming intertangled. It is not a triggerpoint at all, although upon palpation it may seem similar. It is treated by correcting one triggerband at a time until all the distortions are resolved.

*continued on page 30*

## CLINICAL COMPARISON OF TRIGGERPOINT SUBTYPES

Table 3

Subtype	Etiology	Palpatory Differentiation	Treatment
 <p>NON-BANDED HERNIATED TRIGGERPOINTS</p>	Herniation of tissue through non-banded fascial plane	Correction is completed at the end of triggerpoint therapy	Triggerpoint therapy or Jones technique
 <p>BANDED HERNIATED TRIGGERPOINTS</p>	Herniation of tissue through a banded fascial plane distorted by a triggerband	At completion of triggerpoint therapy a triggerband is palpable	Triggerpoint therapy or Jones technique followed by triggerband technique

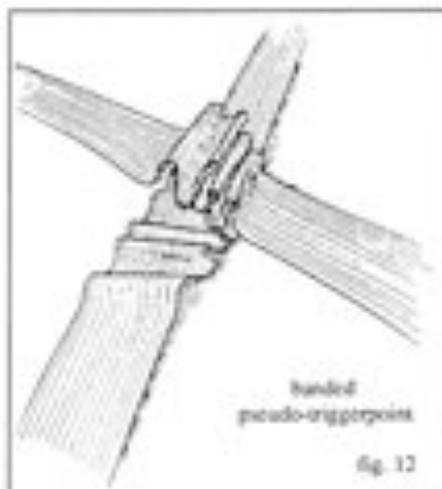
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### Continuum Distortions

Continuum distortions are clinically the primary cause of ankle sprains, pulled ribs, contusions and many other acute injuries seen daily in the emergency room setting. In addition, along with triggerbands, they are associated with chronic problems such as frozen shoulders, costochondritis and low back pain. Continuum distortions are thought to occur when the forces of injury cause an alteration of the transition zone between two tissue types (fig. 13). Continuum technique is designed to reverse this shifting of tissue components by applying equal and

opposite force to the continuum distortion. When the direction and force are adequate, the injury suddenly reverses and clinically the injured area then resembles its pre-injury condition.

Continuity and continuum are two terms used frequently in the fascial distortion model. Although they may seem redundant, they are not, and the implications of each are important in understanding fascial distortions. Continuum is an anatomical model in which tissues are viewed as being in a constant state of physiological flux in which one tissue type can be transformed into another tissue type through its transition zone depending upon the external forces applied to it. In Continuum Technique only



transitional zones between musculo-skeletal tissues are discussed, but the continuum model applies to all tissue transition zones and therefore

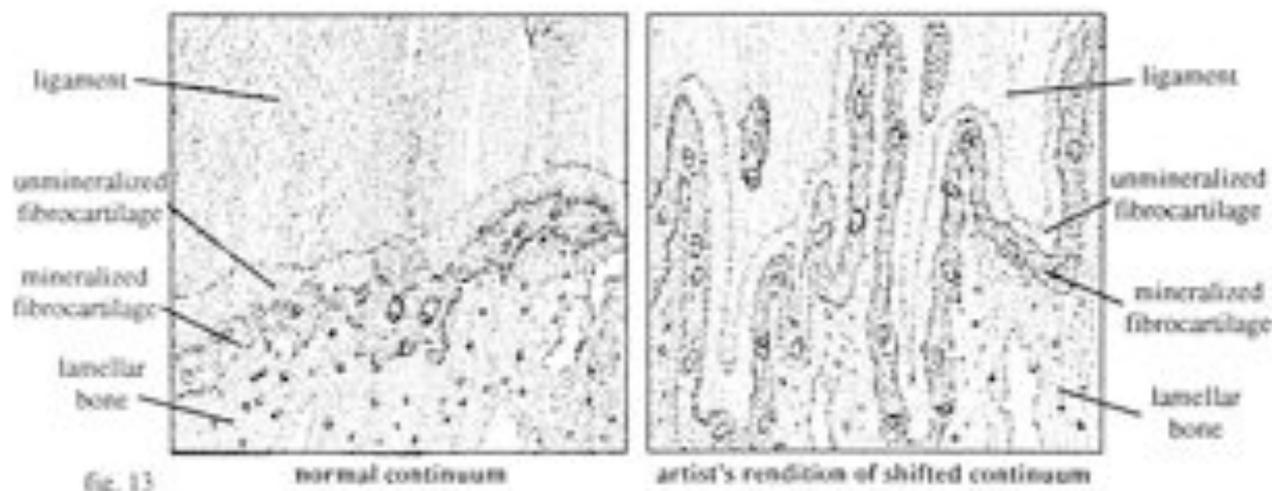


Table 4 TRIGGERPOINT AND CONTINUUM DISTORTIONS

COMPARATIVE CATEGORY	TRIGGERPOINTS	CONTINUUM DISTORTIONS
Etiology	Hemiation of tissue through fascial plane	Alteration of transition zone between tissues
Common location	Abdomen, suprascapular fossa	Near joints at the origin and insertion of tendons, ligaments, and costo-chondro junction
Size	Done to nickel	Pea-sized or smaller
Palpatory sensation to physician	Buggy marble	Viscous A or E soft gel capsule
Palpatory sensation to patient	Moderate tenderness	Moderately tender to excruciatingly painful
Time of treatment until release begins	Variable—seconds to minutes	Variable—less than a minute
Duration of time once release begins until completion	15 seconds to 3 minutes	1-3 seconds
Sensation experienced by physician and patient during release	"Mixing"	"Button slipping into a button hole"

distortions are found in or near a joint, or at the origin or insertion of tendon or ligament with bone. True triggerpoints are most common in the abdomen. Palpatory-wise they are quite different to the experienced physician. Continuum distortions are smaller, firmer and have little give. Triggerpoints are larger, have less-defined borders and are much softer. The release that occurs during correction is also different. The continuum distortion is like a button slipping into a button hole, while the triggerpoint is a melting sensation. The differences are clinically important because how they are envisioned will direct what force and finesse is actually used. In treating either of these, it is the skill of the treating physician that will ultimately determine the success of the treatment.

potentially effects all types of tissues. The term **continuity** refers to the interconnections of all the bodily tissues. In the context of fascial distortions it refers specifically to the fact that individual fascial fibers pass through various tissues and that an alteration of any given portion of that fiber will result in pathological changes elsewhere along that same fiber. Triggerband technique is based on the model of continuity, whereas continuum technique is based on the continuum model.

Although I have already spent some time talking about both continuum distortions and triggerpoints, I think that it is still worthwhile to compare them face to face (Table 4). Despite the fact that they are etiologically different, some physicians may have difficulty discerning the two. Continuum distortions are the result of shifting in the tissues transition zones, and triggerpoints are the protrusion of tissue above its fascial plane.

As a general rule, continuum

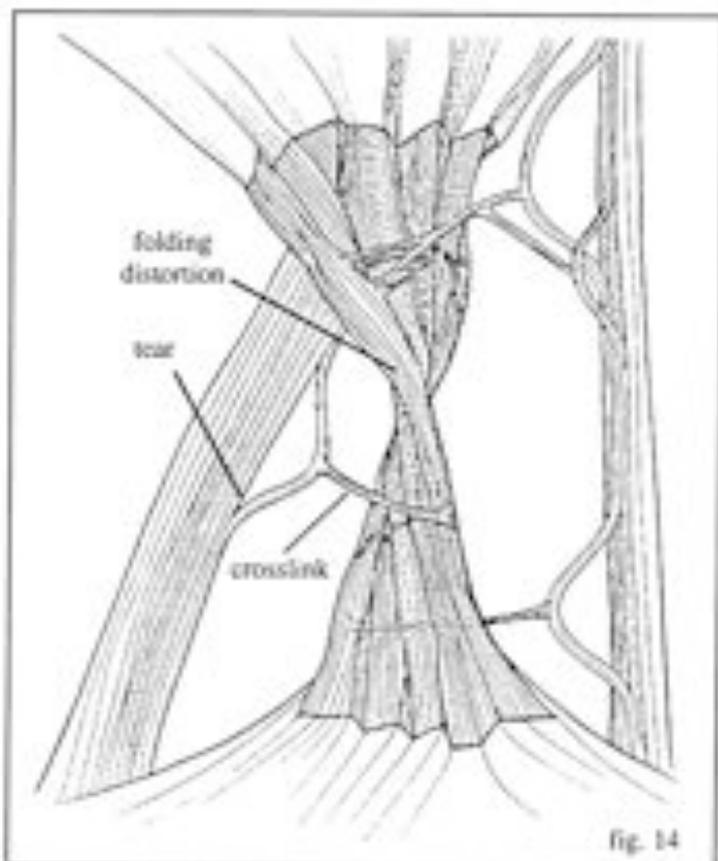


fig. 14

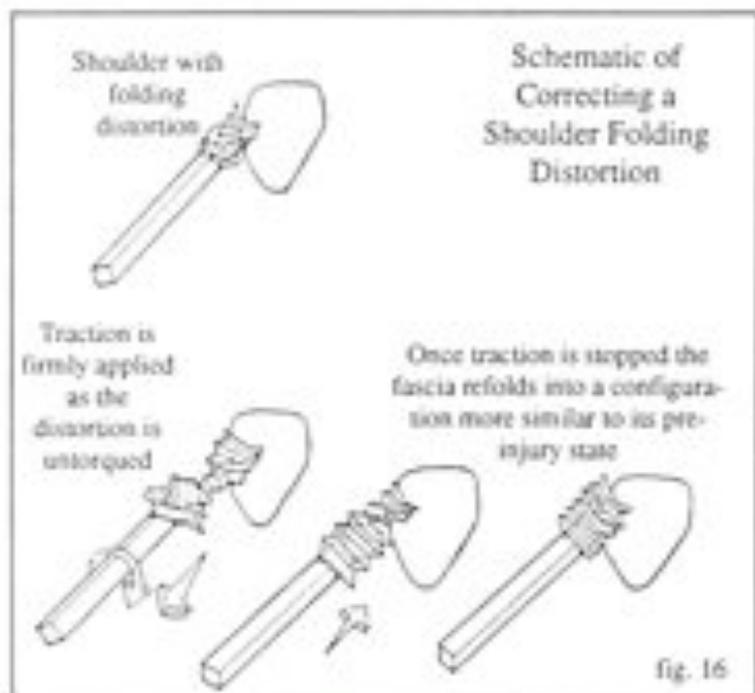
## Folding Distortions

The term fascial plane has been used primarily by physical therapists and proponents of myofascial release. They tend to view the fascia as being present in a planar presentation which pathologically develops restrictions. Myofascial release technique is often a very effective approach to fascial distortions, but I believe not necessarily for the same reasons that have been commonly expressed. Although fascial planes do exist, they do not exist in the same sense that this piece of paper has a planar presentation. Within the fascial planes are fascial bands (fig. 14), which means that an alternation of the plane is in effect altering the fascial bands.

In addition, most fascial planes are not static entities that rest in the body like this paper can rest on the table. The planar presentation is dynamic and moving. As an arm is raised the interosseous fascial plane shifts and partially unfolds. If the forces are increased on the arm such as occurs with lifting, the fascia unfolds more.

It is this unfolding of the fascial planes that is an important, and until now, unknown fascial phenomenon. So, as forces are applied to the fascial plane it is able to unfold to be able to accommodate the stress. This spreads the forces more evenly throughout the fascia and other musculoskeletal structures that are interconnected. But since the fascia unfolds under stress, it must be able to refold once the forces are removed. It is this ability that often is lost with injury and that myofascial techniques are the most effective in treating.

To visualize this better, think of the fascial plane as a piece of paper that is folded in fours. As forces are applied to the edges of the paper, it pulls apart. First it becomes a half, then three-quarters and then a full page. But if the paper is twisted during unfolding it will be constricted. For

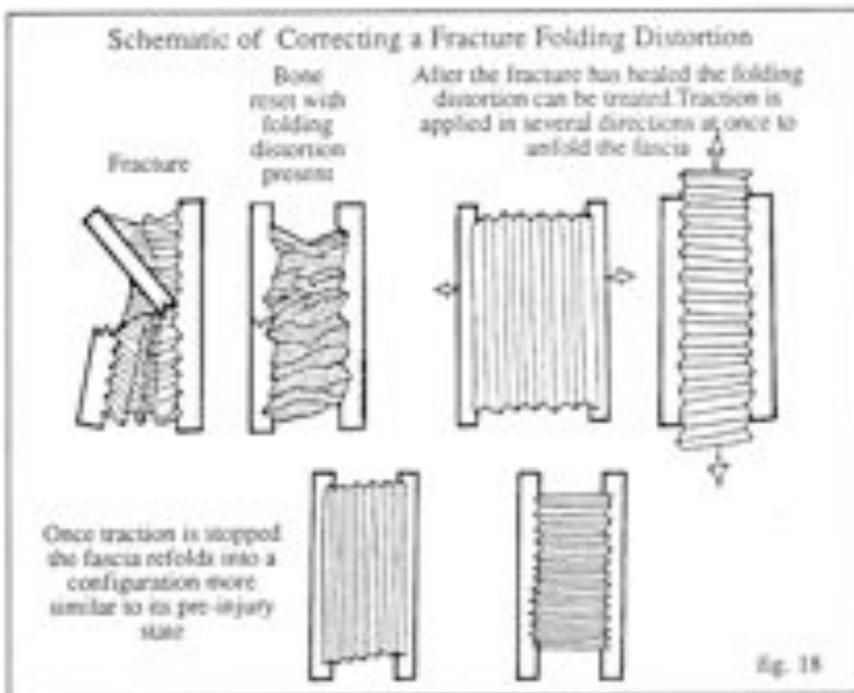
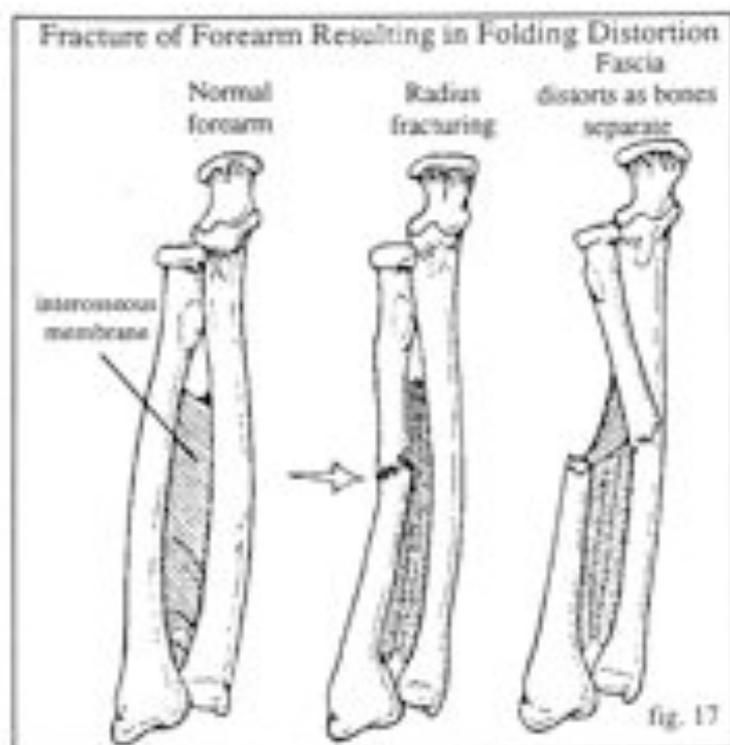


proper refolding, the forces must be directed so that the contortion is reversed. If this does not occur then the refolding cannot be done in a way that restores the fascia to its pre-injured arrangement. I believe this is what myofascial release does; it restores fascial folds to their pre-injured states by simultaneously unfolding and untorquing the fascial distortion.

It must be remembered that there may be fascial band distortions as well, and for optimal results these need to be corrected. At times the fascial planar distortion cannot be corrected until the fascial band distortion has been resolved. In any case, the understanding of fascial folding distortions, fascial planes and myofascial release are all important principles in the fascial distortion model.

Fig. 15 demonstrates what may happen as a shoulder dislocates and is corrected by orthopedic manipulation. Although many times the result is adequate, some of these patients continue to have residual pain and decreased range of motion. This is thought to occur because the fascial plane remains torqued and distorted. In fig. 16, myofascial release is used to gently unfold the distortion and then untwist it before refolding occurs. The shoulder itself does not need to be dislocated to accomplish this, although firm traction is often necessary. A total correction of the folding distortion does not occur with this treatment alone. Stretching and strengthening, triggerband technique and normal everyday use of the shoulder may also be necessary for a complete resolution of the distortion.

Figs. 17 and 18 show what may happen to the fascial planes as a fracture occurs. The fascia is unfolded, torqued and then refolded with distorted fascial planes resulting. The best treatment after the fracture has



healed is to correct the distortion with myofascial release. To be successful, forces must be applied in several directions at once to first unfold the fascia and then untorque it before it refolds. Often two or more sets of

hands are necessary to accomplish this. Again, physical therapy, stretching, strengthening and triggerband technique may be helpful once the folding distortion has been successfully treated.

## Glossary

**Acupressure Points:** Specific anatomical sites along acupuncture meridians that are treated by holding pressure on them in the belief that this will correct dysfunctions elsewhere in the body. Triggerband pathways offer a possible anatomical mechanism for this to occur.

**Acupuncture Points:** Specific anatomical sites in which acupuncture needles are placed. These commonly match crossbands of triggerbands and the meridians often match triggerband pathways.

**Acute Injuries:** Musculoskeletal dysfunctions in which no adhesions have formed.

**Adhesions:** Fascial fibers that are aberrantly attached to other anatomical structures and result in dysfunction and restriction of those structures.

**Arthritis-like Pain:** Pain that is interpreted by the patient as arthritis but is instead of a fascial origin.

**Banded/Herniated Triggerpoints:** One of two subtypes of triggerpoints that are characterized by herniation of tissue through a banded fascial plane that is distorted by a triggerband.

**Banded Pseudo-Triggerpoint:** A fascial distortion that occurs when two or more triggerbands overlap.

**Bursitis:** A painful area under a muscle that is tender to touch. Most of these are triggerbands, although some are either triggerpoints or continuum distortions.

**Carpal Tunnel Syndrome:** A condition in which median nerve conduction is impeded by a triggerband distortion.

**Chronic Injuries:** Musculoskeletal dysfunctions in which adhesions have formed.

**Combination Distortion:** A distortion that is made up of two or more principle fascial distortions, such as a continuum distortion and a triggerband present together.

**Continuity Model of Anatomy:** An anatomical model in which individual fascial fibers pass through various structures and tissues and that an alteration of any given portion of that fiber will result in pathological changes elsewhere along that fiber. It also includes the concept that fascial fibers are continuous with and become the fibers that make up bone, ligaments, tendons and other adjoining tissues.

**Continuum Distortion:** A principle fascial distortion type that occurs when there is an alteration of the transition zone between two tissue types. This most commonly occurs at the origin or insertion of ligaments or tendons with bone.

**Continuum Model of Anatomy:** An anatomical model in which tissues are viewed as being in a constant state of physiological flux in which one tissue type can be transformed into another tissue type through its transition zone depending on the forces applied to it.

**Continuum Technique:** A manual modality that is used to correct continuum distortions. The thumb of the physician is used to first locate and then treat the area of shifted continuum. Force is applied in equal amount and opposite direction to which the injury occurred and is held until there is resolution of the distortion.

**Contusion:** A continuum distortion of the periosteum.

**Costochondritis:** Chest wall pain resulting from a combination of continuum distortions and triggerbands.

**Cranial Technique:** Treatment modality in which the rhythm of fascial fluid is palpated in the cranial area and gentle alterations of the rhythm are made to influence fascial distortions at a distant site.

**Crossband:** Fascial bands that are found in the same plane and at a different angle to a triggerband. They are often the anatomical starting place in triggerband technique.

**Cross-link:** A single fascial fiber that is present at a 90 degree angle to a fascial band which it is restraining. When injuries to cross-links occur, this may cause the band to twist or allow its fibers to tear and separate.

**Crumple:** A distorted fascial band wedged between muscle layers--triggerband subtype.

**Double Twist:** A triggerband distortion in which the fascial band is twisted twice. These are thought to be the cause of the "Headlight Effect".

**Failed Back Surgery Syndrome:** An ongoing pain the lumbar spine that has a fascial etiology that was not correctable by surgical intervention.

**Fascia:** The primary connective tissue of the body that makes up tendons, ligaments, fascial bands, myofascia, adhesions and other tissues that surround and engulf muscles, bones, nerves and organs.

**Fascial Band:** A collection of parallel fascial fibers.

**Fascial Distortion:** A pathological alteration of fascia that results in dysfunction of the affected fascia and its associated structures. The four principle types are triggerbands, triggerpoints, continuum distortions and folding distortions.

**Fascial Distortion Model:** A medical model in which most non-orthopedic, non-neurological and non-organic musculoskeletal dysfunctions are considered to be the result of injured or altered fascia.

**Fascial Fiber:** A collection of parallel collagen fibers.

**Fascial Plane:** Fascial tissue that is present in an orientation such that it is broad and wide but has little thickness.

**Fasciitis:** An infection that involves the fascia.

**Fibromyalgia:** Multiple fascial distortions that involve large areas of the body and have an excessive amount of fascial adhesion formation.

**Folding Distortion:** A principle fascial distortion type that is the result of a three dimensional alteration of its fascial plane. These commonly occur as the result of a fracture or dislocation.

**Frozen Shoulder:** Any fascially injured shoulder that has reduced motion to the extent that daily activities are impaired.

**Grain of Salt:** A triggerband subtype that is a much smaller and firmer version of a knot.

**Groin Pull:** A triggerband present in the groin area.

**Headlight Effect:** During triggerband technique this occurs when the patient has an awareness of the course of the

triggerband pathway some distance ahead of the actual point of the treatment. This is likely the effect from a double twist in which the second twist is pushed ahead by the pressure being applied to the first twist.

**High Velocity Low Amplitude Osteopathic Manipulation:** A thrusting technique in which joint restrictions are alleviated by sling-shooting the triggerband wave distortions away from the affected joint at a very high speed.

**Jones Points:** Anatomical locations of commonly palpated triggerbands, triggerpoints and continuum distortions.

**Knot:** A triggerband subtype that occurs when either a portion of a fascial band has become folded on top of itself or when a portion of a band has been ripped from its attachment and has become knotted on top of itself.

**Massage:** A treatment of myofascia that moves triggerbands away from the involved muscle.

**Movement:** The motion of a triggerband distortion along its pathway. This occurs in acute pain and during certain treatments such as triggerband technique, rolling or traction.

**Muscle Energy Technique:** A treatment modality in which muscle contractions are used to force the triggerband away from a crossband that is in or near a muscle.

**Myofascial Energy Technique:** A treatment modality in which sustained manual traction is applied until a triggerband distortion is moved out of an affected muscle. It also can be

used to correct folding distortions if the forces are directed so that the fascia is first unfolded and then untorqued before refolding occurs.

**Non-banded Herniated Triggerpoint:** One of the two subtypes of triggerpoints that is characterized by herniation of tissue through a non-banded fascial plane.

**Osteoarthritis:** A condition in which the fascia in or near a joint has taken on characteristics of the adjoining bone.

**Pea:** A triggerband subtype that has a similar etiology to that of a knot, but clinically has a much smoother and rounder palpatory presentation.

**Plantar Fasciitis:** A triggerpoint involving the plantar fascia. If a heel spur has formed this is evidence that over time the continuum between fascia and bone has shifted dramatically.

**Pressure Points:** Small, well-demarcated areas of the body that elicit tenderness with palpation. To be adequately treated they must be differentiated into their anatomical etiologies of fascial distortion types. Many are either triggerpoints or continuum distortions, but triggerbands and banded pseudo-triggerpoints also are described by patients as being pressure points.

**Principle Types of Fascial Distortion:** Pathological alterations of fascia that have distinct etiologies. There are four currently known: triggerbands, triggerpoints, continuum distortions and folding distortions. For a new principle type to be recognized it must have a completely different etiology than any other type of fascial distortion previously described.



*Pseudo-sciatica:* Any one of several triggerband pathways that mimic the course of the sciatic nerve.

*Pulled Muscle:* A muscle that has a triggerband wedged within its belly at a perpendicular angle to the axis of the muscle.

*Release:* The sensation experienced by both physician and patient at the instant of correction of a triggerpoint, continuum distortion or folding distortion.

*Rolfing:* A treatment of muscle fascia that may result in breaking of adhesions and forcing of a triggerband out from an involved muscle.

*Shifting of the Continuum:* This occurs when forces are applied to the transition zone between two tissues and the percentages of their components become altered.

*Sprain:* A nonspecific description of a fascial distortion. Ankle sprains are most commonly continuum distortions. Cervical, lumbar and shoulder sprains are often triggerbands.

*Strain Counterstrain Technique:* A treatment modality in which a triggerband is forced away from an involved muscle by alternating the direction of muscle contractions.

*Tendonitis:* A triggerband, or less commonly a continuum distortion, present in a tendon.

*Tennis Elbow/Little Leaguer's Elbow:* A tender area over the lateral or medial epicondyle that is caused from a triggerband or less commonly a continuum distortion.

*Traction:* A treatment modality in which a pulling force is applied in one direction to an affected area of the body. Very small triggerbands can at times be corrected with this modality, and if the direction and force are appropriate, some folding distortions may also respond to traction.

*Transition Zone:* The intermediate area between two tissue types that contains characteristics of both tissue types.

*Triggerband:* A principle fascial distortion type characterized as being a distorted fascial band.

*Triggerband Pathway:* The anatomical course that a distorted fascial band is found to have during its correction using triggerband technique. Most patients with the same clinical problems tend to have anatomically the same distortion pathways.

*Triggerband Technique:* A manual approach to treating distorted fascial bands in which the distortion is located and corrected along its entire pathway by using physical force from the physician's thumb.

*Triggerpoint:* A principle fascial distortion type that results from a herniation of tissue through a fascial plane also known as a herniated triggerpoint.

*Triggerpoint Therapy:* A technique used in the treatment of triggerpoints in which the physician's thumb is used to push protruding tissue down below the fascial plane.

*Twist:* A triggerband subtype that occurs when a portion of a fascial band becomes rotated on itself.

*Wave:* A triggerband subtype that is palpated as a wrinkling in the crossband of the adjoining triggerband.

*Whiplash Injury:* A injury that results from a sudden introduction of flexion and extension to the cervical spine. Most of these are triggerband distortions of the cervical fascia, but continuum distortions also may occur at the origin and insertion of the cervical ligaments.

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