**REFERRED PAIN**

*Referred pain* is a painful sensation located in a part of the body that is usually considerably removed from the source of the pain. This type of pain most frequently radiates or refers from a muscle (trigger point formation), or irritated nerve root. It may also originate from a visceral organ, interspinous ligament or other deep sensory organ. Each source of referred pain generally produces a distinct referred pain pattern, but a referred pain pattern may not be exclusive. Referred pain patterns from different sources may be simultaneously coincident, thus overlapping one another.

**Treatment**

Treatment of *nerve root* or *ligamentous* sources of referred pain must be directed at relieving associated inflammation, swelling, adhesions, or other structural pressure (refer to Nerve Root or Dermatome Referred Pain Distribution, and Interspinous Ligamentous Referred Pain Patterns).
NERVE ROOT OR DERMATOMES REFERRED PAIN DISTRIBUTION

Cutaneous Innervation of Cranial N. V (Trigeminal Nerve), C2 & C3

Cutaneous Innervation of C4-C8, T1 & T2
Cutaneous Innervation of T3-L1  

Cutaneous Innervation of L2-S2
INTERSPINOUS LIGAMENTOUS REFERRED PAIN PATTERNS

Referred Pain Patterns from Interspinous Ligaments C6, C8, T5 & T7

Referred Pain Patterns from Interspinous Ligaments C5, C7, T3 & T6
Referred Pain Patterns from Interspinous Ligaments T1, T4 & T8

Referred Pain Patterns from Interspinous Ligaments T2, T9 & L1

Referred Pain Patterns from Interspinous Ligaments T10 & T12

Referred Pain Patterns from Interspinous Ligaments T11 & L2
Referred Pain Patterns from Interspinous Ligament L3

Referred Pain Patterns from Interspinous Ligament L4
Referred Pain Patterns from Interspinous Ligament L5

Referred Pain Patterns from Interspinous Ligaments S1 & S2
VISCERAL ORGAN REFERRED PAIN PATTERNS

Referred pain patterns from the Larynx

Referred pain patterns from Upper Esophagus, Trachea, or Bronchi

Referred pain patterns from Lower Esophagus, Gastric Cardia, Jejunum, Ileum or Duodenal Cap, (B) Lower Colon

Referred pain patterns from the (A) Duodenum, (B) Upper Colon, (C) Testis
Referred pain pattern from the Appendix

Referred pain patterns from the (A) Bladder Fundus, (B) Uterine Fundus

Referred pain patterns from the (A) Gallbladder, (B) Fallopian Tube or Ovary

Referred pain patterns from the (A) Prostate Gland, (B) Pancreas
Referred pain patterns from the (A) Bladder Neck, (B) Kidney Pelvis

Referred pain patterns from the Seminal Vesicles, Uterine Cervix or Upper Vagina
Referred pain patterns from the Ureter

Referred pain patterns from Myocardium

Referred pain pattern from the Ascending Aortic Arch (aneurysm)
TRIGGER POINT REFERRED PAIN PATTERNS

Masseter (deep)

Masseter (superficial A)
(pattern may include upper teeth & jaw)

Masseter (superficial B)

Masseter (superficial C)
(pattern may include upper teeth & jaw)
Temporalis (anterior) (pattern may include upper teeth & jaw)

Temporalis (middle A) (pattern may include upper teeth & jaw)

Temporalis (middle B) (pattern may include upper teeth & jaw)

Temporalis (posterior supra auricular)
Medial Pterygoid
(pattern may also exist inside the jaw)

Lateral Pterygoid

Anterior Digastric
(pattern may include upper teeth & jaw)

Posterior Digastric
(point accessible just under lower jaw)
Semispinalis Cervicis

Upper Trapezius A

Posterior Cervical Group

Splenius Capitis A
Sternocleidomastoideus (superficial fibers)

Sternocleidomastoideus (deep fibers) (forehead pattern may occur contra laterally)

Orbicularis Oculi

Zygomaticus Major
Platysma
(pattern may also be under chin)

Splenius Capitis B

Scalenus
(Anterior, Medius, & Posterior)

Scalenus Minimus
Infraspinatus

Infraspinatus (abnormal)

Medial Teres Major

Lateral Teres Major
(point palpable in the posterior axilla area)
Middle Trapezius A

Middle Trapezius B

Middle Trapezius C
("Goose flesh" occurs with pain)

Lower Trapezius A
Lower Trapezius B

Cervical Multifidus (C4-C5)

Supraspinatus (muscle)

Supraspinatus (tendon)
Latissimus Dorsi (upper portion)

Latissimus Dorsi (abnormal)

Serratus Posterior Superior
(points palpated with scapular abduction)

Serratus Anterior
Medial Triceps (deep fibers)  Medial Triceps (lateral fibers)

Lateral Triceps  Triceps (long head)
Supinator

Extensor Carpi Radialis Longus

Extensor Carpi Radialis Brevis

Extensor Carpi Ulnaris
Flexor Digitorum Sublimis (radial head)  
Flexor Digitorum Sublimis (humeral head)  
Flexor Pollicis Longus  
Abductor Digiti Quinti
Serratus Posterior Inferior

Multifidus (T4-T5)

Multifidus (S4)

Longissimus Thoracis (L1)
Longissimus Thoracis (T10-T11)  
Multifidus (L2-L3)  
Multifidus (S1-S2)  
Iliocostalis Lumborum (L1)
Iliocostalis Thoracis (T6)

Iliocostalis Thoracis (T11)

External Oblique A

External Oblique B
Pyramidalis

McBurney’s Point

A. Upper Rectus Abdominis
B. Middle Rectus Abdominis

Lower (Caudal) Rectus Abdominis
Biceps Femoris

Vastus Medialis

Gastrocnemius

Anterior Tibialis
Long Toe Extensors

Soleus

Peroneus Longus

Short Toe Extensors
Abductor Hallucis