


# Myofascial Pain Syndrome



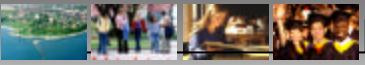

Orthopedics  
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## Myofascial Pain Syndrome Piriformis Myofascial Trigger Point





- May be the cause for back, buttocks, or leg pain

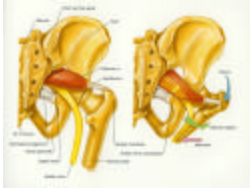
## JFK and Myofascial Pain



- Appointed the first female U.S. Surgeon General, Dr. Janet Travel
- She treated his myofascial LBP






## Anatomy Piriformis




- Relatively small muscle exits the pelvis through a relatively large sciatic foramen.

Travell & Simons






## Clinical Definition of Myofascial Trigger Point

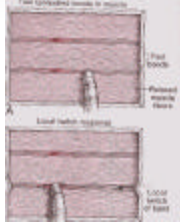


- A hyperirritable spot in skeletal muscle that is associated with a hypersensitive palpable nodule in a taut band

Travell & Simons

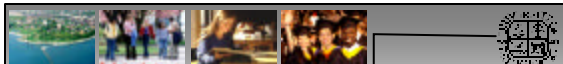



## Myofascial Trigger Point Localized Twitch Response to Palpation




- A. Flat palpation of taut bands
- B. Snapping palpation or rolling the band quickly under fingertips produces a localized twitch response.

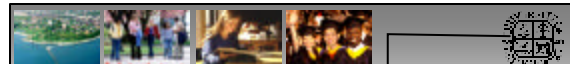
Travell & Simons



### Palpation of Myofascial Trigger Points



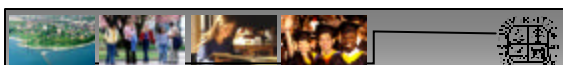
- Flat
- Snapping
- Pincer
- Deep



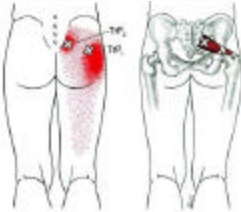
### Active Myofascial Trigger Point

- A myofascial trigger point that causes a clinical pain complaint. It is always tender, prevents full lengthening of the muscle, weakens the muscle, refers a patient-recognized pain on direct compression, mediates a local twitch response of muscle fibers when adequately stimulated, and, when compressed within the patient's pain tolerance, produces preferred motor phenomena and often autonomic phenomena, generally in its pain reference zone, and causes tenderness in the pain reference zone.

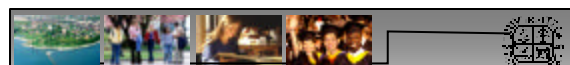
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### Active Myofascial Trigger Point



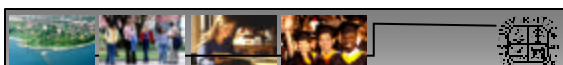
- Tender
- Muscle dysfunction
- Compression Pain
- Stimulated LTR
- IC
  - Referred pain, motor and autonomic phenomenon




### Latent Myofascial Trigger Point

- A myofascial trigger point that is clinically quiescent with respect to spontaneous pain; **it is painful only when palpated**. A latent trigger point may have all the other clinical characteristics of an active trigger point and always has a taut band that increases muscle tension and restricts ROM.

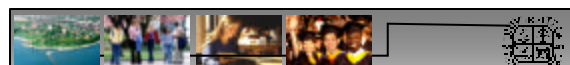
Travell & Simons




### Causes of Myofascial Trigger Points



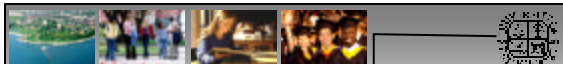
- Acute trauma
- Repetitive trauma
- Postural strain or shortening
- Chilling



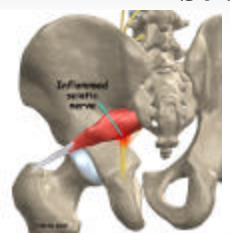
### Causes of Myofascial Trigger Points



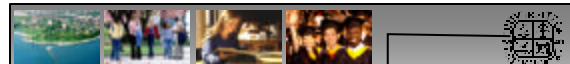
- Emotional distress
- Nerve compression
- Visceral disease



## Piriformis Syndrome Sciatica

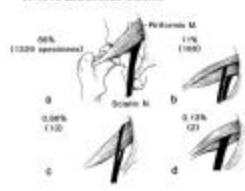


- Travell states that the sciatic nerve may be entrapped or compressed by the piriformis muscle.

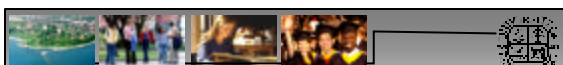


## Sciatic Nerve Relation with Piriformis


Relation of Sciatic Nerve to Piriformis Muscle  
in 1510 Extremities Studied



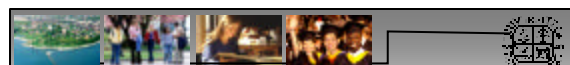
- There are four variations of muscle nerve relationship with piriformis and sciatic nerve.




## Palpation of Piriformis



- Palpate the muscle from sacrum to the belly and then the greater trochanter of the femur head.



## Passive Stretch of Piriformis



- It is necessary to stabilize the pelvis prior to provoking the piriformis with a stretch.



## Myofascial Pain Syndrome Treatment of Piriformis



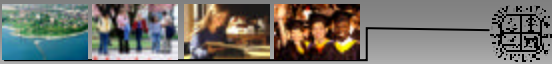
- How will you relieve the pain and dysfunction caused by myofascial trigger points?



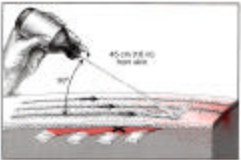
## Myofascial Pain Treatment



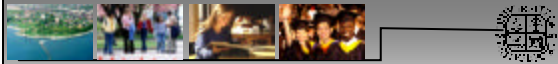
- Ischemic compression
- Spray and stretch
- EMS and heat
- SMT




## Spray and Stretch



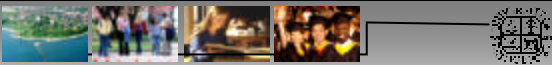
- Spray and stretch
- Heat and EMS
- SMT
- Home stretches
- Home Resisted Exercises




## Piriformis Stretch



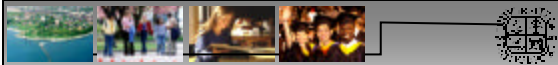
- Teach the patient appropriate stretches to be performed at home.
- 10 reps and 10 sets per day for 10 days




## Piriformis Stretches



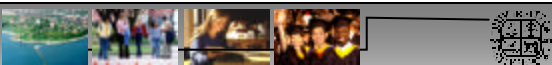
- If the patient increases the pain or does not respond to stretching at home, suspect lack of compliance or inappropriate technique.




## Piriformis Trigger Point Injection



- Chiropractors, osteopaths, and allopaths may prefer to perform injections



## End of Presentation



- I strongly recommend the acquisition of the textbook by Travell & Simons, Myofascial Pain and Dysfunction: The Trigger Point Manual.