

# Trigger Point and Dry Needling

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# Trigger Points

- Hyper irritable tender points within muscle and fascia- often at muscle/fascia junctions
- Palpated as bands- “sausages” in muscle
- Often secondary to a primary dysfunction ie postural etc
- When stimulated can cause autonomic responses ie dizziness, vasoconstriction, sweating
- Can cause changes in skin temperature as evidenced by thermograms
- Often a reduction in circulation occurs as a result of spasm and oedema. This may lead to ischaemic changes in the muscle structure
- May see skin changes if long standing trigger activity- ie orange peel skin, match stick test
- Typically develop in muscle that is overloaded ie mechanical overuse, neurological overuse, protective overuse in synergists and antagonists
- An overused muscle is not a strong muscle.

# Symptoms

- Patient reports dull constant aching
- May report parasthesias as trigger tightens muscle across nerve ie piriformis
- Often report “fuzziness” as distinct to frank neurological symptoms ie p&n, tingling
- Refer to trigger point referral maps of muscles as demonstrated by Travel and Symons

# Signs

- May demonstrated weakness on testing
- May demonstrate loss of muscle range of corresponding muscle
- Obvious palpable tender band in muscle. May be several within the muscle.
- Looking for:
  - Pain with pressure
  - Thickened tissue/ band/ nodule/ ropiness
  - A twitch response

# Signs Cont..

- *Orange Peel* skin- thickened, coarse feel of skin overlying trigger area- more seen in chronic conditions
- *Match Stick* test- when depressing match stick into skin small indentation is left- like pitting oedema- due to autonomic changes in subcutaneous tissue
- *Satellite Trigger points*- points lying in the same reference zone that may be activated by the primary trigger. May correspond to myotomes if neurological. But not always. Satellite triggers may become primary triggers that develop their own satellites and pain distribution
- *Secondary Trigger Points*-
  - Develop in synergists, muscles that do the same job. These muscles are having to do more work as a result of an underperforming primary muscle.
  - Develop in antagonists, opposing muscle. As result of a tightened agonist, the opposing muscle works harder and is overloaded.

# Treatment

- Aim of treatment is to neutralize active triggers and stop the overloading.
- Methods
  - Stretch Spray- use of cold spray on stretched muscle- old spray had CFC..not very green
  - Ischaemic pressure- sustained constant pressure over trigger to slowly release it
  - Dry Needling- use of acupuncture needles to release trigger.

# Rx cont...

- Must stretch muscle post treatment
- Must correct underlying cause ie postural, weakness, core issues, neurological sensitivity, joint involvement, pelvic dysfunction
- If long standing problem triggers will return, but as primary dysfunctions are corrected, overloading of muscle tissue will not occur and trigger activity will lessen

# Dry Needling- acupuncture

- Identifying active trigger and using a needle to release it
- More efficient and effective
- More specific and directed so may actually be less painful than STM/ myo releases
- Patient needs full understanding of process and what to expect during and after treatment
- Use the word PIN, not NEEDLE..semantics but does make a difference



# Technique

- Be confident with using and manipulating needle
- Need to be able to use and manipulate needle with one hand while other maintains trigger
- Use alcohol swabs to clean areas before commencing
- Identify trigger between fingers and hold with one hand
- Do not touch needle with fingers- be as sterile as possible

# Needling

- Be confident and don't hesitate, patient knows it..and its more painful
- Be quite aggressive with trigger and searching for it.
- You are looking for a twitch response- ideally the muscle but sometimes a whole body twitch..still ok
- Most muscles leave in for 5 mins. Re-check- “fish” for more trigger- move needle in and out in fanning motion. No twirling- winds the muscle up like fairy floss.
- Some muscle groups in and out. Once you get the response you're done.
- Moist heat post needling to sooth muscle.

# Warnings

- Min risk of infection as one use only, sterile needles
- Feel initial prick as pin hits the skin
- When get into trigger you will feel little electric shock and twitch of muscle
- Muscle may jump
- You may then have ache around pin for a few mins
- Will leave it in for a few minutes then remove it.
- Happy Days...

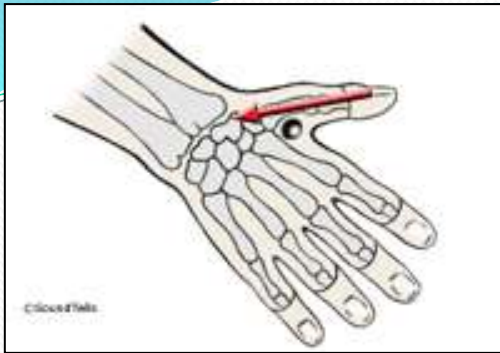
# Post Rx warnings/instructions

- Sore and achy rest of day- panadol if need
- Dead leg feeling/ heavy feeling in limb, Like you've been corked
- No heavy exercise post treatment
- Drink water
- Stretching of area
- Continue heating
- Bruising not usually an issue but assure patient that it is normal and only superficial.

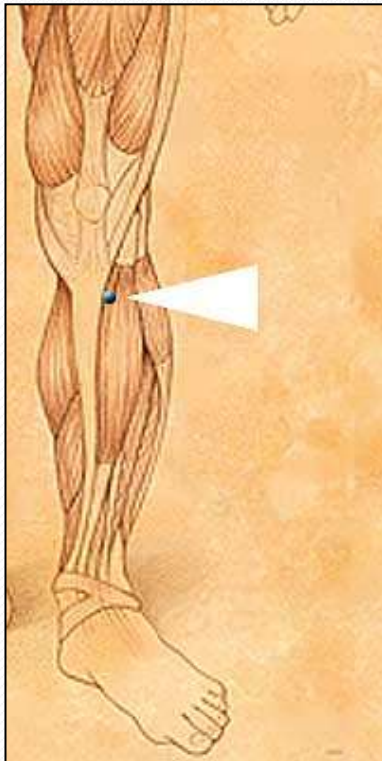
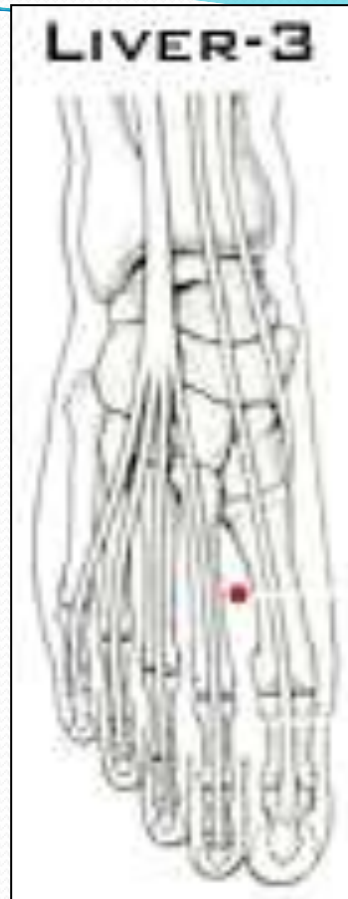
# Precautions

- Trigger activity may be protective in initial stages of acute injury ie acute lumbar and cervical disc..be wary to release too much..may make it worse.
- In these cases do not release all triggers because they are there. Pick one and work from there.
- Use Pain Gate Acupuncture points for severe pain

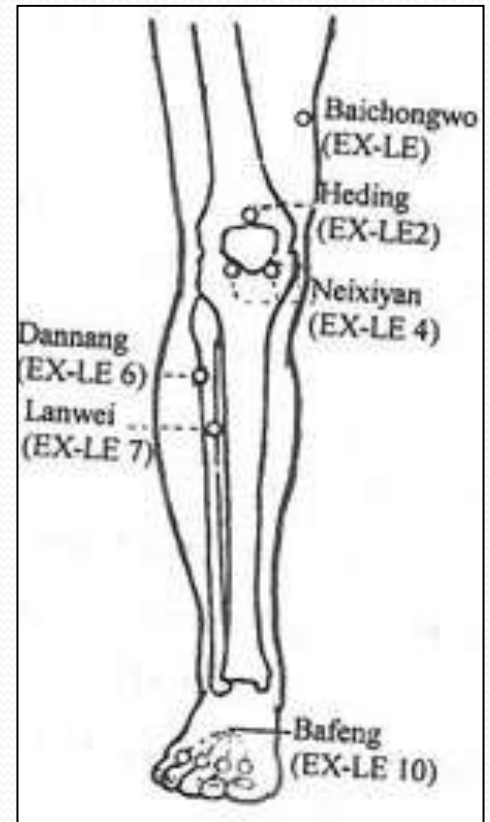
**Large Intestine 4- LI 4**



**Liver 3- Liv 3**



**Stomach 3- St 3**



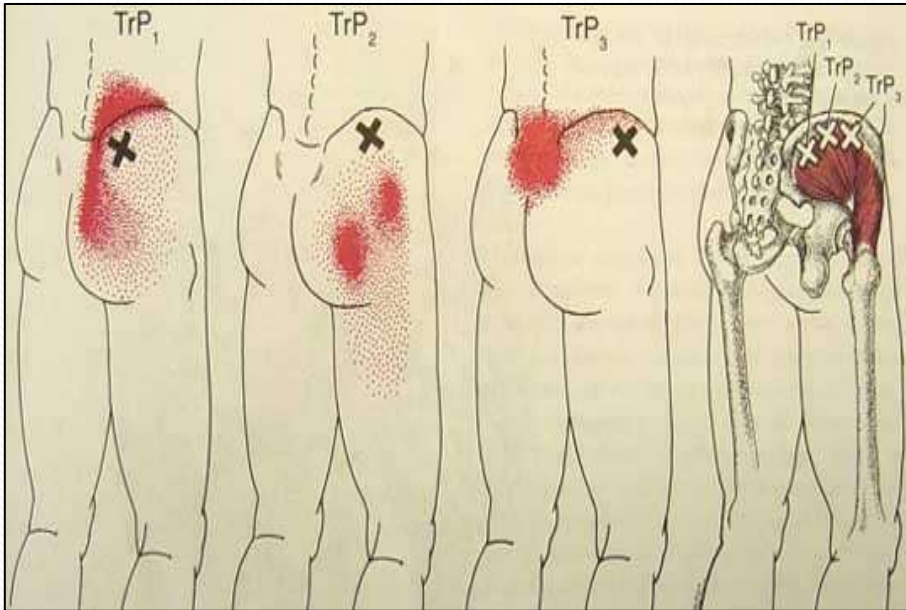
**Gall Bladder 34- GB 34**



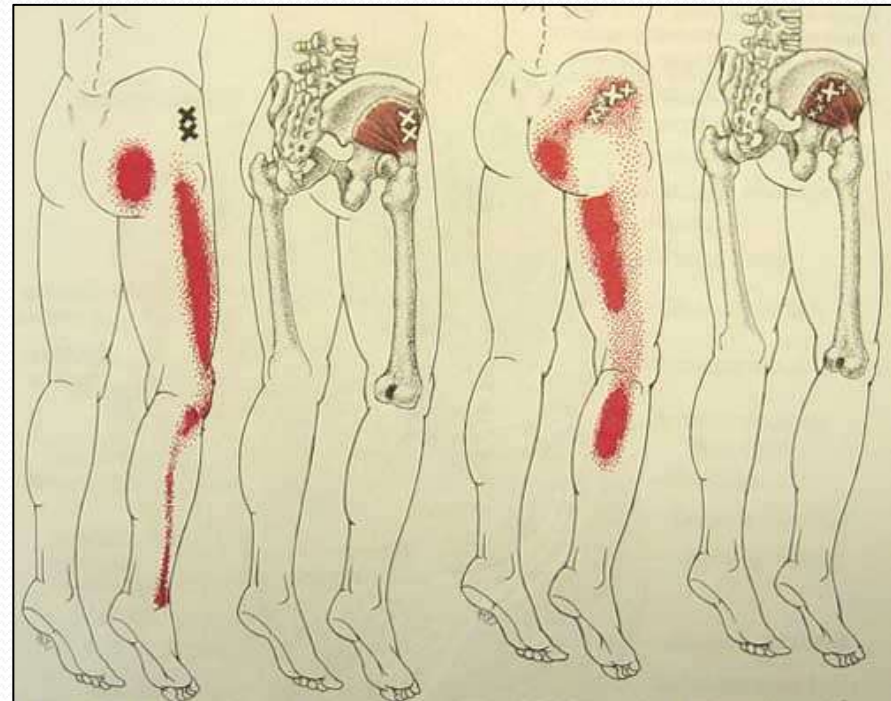
# Muscle Pain Maps

# Glut Med and Min

## Gluteus Medius

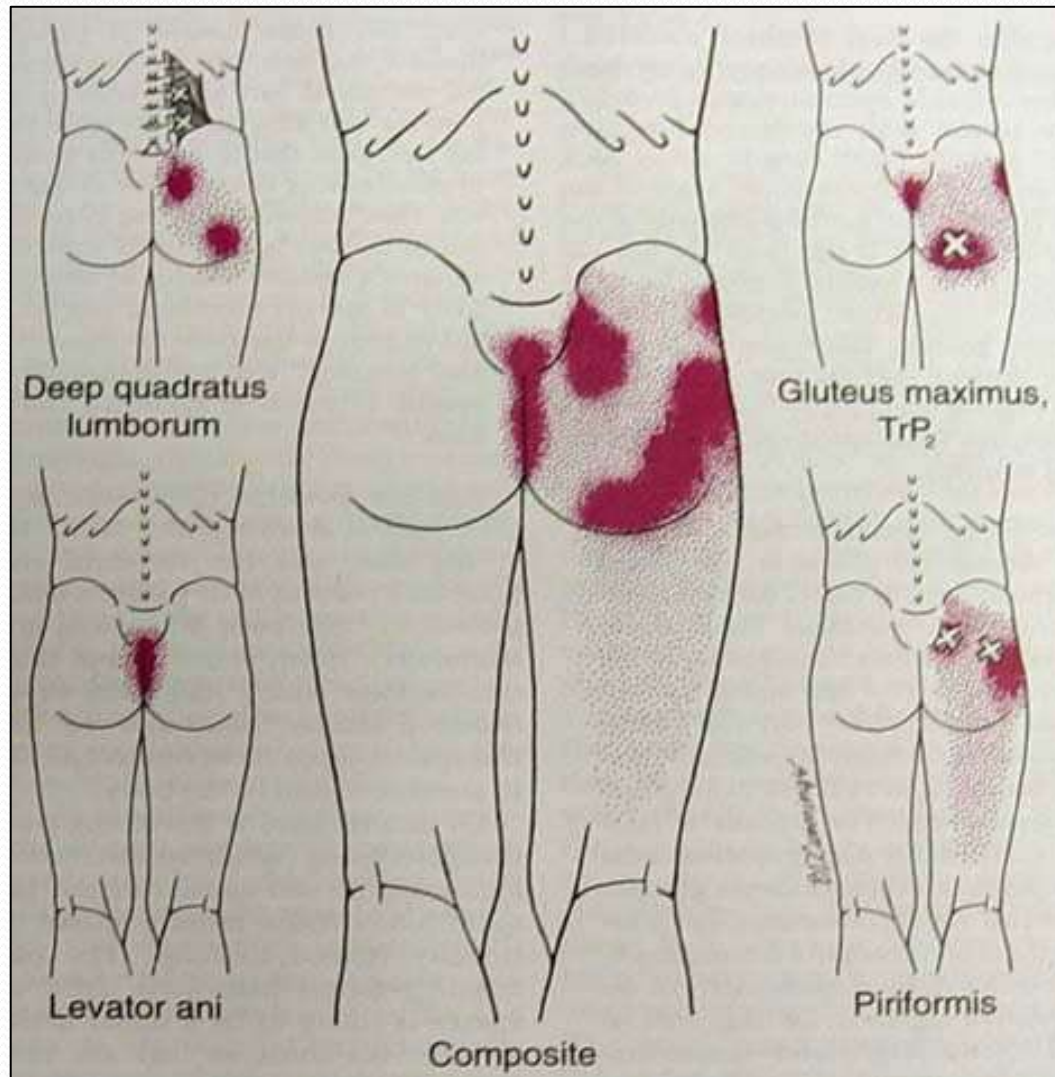


## Gluteus Minimus

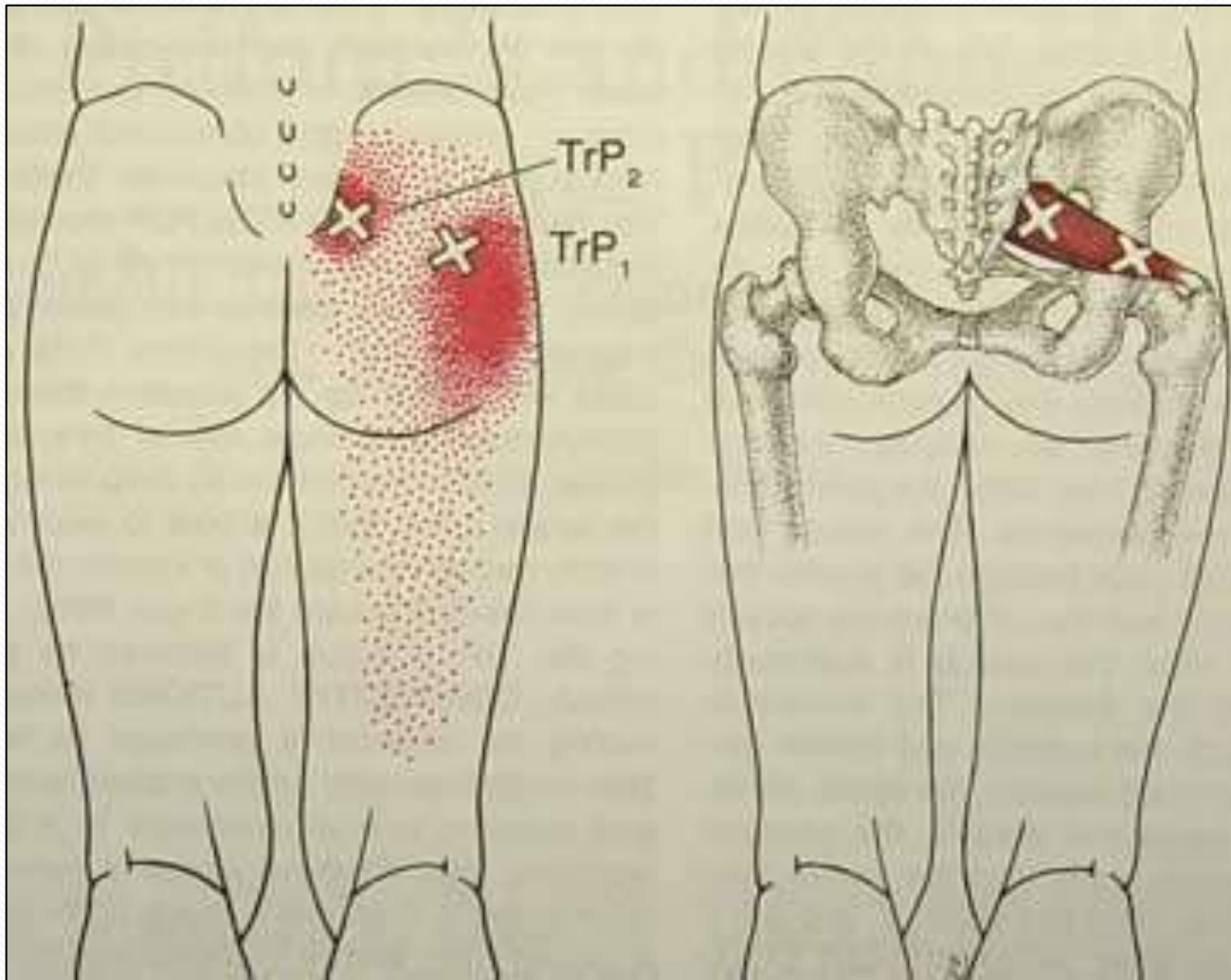




# Gluteus Max

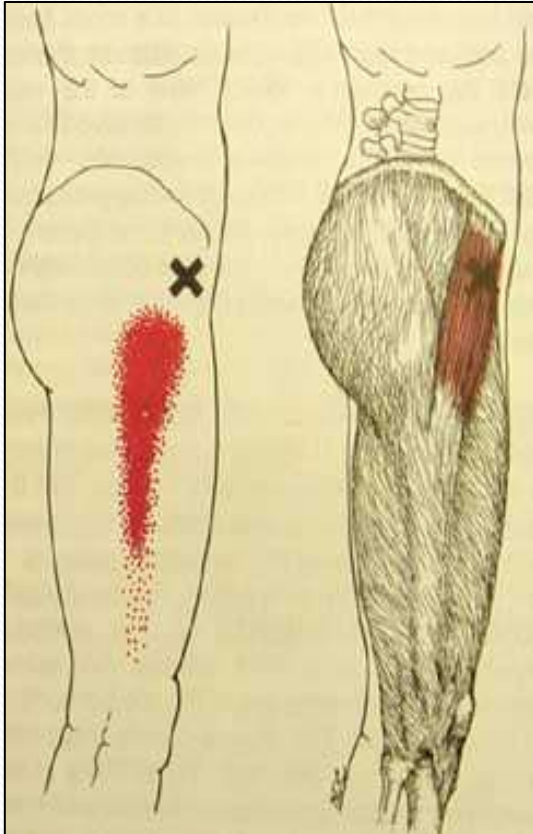


# Piriformis

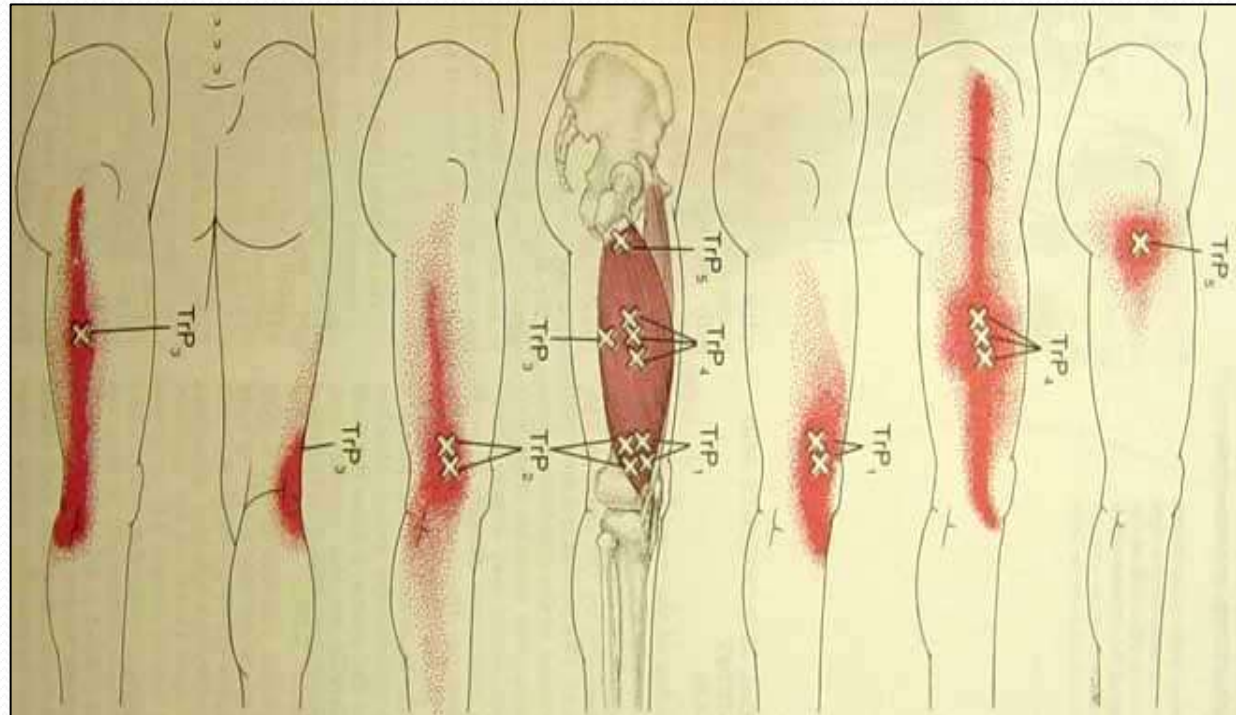


# TFL and Vastus Lateralis

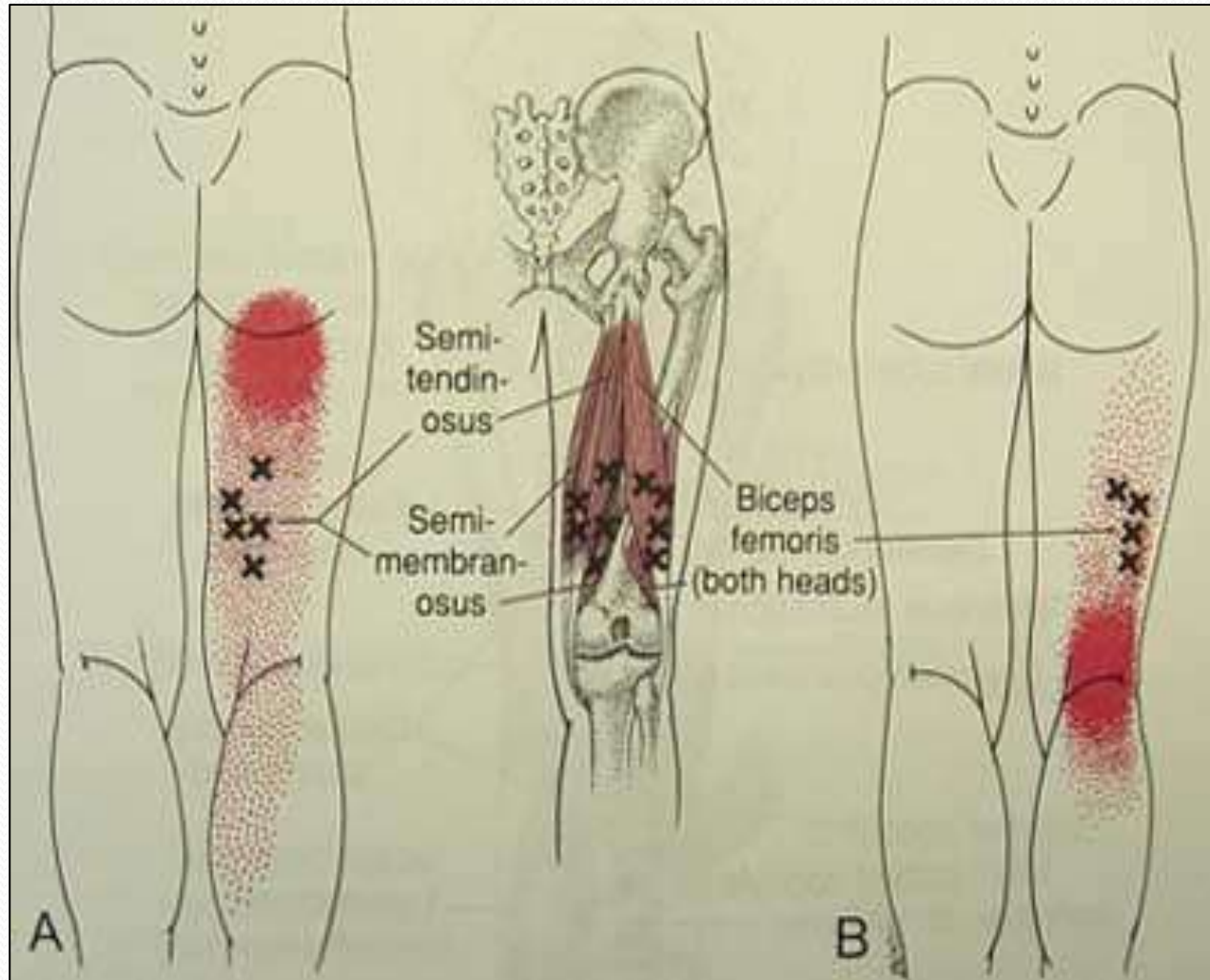
## TFL



## Vastus Lateralis

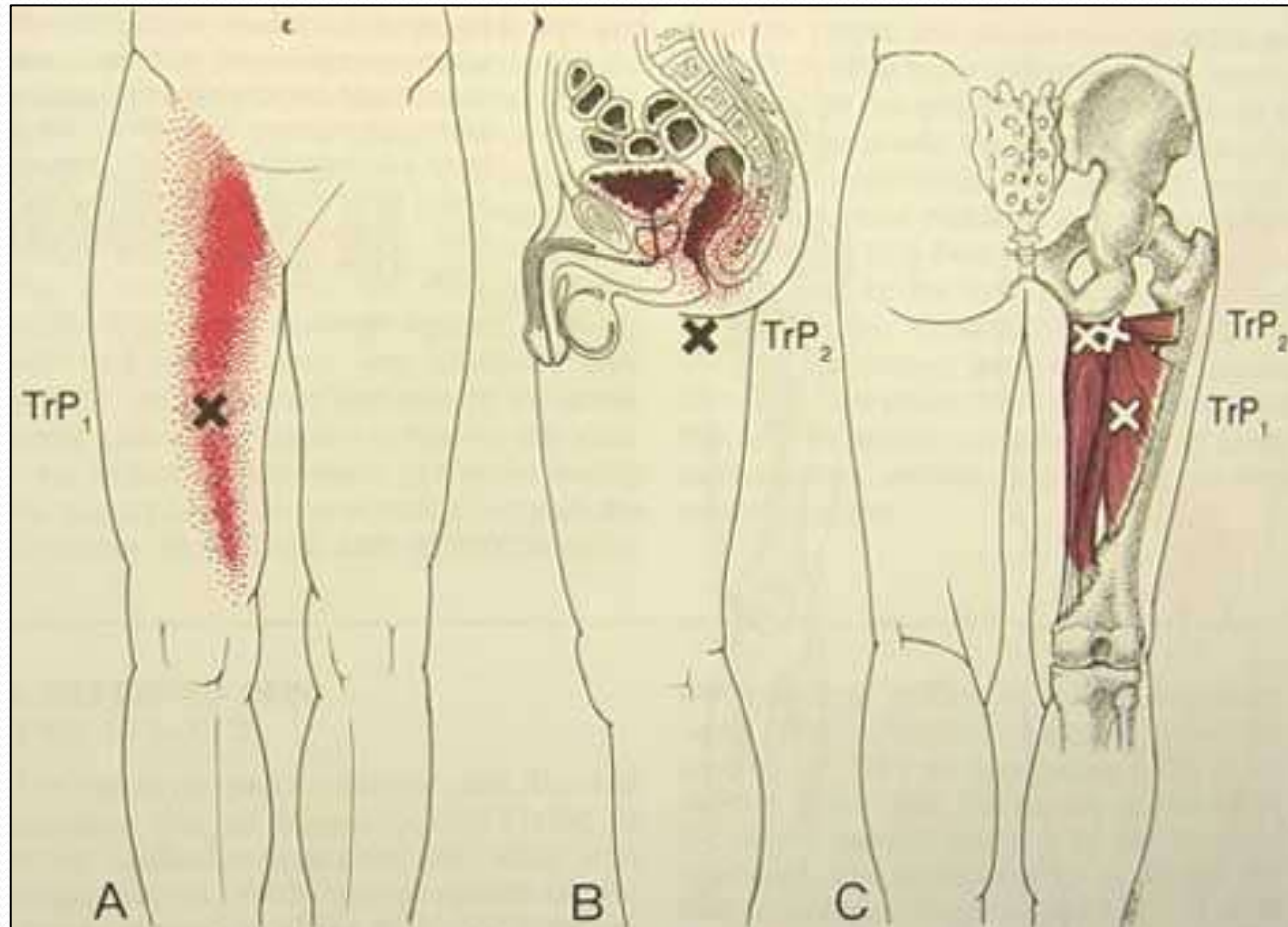


# Hamstrings

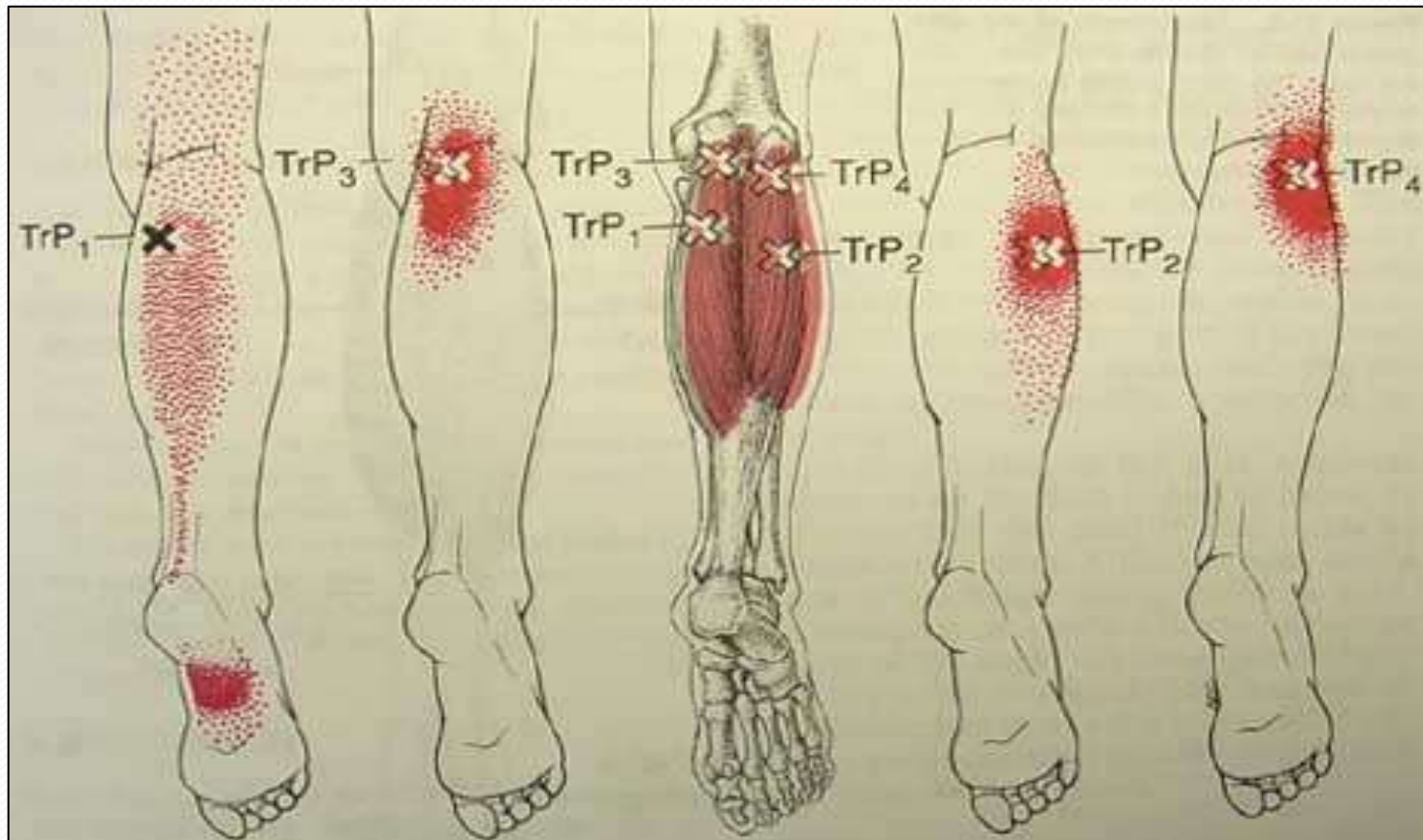




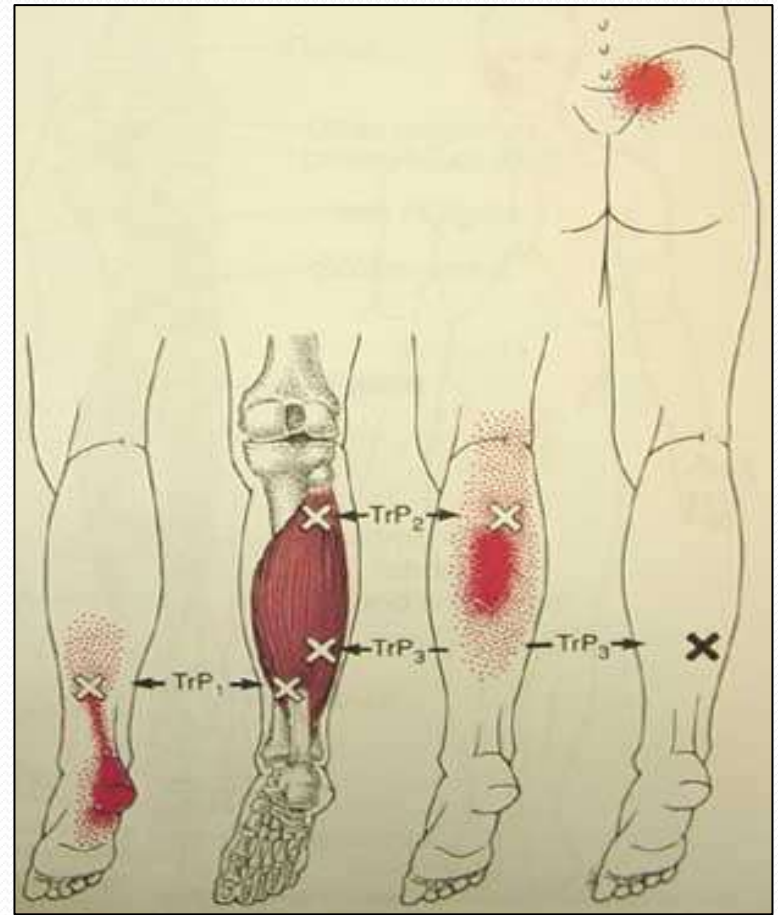
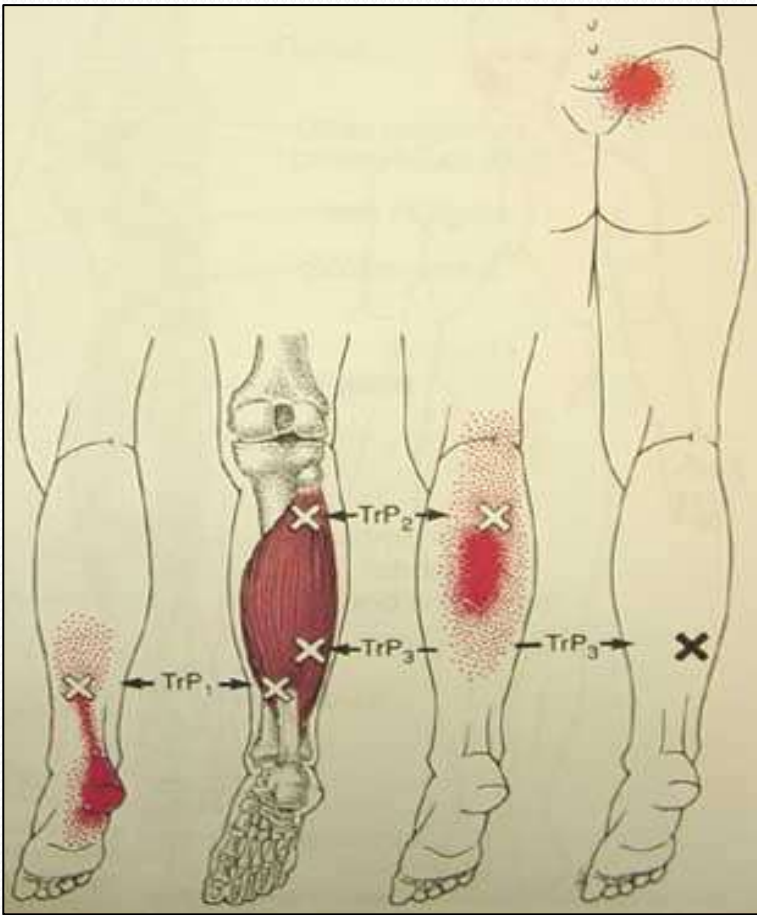
# Adductor Magnus



# Gastroc



# Soleus

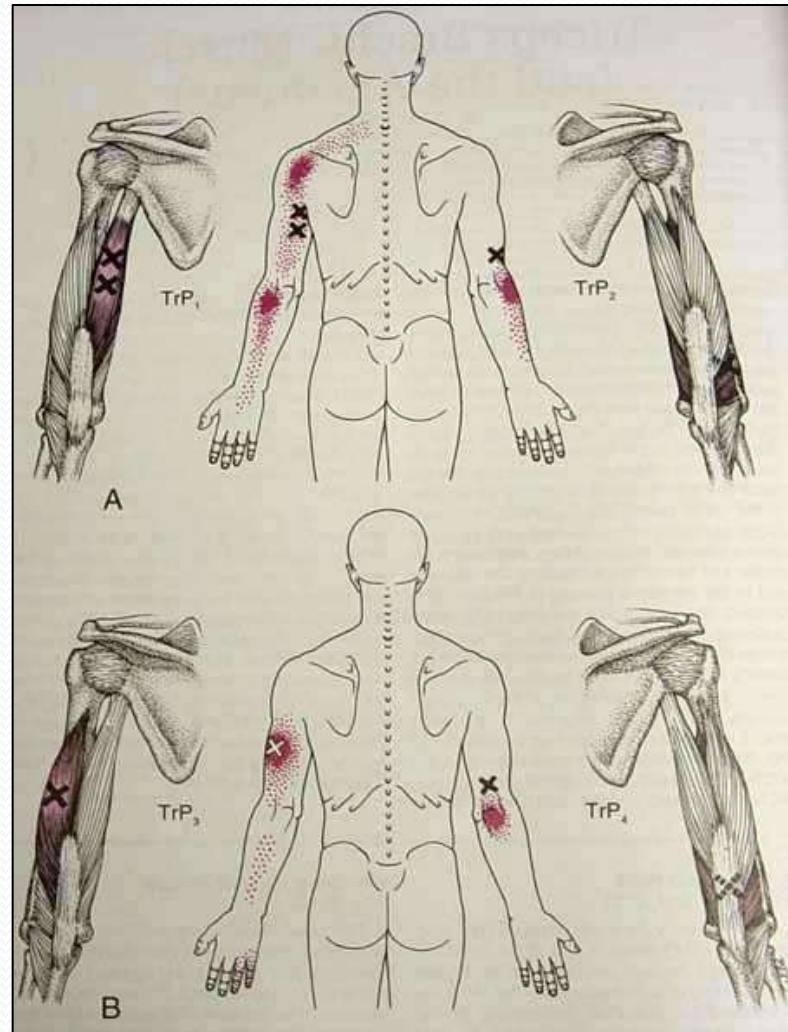


# Tib Post



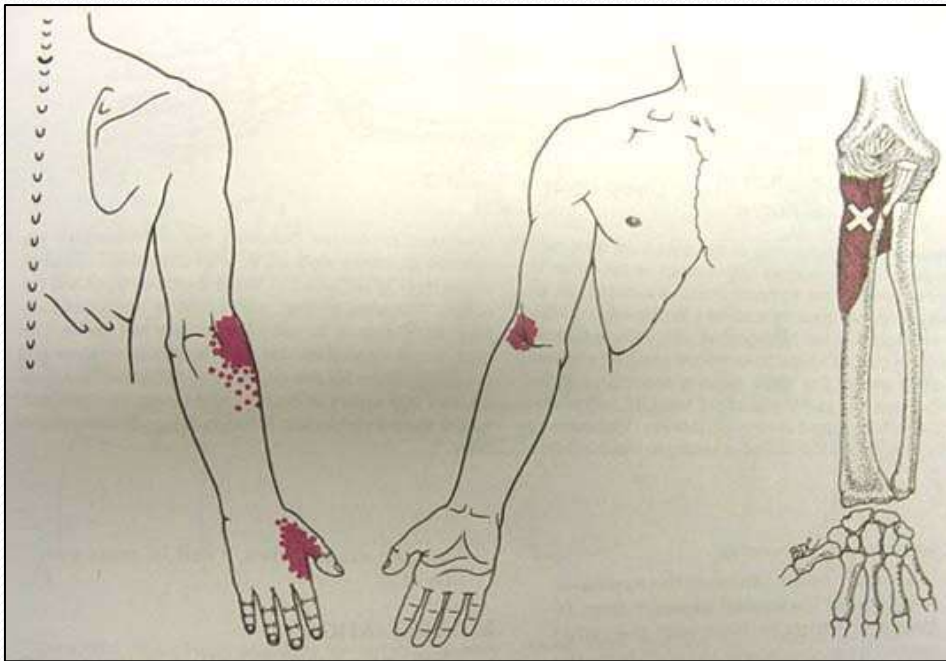


# Triceps

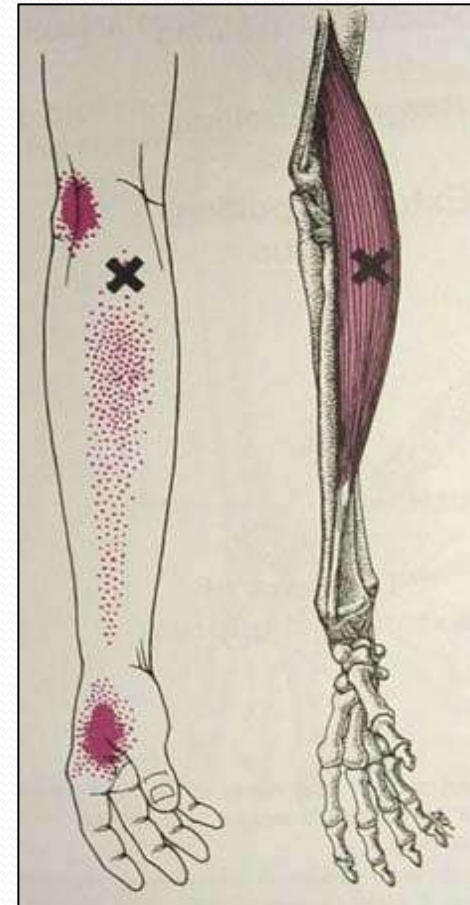


# Supinator and Brachioradialis

Supinator

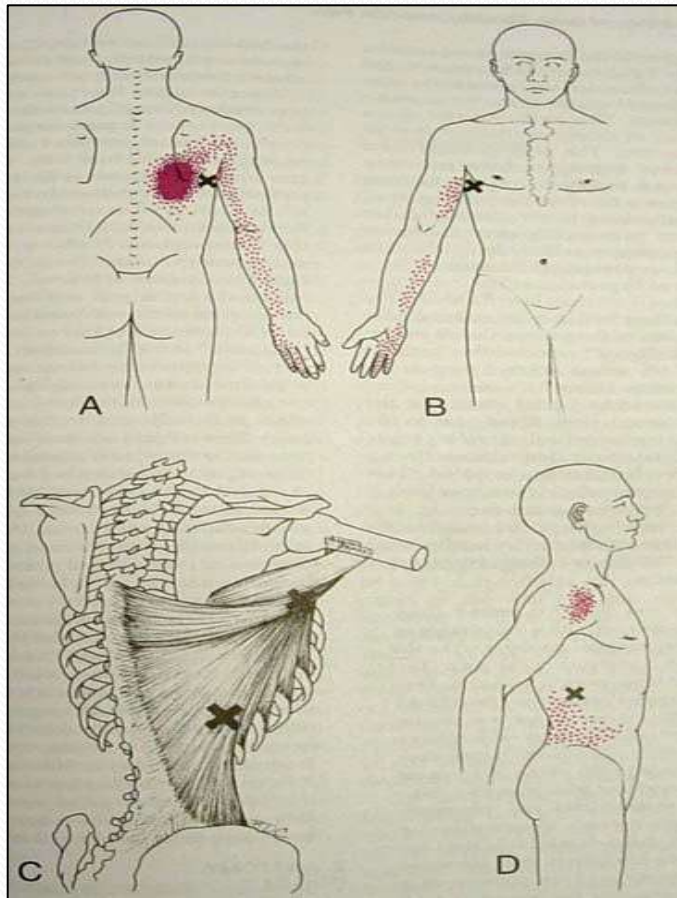


Brachioradialis

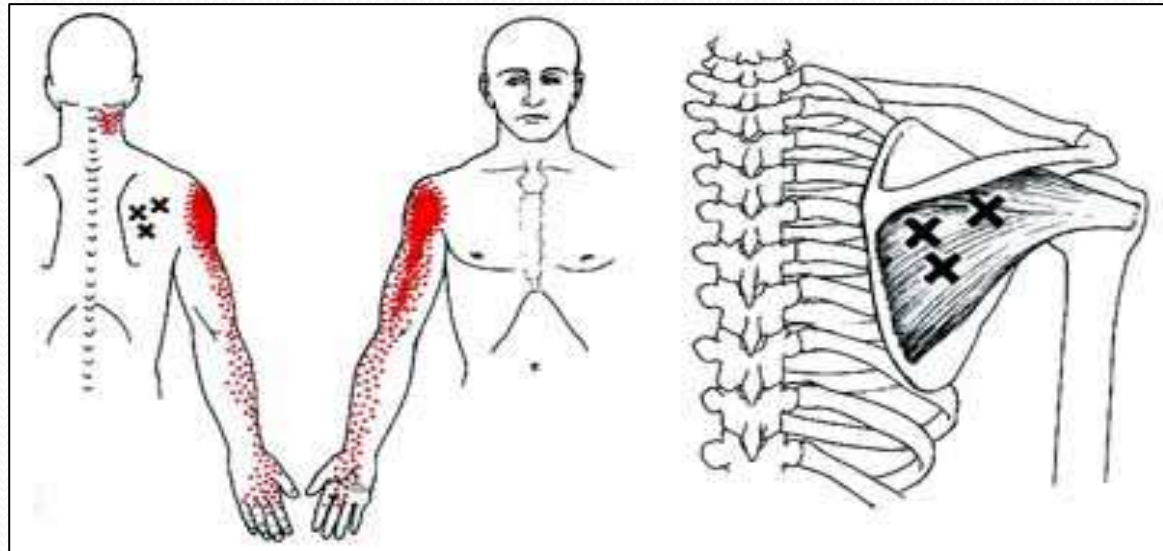


# Infraspin and Lat dorsi

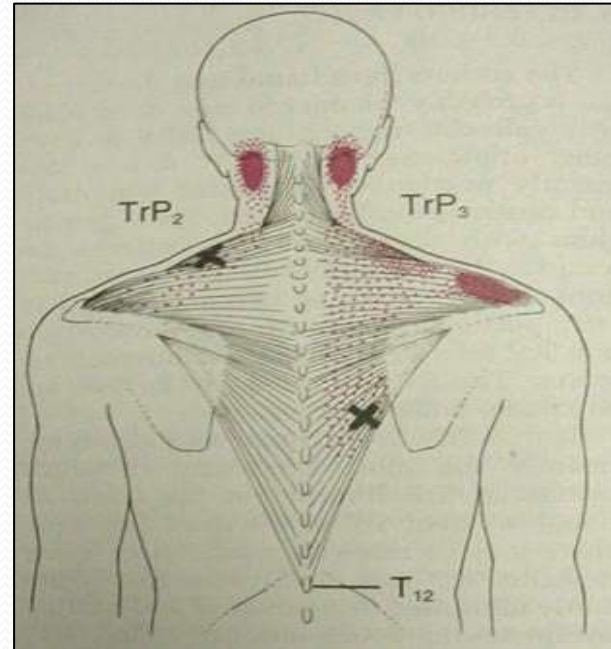
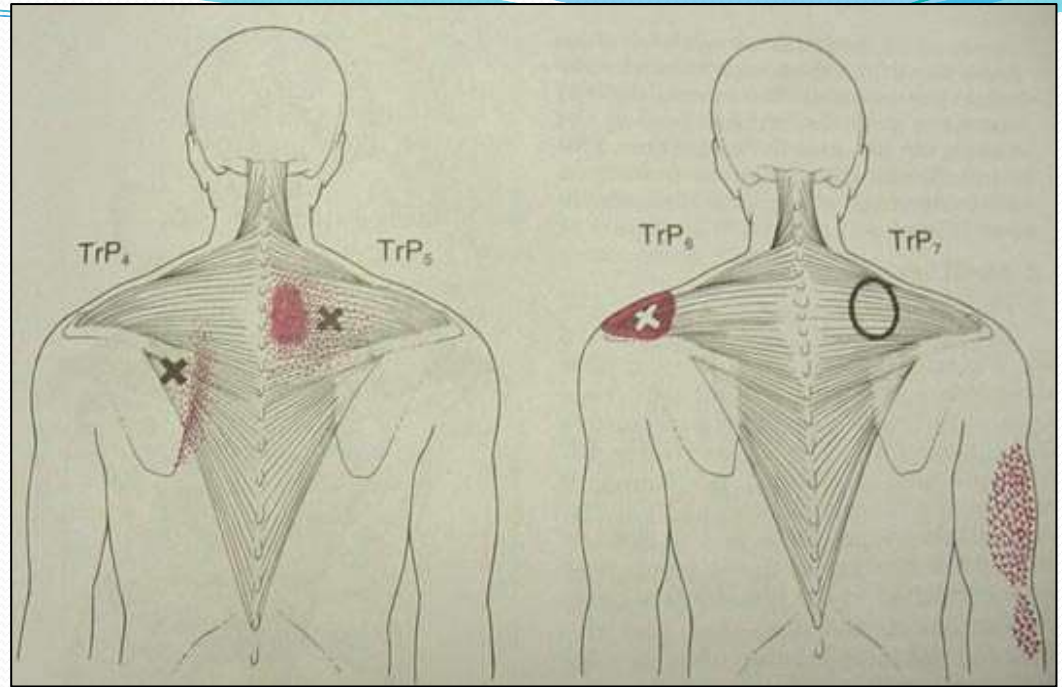
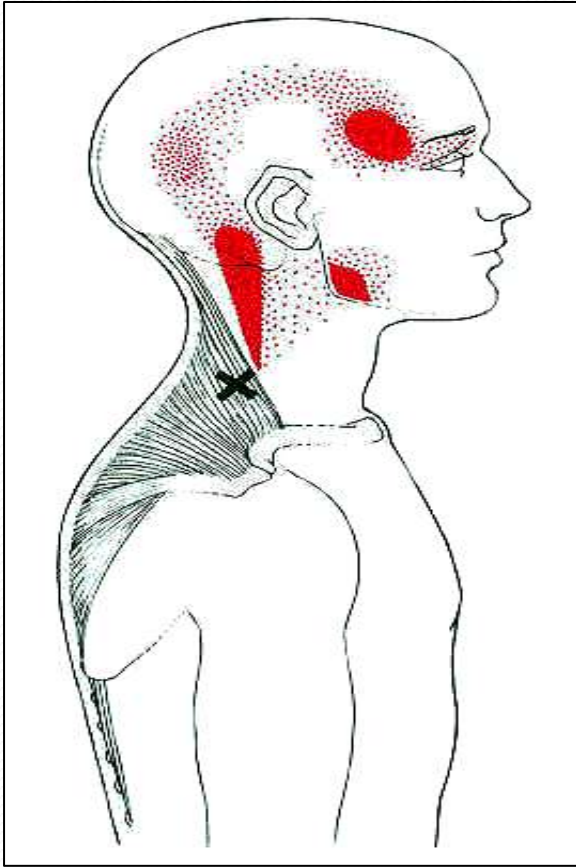
## Lat Dorsi



## Infraspinatus



# Trapezius





# Levator Scap

