Primitive Reflexes

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Reflexes

First, we start with what we learned in school

- A reflex in its simplest form is an expected pattern of motion from a specific stimulus.
- For example, if I tap your knee just above insertion of the patellar tendon with a rubber reflex hammer, I would expect your knee to move (straighten) in response.

Reflexes

- That described reflex stimulation could give one of four responses:

1. No response (which would make me wonder if I did the tap correctly)
2. A less than expected response
3. The expected response
4. More than the expected response

Reflexes

- If I get the expected response as a practitioner, you qualify as “normal” and I don’t typically put more thought into it.
- However, if the response is not what is expected, then I can begin to question (and try to find answers) as to why…

But…

- What they taught us in school is only a small part of reality…

Reflexes

- A reflex is REALLY…anything you need to know how to do before you understand the language required to learn it…

Reflexes

- SO…
  - Breathing…
    - Swallowing…
      - Feeding…
        - Chewing…
          - Walking….

Are ALL reflexes…

Reflexes

- AND, just because you are here today means that YOUR reflexes have met the bare minimum requirement to KEEP YOU ALIVE.
- It in no way reflects on whether you are actually “good” at anything (like breathing or swallowing).

Reflexes

- So, for the most part, these reflexes are designed to operate in the background outside of most conscious control.
- And they are supposed to help us (by keeping us alive).
- When we are healthy and well, the reflexes operate silently.
- But if we have trauma, we call on them to help with keeping us alive.

Reflexes

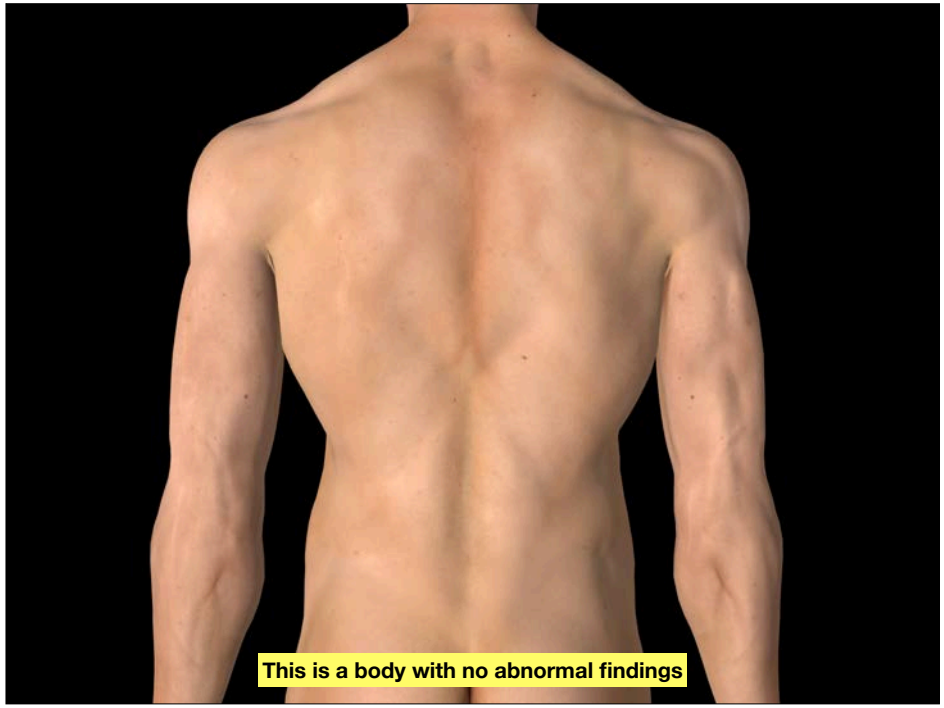
- So trauma (or anything the body deems unsafe) can trigger a reflex to either stay when it is supposed to fade into the background OR bring it back to the forefront after it has integrated.
- These reflexes are then termed “retained” (and they pretty much stick around until they are treated).

Reflexes

- If the reflexes come from a list of things we need to learn before birth or just after, they are termed primitive reflexes.
- These include patterns of motion that allow us to feed (suckling reflex), prepare us to walk (stepping and heel reflexes), and get us through the birth canal (spinal Gallant and Perez reflexes).

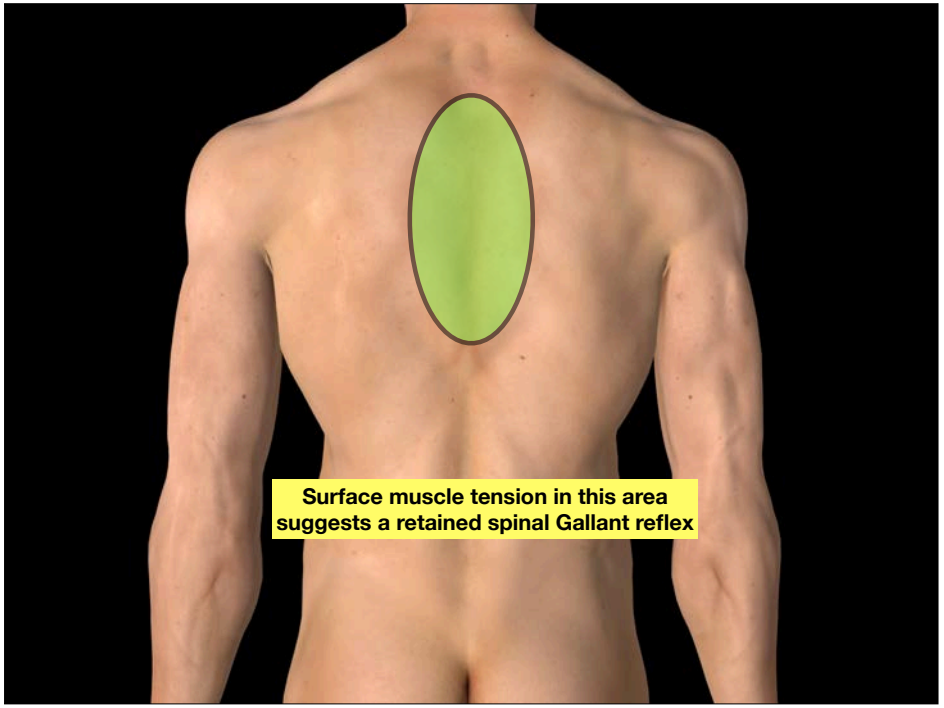
Reflexes

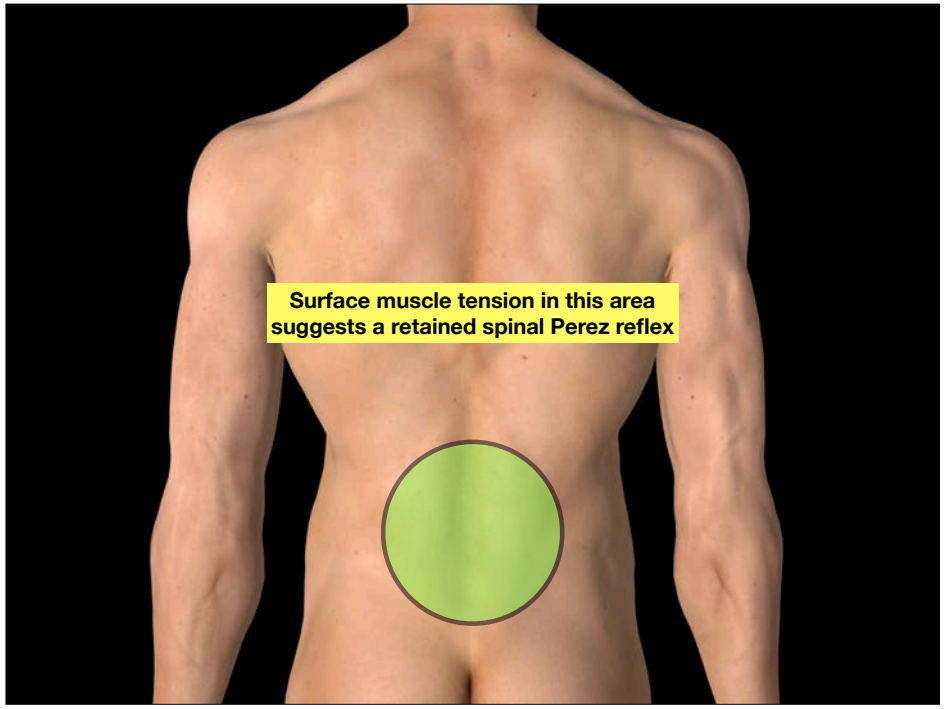
- When we look at retained primitive reflexes, there is something more to consider:
- If a reflex is an expected pattern of motion AND
- You have a reflex that is retained (has not integrated or has been called back to help us stay alive)



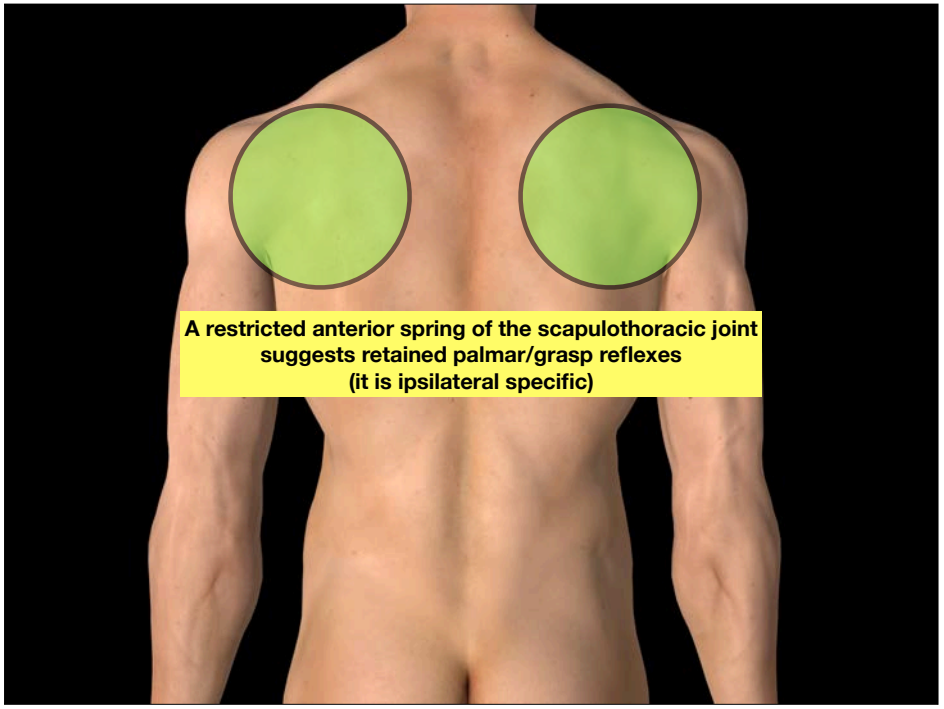
Reflexes

- That pattern of motion is always ready to go in the background (increased sensitivity to stimulation/lowered firing threshold).
- This may appear as something we can palpate.



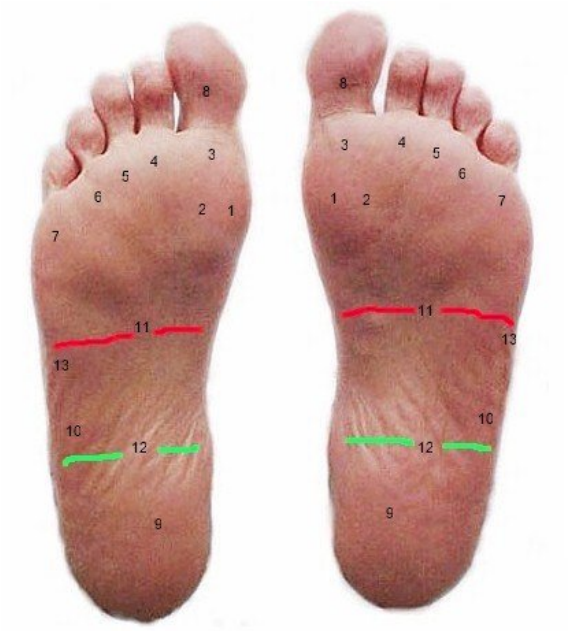


Retained Primitive Reflexes for the Foot



Retained Primitive Reflexes

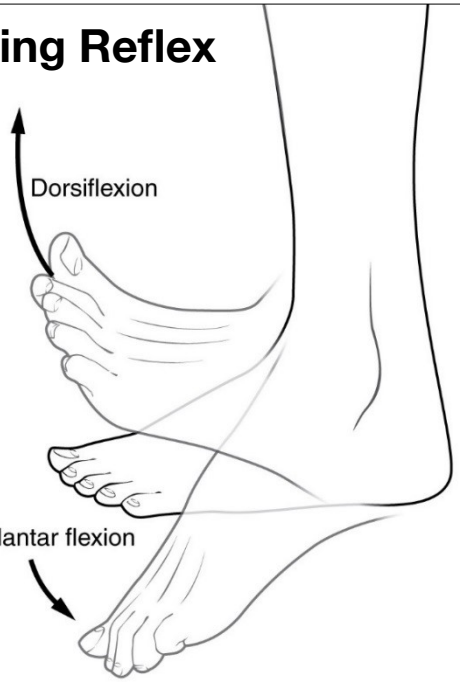
- If you locate ANY of the foot reflexes, you also need to check for and treat any retained fear paralysis and Moro reflexes FIRST.



1. Tibial sesamoid
2. Fibular sesamoid
3. 1st metatarsal phalangeal joint
   (great toe joint)
4. 2nd metatarsal head
5. 3rd metatarsal head
6. 4th metatarsal head
7. 5th metatarsal head
8. Interphalangeal joint of the hallux
9. Plantar medial tubercle of the calcaneus
10. Calcaneal-cuboid (cc) joint
11. Lisfrank's joint
12. Chopart's joint
13. 5th metatarsal base

Stepping Reflex

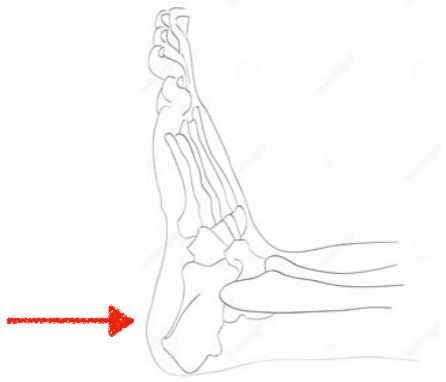
If this motion is possible, the stepping reflex is NOT present



If this is the ONLY motion possible, the stepping reflex is present

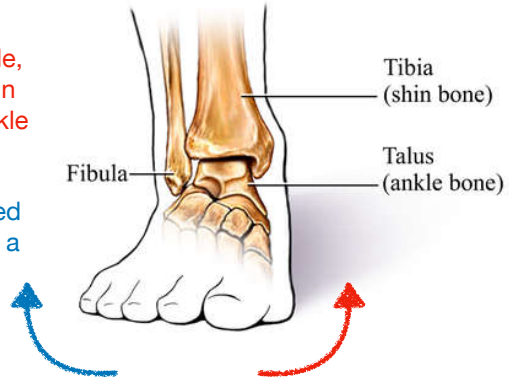
Primitive Reflexes in the Foot

- If springing pressure elicits no give in the calcaneus (hard end feel), look for a retained heel reflex.
- (if you are testing too far posteriorly, you will dorsiflex the foot and not be testing the heel reflex)



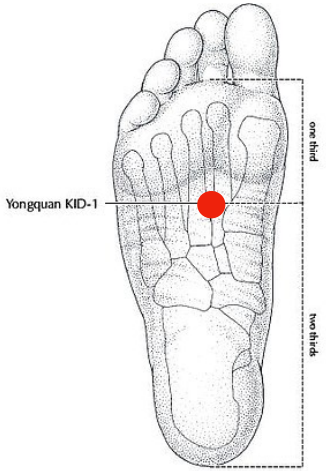
Primitive Reflexes in the Foot

- If inversion motion is possible, this is normal. A foot stuck in inversion can indicate an ankle sprain (chronic or acute)
- If eversion motion is restricted or not present at all, look for a retained Babinski reflex.



Primitive Reflexes in the Foot

- If muscular tension is present here, check for a retained crossed extensor reflex.
- It is the Kidney 1 point in acupuncture and relates to insomnia.



Primitive Reflexes in the Foot

- If there is restriction of motion here (toe flexion primarily), check for a retained plantar grasp reflex.