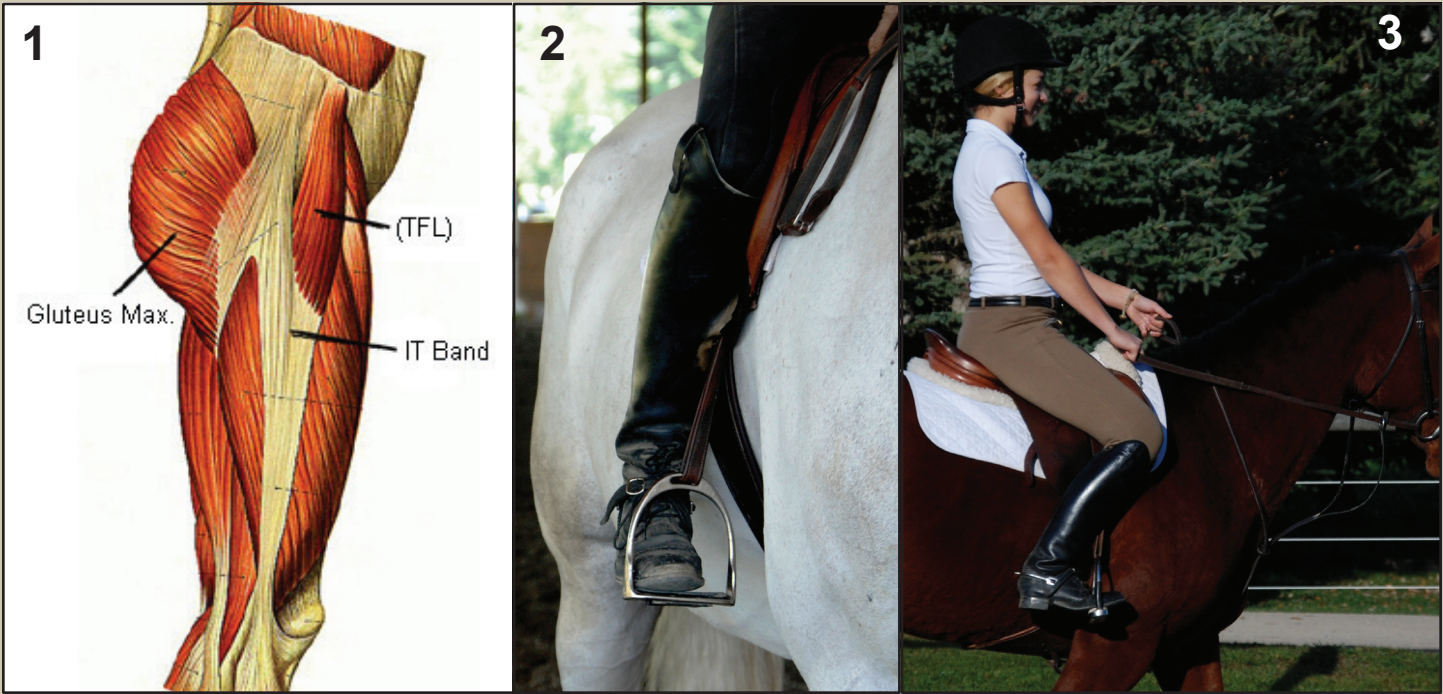


# “Heels Down... and Stop Pinching Your Knee”

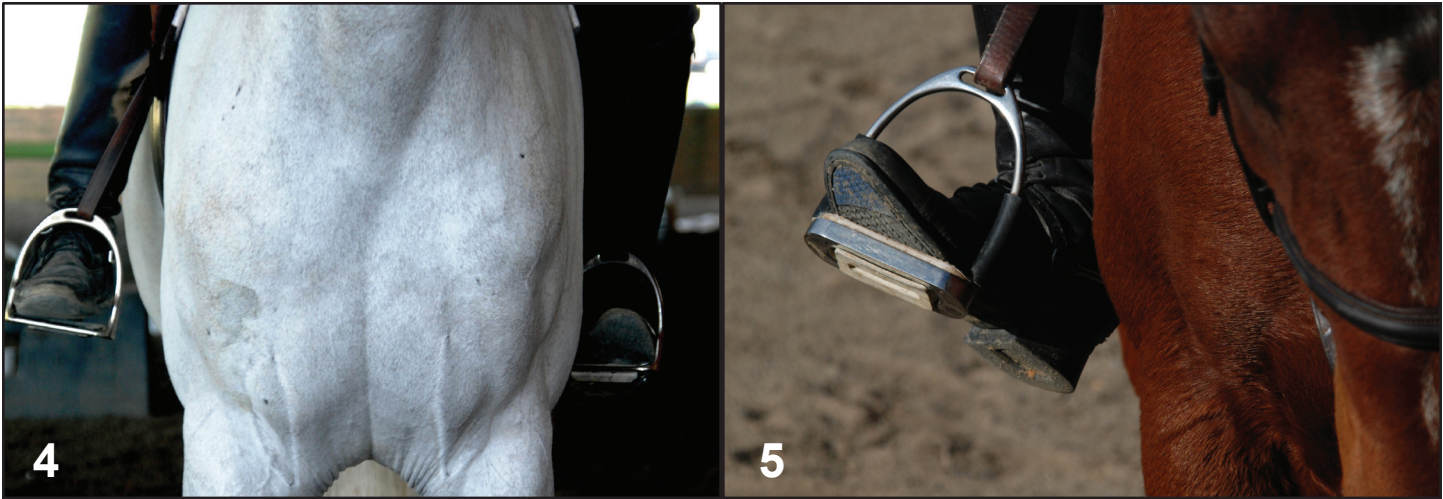
That darn heel. It just won't listen to you or your coach. You push it down, forget about it for a few seconds and it pops right back up again! You may also tend to lose a stirrup, have knee pain (especially with posting and jumping) or have more wear on one knee, boot or saddle flap. You may not have a heel problem! There is a muscle on the top of your thigh, near where your leg joins your pelvis, that can become tight and is often more achey with sitting. This muscle, tensor fascia lata or TFL (See picture 1), joins to the IT band along the outside of the thigh and bends the hip. It also makes the knee turn in in, or 'pinch', and causes the foot to roll to the outside so that more weight is on the little toe than the big toe (see picture 2 & 3). Consistently losing one stirrup or having a 'swinging' lower leg are the most common results (see picture 4). Some horses are less appreciative than others of having the lower leg flapping on their sides!

So why does this happen? The TFL muscle is a hip flexor but it also plays a small role in keeping the pelvis centered in the saddle. When the gluteal (butt) muscles are weak (often due to a back, hip or pelvis problem) they do not help to control the pelvis and the TFL takes over. The result is an overly bent hip, a pinching knee and an elevated heel. Not the best position for strength and balance! Some people will compensate for this feeling of weakness in their leg by jamming their heel down and sometimes straightening their knee into 'the foot on the brake' position (see picture 5). The best solution is to figure out why the hip muscles are imbalanced by speaking to a physiotherapist. Releasing the TFL and strengthening the gluteal muscle will help you keep your heel down and your leg secure without having to be constantly reminded!! See figures 6-9 for good exercise ideas.



Picture text:

- 1) Note the gluteal and TFL muscles are both on the outside of the hip and are positioned to keep the pelvis from slipping sideways.
- 2) See that the knee is closed or 'pinched' and the foot is tipped more to the outside compared to the left.
- 3) The right hip is over bent so the knee pushes past the saddle flap and the heel rises. This rider also has compensatory issues causing a straight and rigid right arm which can be another indicator of a weak hip.
- 4) This rider has minimal weight in her right stirrup and her foot could easily slip out. Notice how high and away from the horse that her right leg is compared to the left. Also note the torn leather on the inside of her right boot that can indicate a loose and swinging lower leg.
- 5) A common compensation for a weak or swinging lower leg is to 'jam' the heel down and turn the foot out. This stiffens the leg and can change how well the horse responds to leg aids on that side.



6) To strengthen right gluteal muscles: Keep body balanced over the right leg as slide left foot out to side. Squat back as if to sit in a chair keeping weight in right heel and right knee behind toes. Left foot rests lightly on floor and left knee stays straight. Continue squat until feel butt muscles working and hold 5 seconds. Pull belly button in towards spine to keep lower back from tightening and arching (keep back flat). Straighten right leg keeping more weight in right heel until back into upright position. Repeat until right hip is tired. 4-5 times each week.

7) 8) To improve hip and lower leg control: Stand balanced on towel rolls with heels off of the floor and feet ~horse width apart. Arms in front as if holding reins. Weight should be slightly more towards inside of feet, but knees should remain aligned out over toes. Squat back as if to sit in a chair as squeeze lower legs into the ball. Continue squat until feel butt muscles working and hold 5 seconds. Pull belly button in towards spine to keep lower back from tightening and arching (keep back flat). Hold 10 seconds and repeat until legs are tired. Rest 1 minute and repeat as many as possible. 4-5 times each week

9) To release TFL and IT band: Roll front of outer hip and outer thigh on foam roller or small ball. 2 minutes for each area, 2-3 times every day.

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