### **Equine Massage**

### I. Introduction

**<u>Power of Motion</u>**- Starts at the hind leg with the motion of a wave that goes all the way to the poll. The flow of energy is interrupted if there is muscle tightness.

**Strength vs. Power**- they differ in that strength can be thought of as contracted force and power is the "synchronization" of strength and momentum. Once this strength is brought together without conscious effort through proprioception, it creates an action. The talent that comes with movement can be taken away with muscle tightness.

<u>**Muscle Function</u>**- 60% of horse's body is muscle; when one muscle contracts, the other releases. Release gives you motion. Tight muscles do not allow for release.</u>

There are 2 ends of a muscle and each attach to the bones: 1) insertion where the motion occurs. 2) Anchor where the stress occurs. Covering of the muscle (fascia) becomes tendons at either end. The muscle consists of thousands of fibers. When tight, they lie close together and limit blood supply. Fibers need to have wide spaces to allow for blood flow. Massage or fiber spreading widens the muscle.

**Evaluate Motion**-Power comes from the trunk; the forelegs are attached to the shoulders, the hindquarters are attached to the pelvis. Look at the points of the shoulder and look at pelvis and gluteal muscles. Look at what releases and what moves freely as compared to what looks "labored" or stiff.

Remember, the left hind and right front drive a horse to right and right hind and left front move a horse to the left.

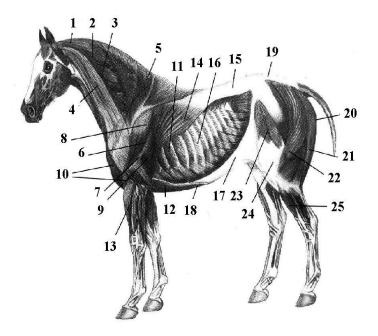
<u>3 causes of muscle tightness</u>: **1)** overuse **2)** injury **3)** lack of oxygen. You cannot put 1 year of work into 2-3 mos of activity. Oxygen deprivation is helped by walking an overheated horse.

The cause of lameness or soreness and the problem are almost always in TWO DIFFERENT places unless there has been an injury. It is necessary to keep the wave/flow of energy by getting rid of muscle tightness. Avoid RESISTANCE to avoid TIRING THE MUSCLES.

You should take at least a half hour to do the whole horse. Do it as much as needed.

Sports massage prepares for exercise. If you don't exercise after a massage, it will not activate the fibers.

## II. Anatomy of the Horse



1. Rectus Capitus Lateralis: allows the head to flex and incline side to side.

2. Splenius: allows the neck to bend.

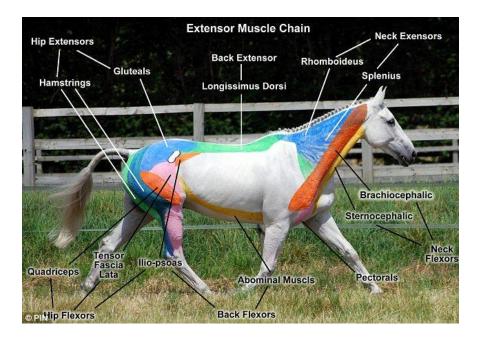
3. Multifidus Cervicus (Deep): allows the neck to flex and the head to rotate to the opposite side.

4. Brachiocephalicus: permits the neck to bend, and move the shoulder forward.

5. Trapezius/Rhomboids (Deep): allows the shoulder to raise, and permits the scapula to draw upward, forward and backward.

- 6. Supraspinatus (Deep): permits the shoulder joint to extend.
- 7. Infraspinatus (Deep): allows the foreleg to rotate outward.
- 8. Deltoid: permits the shoulder joint to extend.
- 9. Tricep: permits the shoulder joint to flex.
- 10. Bicep and Anterior Pectoral: permits the foreleg to extend.
- 11. Serratus Thoracis: allows the trunk to be at the proper level when legs are planted.
- 12. Posterior Pectoral: allows the foreleg to draw backward.
- 13. Extensor Capri Radialis: permits the foreleg to bend and flex.
- 14. Latissimus Dorsi: permits lateral bending.
- 15. Longissimus Dorsi: allows the back to extend, and permits lateral bending.
- 16. Intercostal: supports the ribcage and aids in respiration.
- 17. Oblique: allows the hind leg to draw under.
- 18. Rectus Abdominus: supports the back.
- 19. Gluteus: allows forward movement and hind end action.
- 20. Semimembranosus: permits the hock to extend.
- 21. Semitendinosus: permits the hip and the hock to extend.
- 22. Bicep Femoris: allows for extension of the hind leg, hip and hock, and bends the stifle.
- 23. Tensor Fascia Latae: allows the stifle to extend and the hip to flex.
- 24. & Fascia Latae: allows the stifle to extend and the hip to flex.

25. Long Digital Extensor: permits the hind leg to flex.



# III. Muscles of the Horse in Massage

**<u>Rectus Capitus-</u>** flexes the poll, inclines the neck/head on the same side (lateral flexion).

If the right side is tight, then the left turns will be difficult. If extension of poll is restricted, then horse will have difficulty over jumps.

<u>In general</u>: Compression uses heel of hand hooking fingers over the mane. PUSH into the muscle belly with moderate pressure and go towards the ear. Too light puts them to sleep. Use SOFT HAND. Don't use resistance against resistance.

Do 7 compressions every 5 seconds. Overlap areas of compression without taking hands off of the horse. This relaxes the muscle with each inch of compression. For rectus capitus, keep head towards you to relax the muscle.

**Brachiocephalus**- largest muscle in the neck. Extends the shoulder. Attaches from the masseter to the head of the humerus.

If muscle does not release, horse will be labored to opposite side. With head towards you, compress with back of the hand. Light soft hand straight in. Do your

compressions with hand in contact all the way down. DON'T TAKE HAND OFF

<u>**Triceps**</u>- flexes shoulder and bring legs back for canter, going up and down hills

If horse won't pick up the canter, then this muscle is tight. With soft hand use one hand and other hand with loose fist. Also use compressions with heel of hand.

<u>Posterior Pectoralis</u> (Girth) - thin muscle on ribs and attaches to sternum. This muscle brings foreleg back. If it is rock hard then the horse cannot bring foreleg back.

Use a loose hand and rub down. Tightness is due to girth too tight or walking in deep footing.

**<u>Trapezius</u>** at withers, this muscle raises shoulder and brings it back and is horse's center of balance.

Bad saddle fit in this area causes tightening and prevents the horse from using the shoulder freely. Horse will lose his balance.

To massage, use the heel of the hand and go straight in and down.

## If tissue doesn't release, then muscles will not move

**Back Muscle (Longissiums Dorsi)-** longest muscle in the body, extends the spine. Attaches to the gluteal muscle. Horse won't round the back if tight causing hollowing.

Compression with heel of hand using soft hand to separate the fibers.

When back is tight, this is caused by ill fitting saddle or rider that drives with their seat. If not working to release tension, look for foot, leg or other issues.

<u>Gluteus</u>- covers ilium and attaches to the hip. It extends hip and is greatest muscle for kicking, bucking. Most important for canter

Compensatory tightness occurs: if right shoulder is tight, then left gluteal will be tight. The stride will tighten shorter to keep horse in balance, back to front.

**Hamstring**- Biceps femoral (not a straight muscle) works the hip (extension), stifle (flexion), hock (extension)

Compress with heel at highest point. At lower points use loose fist