



## Introduction to Myofascial Release (MFR) and Soft Tissue Mobilization (STM): By Debranne Pattillo, MEEBW

These are user-friendly and beneficial techniques, which you can explore in depth. Here, simple examples are given. You will find it very helpful in compartmental-type issues and broad areas of fascial restrictions. MFR goes hand in hand with sports massage, and is one of the first additional modalities you should develop further, to complement your sports massage techniques. *Facilitated Healing through Myofascial Release* by Ruth Mitchell Golladay, PT goes into depth describing Equine MFR. Ruth teaches the Equine and Canine course MFR modules for the Equinology and Caninology programs.



This broadly-directed technique is used to address issues that may affect large areas of the body. Even while direct contact between the body worker and the horse may be limited to a small area, by using gentle but sustained pressure, the technique may address areas that are far removed from the focal site of restriction.

These techniques can be used on most anatomical areas since the pressures involved are not likely to negatively impact any underlying bony structures. Sensitive areas which are sometimes difficult to address and may display irritation, such as localized heat or sweating, are ideal candidates for this technique. If you have any concerns if the technique is appropriate for a specific condition, please discuss this with your veterinarian first.

### How Does This Modality Work?

The precise physiological mechanisms of MFR are still being researched. It is speculated that mechanoreceptors (sensory receptors that respond to mechanical pressure, sensation or distortion) in the skin play a role in this technique. Ruffinian corpuscles, which are mechanoreceptors in the skin, are being researched scientifically.

Alice Sanvito writes: *“Why Ruffini corpuscles? Clinically, we observe that applying a slow, extended stretch to the skin can create desirable changes both locally and centrally, decreasing tension in the area where the hands are applied as well as creating an overall sense of relaxation. Ruffini corpuscles respond to lateral skin stretch that is, stretching the skin tangentially or along the same plane as the tissue below. They are slow-adapting, meaning that they continue firing for as long as the stretch is sustained, unlike some mechanoreceptors which respond briefly to new stimulation and then stop responding if it continues...”*

*The nervous system is constantly monitoring its environment, responding to a complex array of input. It would be naive and simplistic to think that response to our touch could be reduced to one set of*

mechanoreceptors or to ignore all the other countless factors. However, when examining the kind of manual therapy we have come to think of as "fascial," understanding the role of Ruffini corpuscles is a good place to start." <http://www.massage-stlouis.com/if-we-cannot-stretch-fascia-what-are-we-doing>

While mechanoreceptors that respond to manual pressure are also found in fascia (which in itself is capable of minimal contraction) it is suggested that one cannot stretch fascia through sustained holds. An example is offered to consider that if this were the case, just sitting in your chair would constitute a myofascial release. Activating mechanoreceptors may reduce fascial tone, and although this may make them more pliable, this activation does not result in a maintained stretch.

### The Difference between Myofascial Release and Soft Tissue Mobilization

The mechanics of both techniques are similar, however, true **MFR** follows the direction of the restricted tissue. The practitioner's hands follow the tension with no "flight plan" filed before starting the move. The touch is always very light and never aggressive. On the other hand, **STM** specifically addresses an area with the intent to move from point to another. **STM** can also build in pressure, especially in applications where the horse leans into the practitioner for more pressure. **STM** encompasses many forms of body work such as massage and range of motion exercises, or a combination of both. For example, in the hamstring lean or walk (presented in the practical session), the hamstring muscles are targeted, and the horse may increase pressure from the practitioner by leaning into the different moves or strokes.

You can use your hands, forearms and loose fists for **MFR**: see positions below.



### WORKING THE TOPLINE WITH MFR

A thick fascial band spans the back and extends into the hindquarter area. Gently shampoo the area with your finger pads beginning behind the withers, all the way to the start of the quarters (on both sides). Watch for any signs of sensitivity (resentment to touch, moving away, stomping etc.). Place



both palms over areas that feel more tight or sensitive. You can lay your hands side by side if you think you are going to be covering a large area during the move, or use crossed hands for smaller areas.

Begin by applying gentle pressure to the underlying tissue. Think about sinking beyond the barrier for a good 90 seconds. Working only with the pressure the horse offers in return (the lighter, the better), slowly allow your hands to move away from each other in whichever direction feels appropriate. Think it more as your hands repelling from each other. It helps to rock from your palms to your finger pads but only enough so the eye doesn't really see the action. Imagine your hands inside a circle and exploring its edges. Avoid sliding. Your hands will tend to move towards firmer areas are held in a sustained tension, so try not to have any particular intent while adjusting your focus. Read the move as it develops. As you technique improves your hands will either feel as if they are a boat floating on the water or a storm brewing under your palms. Maintain the move for at least 3 minutes, and possibly for longer.

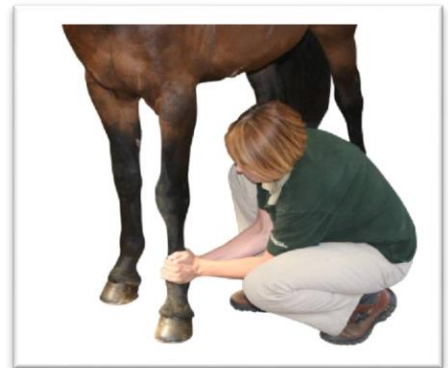
Alternative techniques might involve the use of forearms or a loose fist. However you decide to work, try to minimize any dorsiflexion (backward bending) in your wrist, to avoid soreness or injury to your hand(s).

#### **Where/when this would be used:**

Anywhere along the topline, between the withers and the tail. For very tall horses you may need to stand on something, but make sure you are safe and the horse is accepting of you standing over him/her. Apply this move every other day. As with any animal which has been injured, please run the technique by the attending veterinarian to make sure that the work is appropriate for the horse.

#### **SLOW LEG LIFT AND STRETCH**

This technique is an adaptation of myofascial release (MFR) for the limbs, with a special focus on the joints, ligaments and tendons in the lower limb. After adopting a crouched stance that allows you to rest your arms against your body and maintain your position for some time, cup the lower leg with both hands resting on the pastern just above the hoof, with one hand on the front and the other behind. Apply just enough pressure so your hands don't slip, and stay here for 90 seconds.



Build up just a little more pressure by lifting upwards to address the underlying tissue. Think about the horse shifting his weight into your hands. As he does this you will feel that your hands will begin to travel upwards slowly and it will feel like you are pulling up his "socks". If the horse does not shift his weight to the side you are working on, try to rock gently from side to side, which will help to facilitate the move. Be sure to keep the rocking minimal, especially on an injured limb and avoid pressure on the actual fetlock joint. Be aware that the horse may initially interpret this as a request to lift the leg, but that he will shift his weight onto the limb when he understands what is involved.

Try to aim to sustain this move for an additional 90 seconds, and hold longer if is the horse is still working

with you. Continue all the way up to the carpal joint (knee).

**Where/when this would be used:**

This type of move is very useful for horses with tendon and ligament issues, since there are a relatively limited number of manual techniques that effectively address distal limb issues. Try to use this move every other day. As with any animal which has been injured, please run the move by the attending veterinarian to make sure that this work is appropriate for the horse.

**HAMSTRING LEAN**

This is a STM move, since we are targeting specific muscles and a heavier weight/pressure is involved.

After making sure that the horse is comfortable with work around the base of the tail, stand off to one side facing the head of the horse. Locate the point of buttock (ischiatric tuberosity) on the opposite side, and drop you hand below it. Gently lean on it, asking the horse to meet your pressure. You can use your palm, but try to avoid dorsiflexion of the wrist.

If this is uncomfortable for you, try using a loose fist so your wrist remains straight. Use the horse’s reaction to this pressure to gauge how response is welcomed. You may need to wait a few moments to allow the horse to lean into you.

If the horse steps out of the lean, apply the technique again. You can alter your hand placement to target specific areas of tension noted in the hamstring group.

You can also slide up and down the muscle for a “hamstring walk”. Maintain the same pressure as you allow your hand to move up or down. After the initial contact, and after the horse meets your pressure, maintain your position for at least 90 seconds, and then continue walking up and down the muscles for at least another 90 seconds.



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