Responsiveness of Horses to Biofrequency Modulation after Acupuncture Palpation

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Abstract

The objective of this study was to explore the use of acupuncture point palpation and application of biofrequency modulation to relax the back and relieve back discomfort in horses. One hundred forty two horses were evaluated. Four horses did not demonstrate back pain, and were not evaluated further. One hundred thirty-five of the remaining 138 horses with back pain showed elimination of back pain after patch placement for 5 minutes. Seven of these 135 horses were given a placebo patch and all showed no response. Two horses who failed to respond initially showed elimination of back pain after reversal of patch position. One horse failed to respond. In conclusion, biofrequency modulation patches, when placed according to the technique outline in this paper, consistently alleviate back pain in horses, as assessed by acupuncture palpation.

Introduction

Biofrequency modulation patches are thin patches approximately the size of a half-dollar that are placed on the surface of the body over specific acupuncture points. They are made up of orthomolecular organic compounds arranged in a matrix parallel to the plane of thermomagnetic rotation. The patches come in sets of two, a white patch containing organic structures with thermomagnetic levorotatory action, and a tan patch with thermomagnetic dextrorotatory action. The induced electron flow assists in recruiting calcium ions into the muscle fiber during the contraction phase, allowing the user to recruit more muscle fibers during contraction. The passive thermomagnetic frequency modulation by the organic matrix increases transport of long chain fatty acids across the mitochondrial membrane for subsequent beta-oxidation and energy production, providing the user with increased energy and stamina.[1a] Strength tests in college athletes after placement of biofrequency modulation patches showed a 34% increase in strength in the test group, as compared to 4.9% increase in the blinded placebo group, and 2.3% increase in the unblinded control group[1b]. A second study showed that college athletes who wore the patch experienced an average improvement of 43.2% in strength performance[1c]. Placement of biofrequency modulation patches on acupuncture point Urinary Bladder 23[2] of equine patients in the author's practice resulted in anecdotal reports of increased stamina, more brilliance in the show arena, improvement in jumps, increased energy during strenuous exercise, and faster recovery after strenuous exercise, ultimately prompting this study.

Back discomfort is a significant problem in performance horses, and can have many causes, including "less than desirable" riding techniques, shoeing problems, bad saddle fit, as well as general athletic demands. The iliopsoas muscle, which is one of the largest muscles in the back of the horse, is constantly stressed when a horse is ridden. This muscle is made up of two parts, the psoas major, which arises from the last two ribs and the corresponding lumbar transverse processes, and the iliacus which comes from the wing of the sacrum, ventral sacroiliac ligaments, sacropelvic surface of the ilium, and tendon of the psoas minor muscle. The two muscle parts join in a common tendon that inserts on the trochanter minor.[3] It is the author's opinion that acupuncture point Bladder 23 seems to have a strong relationship with this large and important muscle of the back. Apart from the broad band of abdominal muscles, the psoas minor and the iliopsoas muscles are the only muscles between the lumbar spine and the ground. These muscles are responsible for lowering the pelvis and bracing the spine when the hind limb muscles push the body forward, as well as flexing the hip joint and bracing the back.[4] The psoas minor and the iliopsoas cannot be seen from the outside of the horse. Nevertheless, they are perhaps the most important muscles in the ridden horse. If parts of the vertebral column and the pelvis are not moving as freely as they should due to spasms, a horse will experience pain in these areas, which adversely affects performance. Relieving this discomfort and stiffness in the lower back and pelvis is a major part of the therapeutic regime proposed below.

The author has developed an acupuncture diagnostic technique based on palpation to consistently measure changes in back discomfort in horses after applying biofrequency modulation patches.[a] In the author's experience, this technique can be easily taught and will produce repeatable results even with individuals who had no prior knowledge of acupuncture. Acupuncture diagnosis is extremely useful in localizing soreness or lameness, which is not easily detected with the more conventional techniques of jogging, nerve blocking, and hoof testers. The Chinese have developed a system of diagnosis based on the palpation of special points called Association or "Back-Shu" Points and Alarm or "Front-Mu Points." Any disorder of an organ or meridian will result in spontaneous pain or chosen to patch their horses at other times than just before a quiet trail ride. Logic tells us that if the pelvis and

tenderness at the corresponding Association or Alarm Point.

Methods and Materials

Animals: 142 client owned horses.

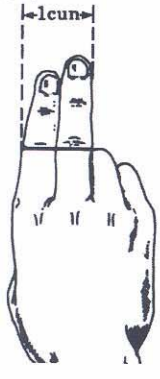
Procedure: Back discomfort was assessed before and after biofrequency modulation patch placement, using the novel technique outlined in this paper.

One hundred forty-two client-owned horses were tested using the technique described below. All horses were systemically healthy and in use in either specific disciplines (racing, jumping, reining, dressage, barrel racing, other show events or breeding) or pleasure (occasional showing, trail riding, roping, or general pleasure use). Horses were between the ages of 2 and 24 years old, and of 22 different breeds. Most of the horses had some degree of back pain, as this is a common chief complaint for an acupuncture visit.

Placebo patches were identical to test patches in adhesive, adhesive backing, and plastic sleeve, but contained no orthomolecular organic matrix. Placebo patches were applied to 7 horses, and testers were blinded to which patches were placebo. A second control group was made up of 7 horses upon which only duct tape was placed, to eliminate confounding results by any affect the duct tape might have had on the horses by potentially causing minor irritation the acupuncture point.

Acupuncture Point Palpation. In the horse, Association Points are located along the inner branch of the left and right Bladder Meridians, which run longitudinally, about a hand's width lateral to the midline and one "cun" (the width of the sixteenth rib, or approximately 3 cm) apart (Figure 1). Due to anatomical variation in body size and breeds, there is some discrepancy in the precise location of certain points. Testing begins at the most cranial point Bladder 21 just caudal to the last rib, continues caudally at intervals of one cun, until the most caudal point Bladder 35 is reached, at the level of the base of the tail (Figure 2). Approximately 3 pounds of pressure is used at each point. A measure of 3 pounds of pressure can easily be determined using any flat scale, such as a grocery scale. Acupuncture diagnosis by deep palpation can be accomplished with pressure from the fingers or an object such as a needle cap. Whatever tool is used, pressure must be consistent at each point to achieve accurate results. When pain is elicited at the point, the response is a quivering of the muscles, movement away from the pressure, retraction of the back or, if the point is very painful, a horse will even attempt to kick or bite.[4]

Figure 1



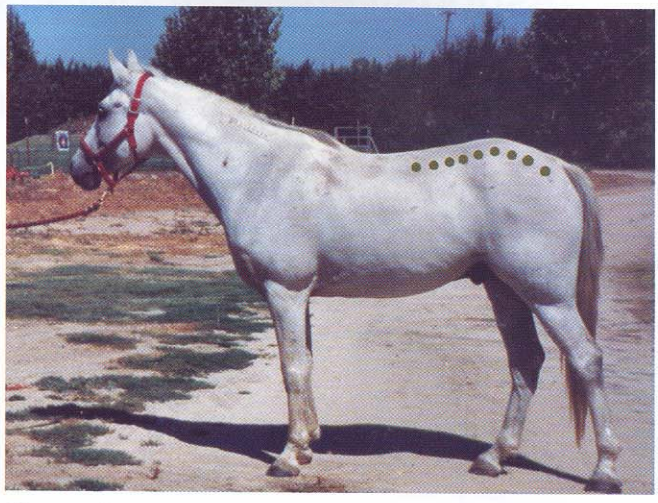


Figure 2

The horses were measured against a 1 to 10 scale for back discomfort and tightness (Figure 3). Values 1 through 3 are considered normal. For these values, on palpation there is life and elasticity in the tissues, and there could be very minor sensitivity, but the horse does not appear to be distressed in any way. Values 4 and 5 represent mild to moderate discomfort, 6 through 8 frank distress and pain, and 9 and 10 severe pain.

Patch Placement. If horses were assigned a Sensitivity Score of 1, 2 or 3 after acupuncture palpation, no further testing was done for these individuals. For horses assigned a sensitivity score of 4 or higher, patches were placed with the adhesive side away from the horse, with the adhesive left covered by the manufacturer's backing, in order to eliminate confounding results by any effect contact of adhesive with the horse's skin might have. They were covered with duct tape to secure, and left in place for 5 minutes. A white patch was placed on the right side of the horse on the Bladder 23 point and a tan patch was placed on the left side of the horse on the corresponding Bladder 23 point. Urinary Bladder 23, is the Back-Shu, or Association Point of the Kidney, and is located 3 cun (approximately 9 cm) lateral to the lower border of the spinous process of the 2nd and 3rd lumbar vertebrae (Figure 4).[5] This acupuncture point, in addition to many other functions, tonifies the kidneys, and strengthens the lower back and knees.[6]

Reassessment. Repeat Acupuncture Point Palpation, as described above. If reassessment resulted in failure of sensitivity score to fall by at least two units, then patches were reversed (the white patch placed on Bladder 32 on the left, and the tan patch placed on Bladder 32 on the right). It has been noted anecdotally by those who use LifeWave Patches that a small group

of individuals seem to have "Reversed Polarity," and while they fail to respond appreciably to placement of white patches on the right and tan on the left, they do respond well to placement of tan on the left and white on the right. Reverse placement of biofrequency modulation patches usually fails to bring about improvement in individuals who do not suffer from reversed polarity.

Results

Four of the horses showed no significant sensitivity on initial assessment (i.e., scored 1-3) and were not evaluated further. Because scores 1-3 are all considered within normal range, and differences between those three scores are likely clinically insignificant, all horses who scored within normal range (1-3) were designated a score of 3. Eight horses showed mild to moderate discomfort (scored 4-5), 79 horses showed frank distress and pain (scored 6-8), and 51 horses showed severe pain (scored 9-10).

None of the 7 horses who received placebo patches showed any change in sensitivity score when reassessed after patch placement. On initial assessment, 3 of these horses showed moderate discomfort (scored 4-5), 3 showed frank distress and pain (scored 6-8), and one showed severe pain (scored 9). When biofrequency patches were applied to these horses, all sensitivity scores returned to normal range (1-3).

Three horses in the study showed no response to biofrequency modulation patch placement. One of these horses showed an initial sensitivity score of 7, indicating frank distress and pain, and 2 of these horses showed an initial sensitivity score of 9, indicating severe pain. After patches were reversed, two of these horses showed return of sensitivity score to normal (1-3). One horse with initial sensitivity score of 9 who did not respond to initial patch placement also failed to respond to reverse patch placement.

Figure 3

Acupuncture Palpation Scale

	Subclinical Discomfort
1	no detectable discomfort
2	marginal discomfort with no muscle tightness; skin may twitch in one or two areas
3	slight or localized muscle tightness; skin may twitch in one or two areas
	Mild to Moderate Discomfort
4	marginal sensitivity; twitching of skin in three or more areas or slight tendency of horse to move away from pressure in two or more areas
5	noticeable discomfort and generalized muscle tightness; moves away from pressure but is not terribly distressed
	Frank Distress and Pain
6	mild distress; skin twitches and moves away from palpation; may turn to look at tester and lay ears back
7	obvious distress; may observe muscle spasms over back muscles; may turn to look at tester, lay ears back, stomp foot, and deliberately move away
8	frank pain; may grind teeth, lay ears back, threaten tester, try to get away from palpation; muscle spasms along the back common
	Severe Pain
9	may not tolerate even a light touch; may drop and fall away somewhat from the hand when palpated
10	may try to kick or bite; drops noticeably when palpated over the croup area

Figure 4

Conclusions

The horses tested responded dramatically to the biofrequency modulation patches. Out of 138 horses with mild to severe back discomfort, all horses except one with severe pain responded favorably to the LifeWave patches. One hundred thirty-five horses responded to traditional patch placement (white on the right and tan on the left), and 2 responded to reversed patch placement (tan on the right and white on the left). The more severe the back discomfort and tightness, the more dramatic were the effects. The lack of perceived improvement after placement of placebo patches to which investigators were blinded likely confirms legitimacy of the perceived therapeutic response to biofrequency patches.

This study evaluates patch use limited to 5-minute periods. In my practice, therapeutic patching of horses with back pain for as long as 12 hours at a time, and for subsequent treatments, has produced further beneficial effects. Some horses have manifested more energy and power than their owners have actually desired on the trail, while wearing biofrequency modulation patches. These clients have

back of a horse are working more efficiently in capacity and if the horse is not in discomfort, the horse will indeed show increased strength and manifest more energy and stamina.

[a] LifeWave Energy Patches, Suwannee, Georgia, USA.

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J. Lauren DeRock is an Independent Distributor for LifeWave™ Products, LLC, manufacturer of the biofrequency modulation patch tested in this study. Lifewave provided Patches used in the study.

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