N O V A F O N

Instructions for Application Veterinary

Preface

Here at NOVAFON, we give people and animals (from 3 kg) access to treatments which alleviate the symptoms of a wide range of health complaints, thus improving their quality of life. The vibrations of the NOVAFON, ranging from gentle to powerful, help to reduce pain and relieve muscle tension.

The NOVAFON brand is an ambassador for local vibration therapy, and represents quality and innovation. Our tried and tested therapeutic devices are made in Germany. As a manufacturer of medical devices, our quality management process is certified in accordance with DIN ISO 13485 and our products are governed by strict safety regulations for the safety and well-being of our customers.

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Basis for use

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A vibration describes an oscillation that is controlled by the variables of frequency and amplitude.

Frequencies

Frequencies are measured in hertz (Hz), which indicate the number of vibrations per second. The NOVAFON has two frequency settings. level 1 has a frequency of 100 Hz, and level 2 has a frequency of 50 Hz.

50 Hz (level 2) Relaxation of hardened tissue, muscle relaxation

100 Hz (level 1) Stimulation of the muscles, pain relief

Amplitude (intensity)

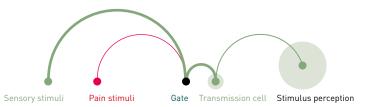
In a regular vibration curve, the amplitude is the measurement between the curve's highest and lowest point. The higher the amplitude, the more intense the vibration or intensity of the NOVAFON. Using the top multi-function button, the intensity setting can be switched from low to high in 3 simple steps.

Penetration effect

The NOVAFON's vibrations penetrate up to 6 cm beneath the skin. This has been confirmed by the Fraunhofer Institute. In this way, the vibrations also reach deep tissue treatment areas.

Gate control theory

When sensory stimuli such as heat, cold, or vibrations interact with nerve fibres, the transmission of pain signals to the brain can be interrupted as the sensory stimuli superpose the pain stimuli. Through regular use, this effect can also be sustained long after treatment.²



1. Switching on and off

Fully charge the device prior to switching it on for the first time. Press the ON/OFF button once to switch the NOVAFON on. To switch the device off, press this button three times in total.

2. Settings

The device is set at 100 Hz (Level 1) when the ON/ OFF button is pressed once. level 2 (50 Hz) is activated by pressing this button again. The current frequency selection is indicated on

the LED display below the multi-function button (Frequencies). You can regulate the intensity by repeatedly pressing the "Intensity Setting" button. Here you can choose from three intensity levels: low, medium, and high.

The intensity selection is indicated on the LED display above the multi-function button (Intensity). The device always starts on the lowest intensity setting.

3. Charging

Without the charging stand: Connect the charger cable to the device and the mains power supply unit. Then plug the mains power supply unit into the socket.

With the charging stand: Place the device on the charging stand. Connect the charger cable to the charging stand and the mains power supply unit. Then, insert the mains power supply unit into the socket.

4. Treatment

The suggested duration of treatment is up to 20 minutes per area. Treatment can be repeated several times per day (up to three times) as required. Longer or more frequent treatment offers no further benefit. Please note that NOVAFON sound wave devices only alleviate symptoms.



TIP Not yet familiar with the device? Then start on the lowest intensity setting and increase it as required during treatment. They do not treat the underlying cause and are not a substitute for visiting a veterinary surgeon. Despite their safe, simple, and non-invasive application, we suggest that you discuss the treatment with your treating veterinary surgeon or therapist. Should symptoms worsen, please seek veterinary advice.

5. Contraindications

Local vibration therapy is a simple, safe, and effective therapeutic method. However, please note the following contraindications and information regarding side effects.

Use of the NOVAFON is not permitted with:

- Open wounds/eczema
- (in the body region being treated)
- Arteriosclerosis
- (in the body region being treated)
- Current episodes of epilepsy
- Pregnancy
- Implants
- (in the body region being treated)
- Heart pacemakers
- Thromboses
- (in the body region being treated)
- Brain pacemakers
- Cardiac arrhythmia
- Tumours
- Acute inflammations
- (in the body region being treated)
- Acute episodes of inflammatory diseases

6. Side effects

Please note that in rare cases the following side effects may occur:

- Intensification of pain/unpleasant sensitivity
- Discomfort/dizziness
- Skin irritation
- Reflex/involuntary muscle contractions

Please cease treatment immediately if any of these side effects occur. Note that, especially with pain management, an initial worsening of the complaint may occur before you notice an improvement. Please note that slight reddening and warming of the skin do not represent a cause for concern. This is a desired effect of local vibration therapy, resulting from the increased blood flow.

7. Attachments

The NOVAFON has an intelligent system for connecting attachments. Planar treatments are performed using the disc attachment, the pin attachment, or the sensory roller; spot treatments with the magnetic, ball, or cone attachments.

8. Changing the attachment

All attachments can be easily connected or disconnected by rotating them one quarter turn. Attachments should only be changed once the device has been switched off. The attachment has been properly connected once the brackets on the device and attachment lie flush on top of each other.

9. Additional products

To avoid liquid ingress into the device, do not use creams or gels. These can shorten the service life of the device.

10. Using on fur

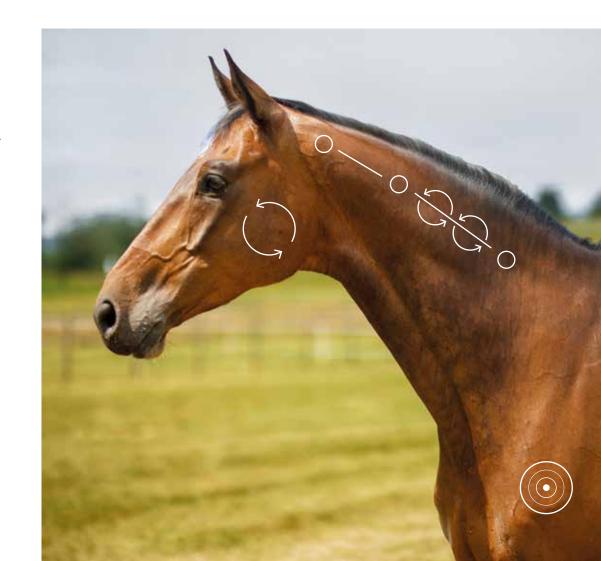
With short fur, stroke the affected areas as normal. In the case of long fur, it is advisable to part the fur on the affected areas if necessary.



	linear stroke
	continuous gentle circular motion
(gentle circular motion
\bigcirc	spot treatment

11. Movement patterns

Place the device onto the area to be treated. You can use the device in a planar or spot-treating fashion.





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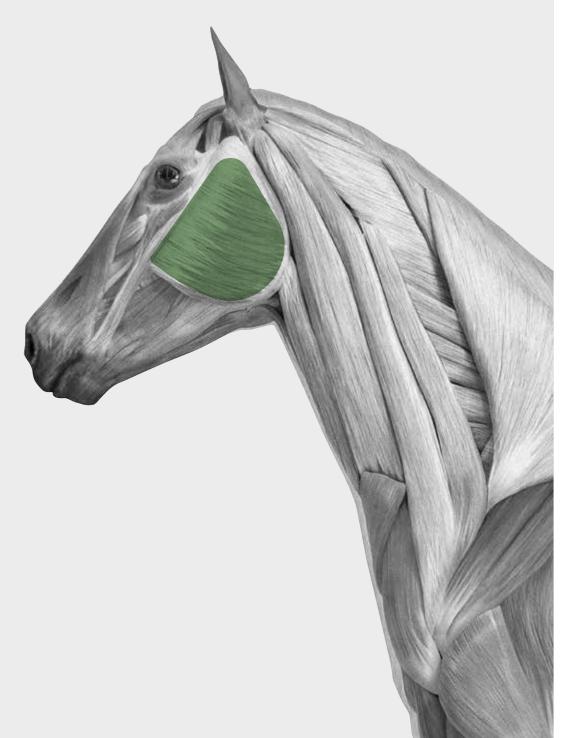
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Jaw joint symptoms

The horse's jaw joint or its dysfunction can affect the entire musculoskeletal system. Muscle chains that attach to the jaw and stretch across the neck and spine can cause back pain and imbalances in the back muscles. A horse with jaw joint problems can find it very difficult to let go while working under the rider. The horse often pulls a lot, and finds it difficult to work "on the bit" or turn. Tension in the jaw joints also affects the horse's forehand mobility. The horse also finds it more difficult to round its back and track up with its hindquarters.

In the treatment of the jaw joint, in addition to the joint itself, the associated muscles and trigger points also play a role. With the NOVAFON, however, the entire masticatory muscle system can be treated supportively in order to compensate for muscular imbalances and to reduce restrictions to the horse's movement. Treatment with the NOVAFON should last a total of 10 to 15 minutes and can be repeated daily. The intensity setting should be individually adapted to each horse, as every horse perceives the vibration very differently, especially in the head area. Always treat both sides.

NOTE

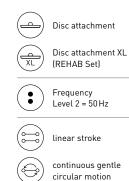
The horse's teeth must be checked regularly (once a year) by a specialist veterinarian and, if necessary, treated.

POSSIBLE CAUSES

Dental problems, broken tooth | Riding with "hard hands" | Riding with short reins | Hoof misalignments | Badly fitting saddle or bridle | Use of incorrect bit | Incorrect stabling or feeding

Step 1 — Stroking the masticatory muscles

In the first step, set the device to vibration level 2 and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion. The direction of treatment plays a subordinate role – pay more attention to whether the horse is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is recommended that you work in the direction of the coat growth. Treat each side of the face for 2 to 3 minutes.





TIP To optimise treatment, use the magnetic attachment instead of the ball attachment.



Ball attachment





gentle circular motion

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)) spot treatment

Step 2 — Treatment of stress points

Use the ball attachment to work directly on the trigger points. It is best to feel for the trigger points with your fingertips at the marked areas. To treat these areas, connect the ball attachment, select level 2, and adjust the intensity accordingly. Treat the trigger points for about 1 to 2 minutes each, either by applying light pressure without moving or in small circular movements.

TIP To optimise treatment, use the disc attachment XL instead of the disc attachment. 22

Neck band symptoms

By neck band symptoms, we are referring to the upper part of the neck band. There are two bursa sacs located here (bursa subligamentosa nuchalis cranialis/caudalis) which can show calcifications, often involving the neck ligament (ligamentum nuchae). This disorder usually occurs in showjumping and dressage horses of all ages. Discussion centres on whether holding the neck too tight triggers inflammatory processes and, in a later stage, calcifications. Affected horses usually have severe restrictions of the cervical spine, which can be accompanied by coordination difficulties and swelling.

In the event of radiological findings or calcification, we recommend that you speak to your veterinarian about suitable methods of therapy. With the NOVAFON, the entire neck and throat musculature can be treated supportively in order to compensate for muscular imbalances and to reduce restrictions to the horse's movement. Treatment with the NOVAFON should last a total of 10 to 15 minutes and can be repeated daily. When treating the neck and throat muscles, it may be useful to include the back muscles too. The intensity setting should be individually adapted to each horse, as every horse perceives the vibration very differently, especially in the head area. Always treat both sides.



TIP To optimise treatment, use the disc attachment XL instead of the disc attachment.



Disc attachment XL (REHAB Set)



linear stroke

continuous gentle circular motion

Step 1 — Stroking the neck and throat muscles

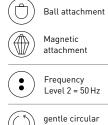
In the first step, set the device to vibration level 2 and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion. The direction of treatment plays a subordinate role - pay more attention to whether the horse is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is recommended that you work in the direction of the coat growth. Treat each side of the face for 2 to 3 minutes

NOTE Neck band symptoms must always be investigated by a veterinarian using radiological methods.

POSSIBLE CAUSES Riding "too tight in the neck" | Side reins | Traumas such as falling or rolling over | Leaning on the halter

Step 2 — Treatment of stress points

Use the ball attachment to work directly on the trigger points. It is best to feel for the trigger points with your fingertips at the marked areas. To treat these areas, connect the ball attachment, select level 2, and adjust the intensity accordingly. Treat the trigger points for about 1 to 2 minutes each, either by applying light pressure without moving or in small circular movements. After this, treat the next sore area.



 (\bullet)

) spot treatment

TIP To optimise treatment, use the magnetic attachment instead of the ball attachment.





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Myofascial pain syndrome of the head, neck and throat muscles

The horse's neck plays a fundamental role in riding. Due to its length, position and mobility, it is responsible for the horse's balance. Pain, muscular imbalances, restricted mobility and vertebral blockages are not uncommon in recreational and sport horses. In some horses, especially tall and/or old horses, these symptoms are often associated with ossification of the vertebrae. Horses may react by rearing or bucking, and they usually pull strongly against the rider's hand or shake their heads. Achieving the correct head position and the correct bend is restricted or no longer possible.

Depending on the findings of a specialist veterinarian, you can use the NOVAFON to treat the entire neck and throat muscles in a supportive manner in order to compensate for muscular imbalances and to reduce restrictions to the horse's movement. Treatment with the NOVAFON should last a total of 10 to 15 minutes and can be repeated daily. When treating the neck and throat muscles, it may be useful to include the back muscles too. The intensity setting should be individually adapted to each horse, as every horse perceives the vibration very differently, especially in the head area. Always treat both sides.

NOTE

Have differential diagnoses clarified by a veterinarian and, if necessary, consult an equine therapist specialising in physiotherapy, chiropractic or osteopathy.

POSSIBLE CAUSES

Riding incorrectly | Incorrect loading | Badly fitting saddle or bridle | Use of incorrect bit



TIP To optimise treatment, use the disc attachment XL instead of the disc attachment.



Disc attachment XL (REHAB Set)

Frequency Level 2 = 50 Hz

$\stackrel{-\circ}{_{-}}$ linear stroke

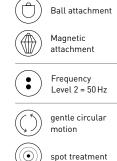
continuous gentle circular motion

Step 1 — Stroking the neck and throat muscles

In the first step, set the device to vibration level 2 and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion. The direction of treatment plays a subordinate role – pay more attention to whether the horse is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is recommended that you work in the direction of the coat growth. Treat each side of the face for 2 to 3 minutes.

Step 2 — Treatment of stress points

Use the ball attachment to work directly on the trigger points. It is best to feel for the trigger points with your fingertips at the marked areas. To treat these areas, connect the ball attachment, select level 2, and adjust the intensity accordingly. Treat the trigger points for about 1 to 2 minutes each, either by applying light pressure without moving or in small circular movements. After this, treat the next sore area.

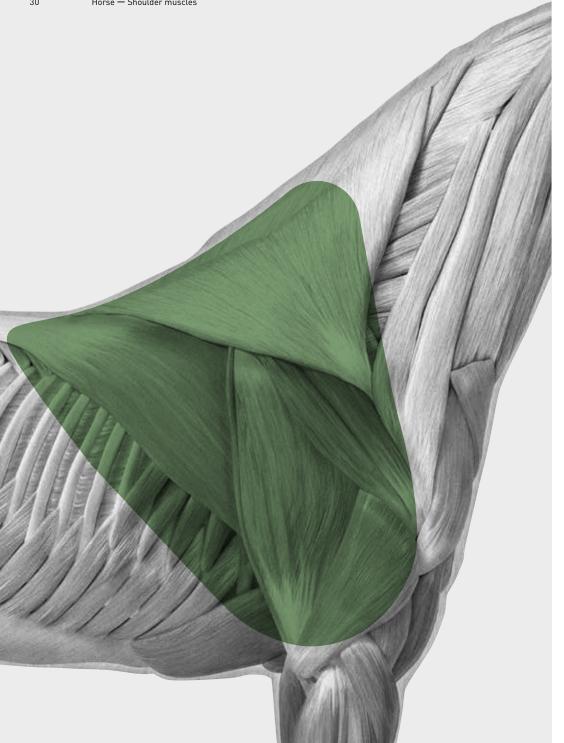


spot treatment

TIP To optimise treatment, use the magnetic attachment instead of the ball attachment.







Myofascial pain syndrome on the shoulder

In contrast to the human shoulder, a horse's shoulder is not osseous. but is built up almost entirely of muscles. The shoulder, together with the head, neck and front legs, form the horse's forehand. As most of the horse's organs are located in this front third, the horse's centre of gravity is also located here instead of, as might be assumed, the middle of the body. If we add the weight of a rider with a saddle, this can result in the horse becoming forehand-heavy. This needs to be balanced out with proper riding and training. Muscular imbalances and problems are common in this region, which is very important for the horse's movement, and should be treated preventatively and in a targeted manner.

With the NOVAFON the entire musculature of the shoulder area can be treated supportively in order to compensate for muscular imbalances and to reduce restrictions to the horse's movement. Treatment with the NOVAFON should last a total of 10 to 15 minutes and can be repeated daily. When treating the shoulder muscles, it may be useful to include the back muscles too. The intensity setting should be individually adapted to each horse, as every horse perceives the vibration very differently, especially in the head area. Always treat both sides.

NOTE

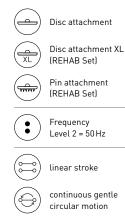
Be sure to have your saddle fitted by a professional. A badly fitting saddle leads to atrophied shoulder muscles, pressure points and problems in the entire spinal column and musculoskeletal system. Therefore, you should support this area with level 1 vibrations in order to strengthen the muscles.

POSSIBLE CAUSES

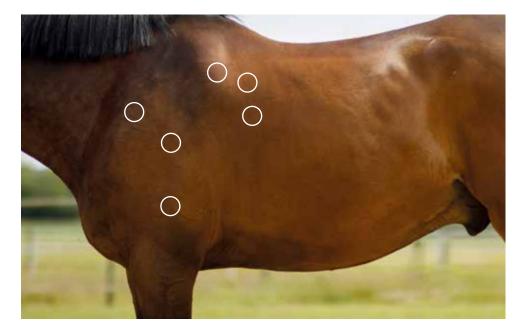
Anatomy of the horse | Incorrect riding | Incorrect loading | Badly fitting saddle - affects freedom of shoulder movement | Incorrect shoeina

Step 1 — Stroking the shoulder muscles

In the first step, set the device to vibration level 2 and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion. The direction of treatment plays a subordinate role – pay more attention to whether the horse is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is recommended that you work in the direction of the coat growth. Treat each side of the face for 2 to 3 minutes.



TIP To optimise treatment, use the disc attachment XL or the pin attachment instead of the disc attachment.



TIP To optimise treatment, use the magnetic attachment instead of the ball attachment.

Ball attachment Magnetic attachment Frequency : Level 2 = 50 Hz

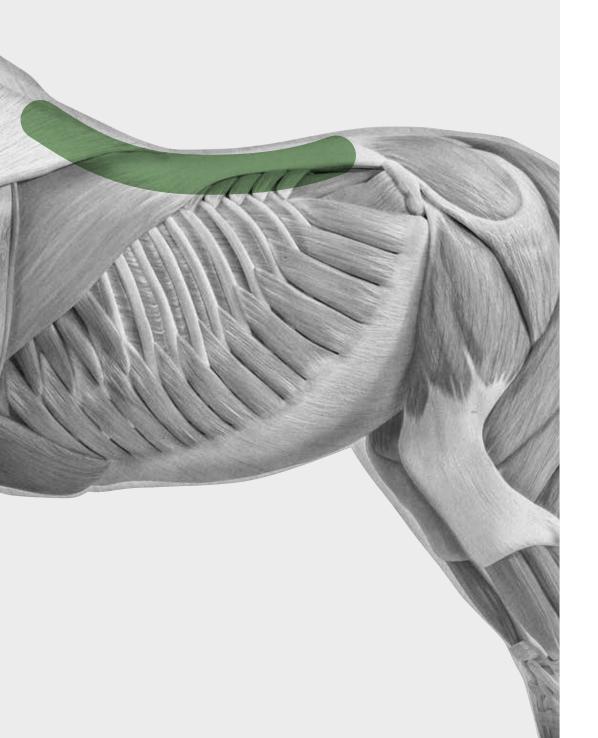
motion $\overline{\mathbf{O}}$

spot treatment

gentle circular

Step 2 — Treatment of stress points

Use the ball attachment to work directly on the trigger points. It is best to feel for the trigger points with your fingertips at the marked areas. To treat these areas, connect the ball attachment, select level 2, and adjust the intensity accordingly. Treat the trigger points for about 1 to 2 minutes each, either by applying light pressure without moving or in small circular movements. After this, treat the next sore area.



Kissing spines

The condition known as "kissing spines" refers to inflammation and changes in the vertebrae, mostly between the 10th thoracic vertebra and the 4th lumbar vertebra. Unfortunately for horses, this is exactly where the saddle is placed (9th to 18th thoracic vertebrae). "Kissing spines" means that the vertebrae are touching or overlapping. If the horse's back muscles are not strong enough, the horse cannot arch its back, instead pushing it downwards. The result is that the vertebrae move closer together, and the resulting friction can cause pain. Problems of this nature lead to the horse becoming unrideable. With the right training plan, a well-fitting saddle and correct riding, you can slow the progression of the disease and continue to ride your horse.

When treating "kissing spines", it may be useful to include the back muscles too. With the NOVAFON, the entire back musculature can be treated supportively in order to compensate for muscular imbalances and to relieve pain. Treatment with the NOVAFON should last a total of 10 to 15 minutes and can be repeated daily. The intensity setting should be individually adapted to each horse, as every horse perceives the vibration very differently. Always treat both sides.

NOTE

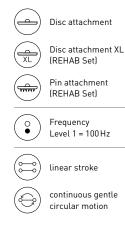
The diagnosis of "kissing spines" should be confirmed by a veterinarian using radiological methods.

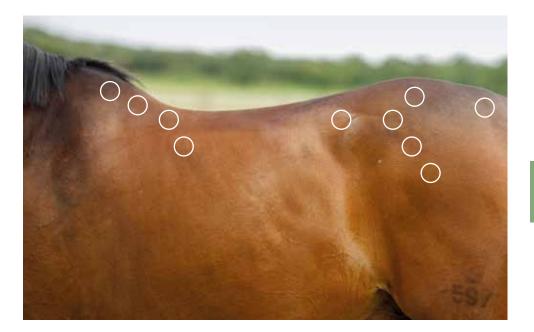
POSSIBLE CAUSES

The anatomy of the horse | Swayback | Weak back muscles | Incorrect riding | Incorrect loading | Badly fitting saddle | Traumas such as falling or rolling over

Step 1 — Stroking the back muscles

In the first step, set the device to vibration level 1 and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion in order to strengthen the muscles. The direction of treatment plays a subordinate role – pay more attention to whether the horse is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is recommended that you work in the direction of the coat growth. Treat each side of the face for 2 to 3 minutes.

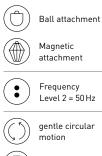




TIP To optimise treatment, use the magnetic attachment instead of the ball attachment.

<image>

TIP To optimise treatment, use the disc attachment XL or the pin attachment instead of the disc attachment.



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spot treatment

Step 2 — Treatment of stress points

Use the ball attachment to work directly on the trigger points. It is best to feel for the trigger points with your fingertips at the marked areas. To treat these areas, connect the ball attachment, select level 2, and adjust the intensity accordingly. Treat the trigger points for about 1 to 2 minutes each, either by applying light pressure without moving or in small circular movements. After this, treat the next sore area.

Sensitivity in the saddle and girth area

Many horses are very sensitive to pain caused by pressure in the saddle area. From an anatomical point of view, horses (and especially horses that are not regularly ridden) have a smaller soft tissue layer in the area of the thoracic vertebrae and ribs than in the area of the lumbar spine. This means: the less muscle mass the horse has in the saddle area, the higher the risk of pain. Trying to get a horse fit too quickly can also favour these symptoms, as can inexperienced riders. Symptoms can vary widely. The most common symptoms include immediate reactions such as altered breathing, head shaking, kicking out, shying and snatching. When being ridden, the horse may be very tense, or may react when the girth is tightened.

It is important to know the cause of such behaviours. A veterinarian should be on the lookout for muscular or organic problems. In addition, treatment should always be monitored and accompanied by a trained person or a therapist. With the NOVAFON, the musculature of the entire back and girth area can be treated supportively in order to compensate for muscular imbalances and to relieve pain. Treatment with the NOVAFON should last a total of 10 to 15 minutes and can be repeated daily. The intensity setting should be individually adapted to each horse, as every horse perceives the vibration very differently. Always treat both sides.

NOTE

Have differential diagnoses clarified by a veterinarian and, if necessary, consult an equine therapist specialising in physio-therapy, chiropractic or osteopathy.

POSSIBLE CAUSES

Swayback | Weak back muscles | Incorrect riding | Incorrect loading | Badly fitting tack | Traumas such as falling or rolling over | Incorrect shoeing | Overexercise | Girth too tight | Muscular problems | Gastrointestinal problems



TIP To optimise treatment, use the disc attachment XL or the pin attachment instead of the disc attachment.



Frequency Level 2 = 50 Hz

$_{o}^{o}$ linear stroke

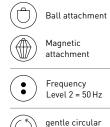
continuous gentle circular motion

Step 1 — Stroking the back muscles

In the first step, set the device to vibration level 2 and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion. The direction of treatment plays a subordinate role – pay more attention to whether the horse is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is recommended that you work in the direction of the coat growth. Treat each side of the face for 2 to 3 minutes.

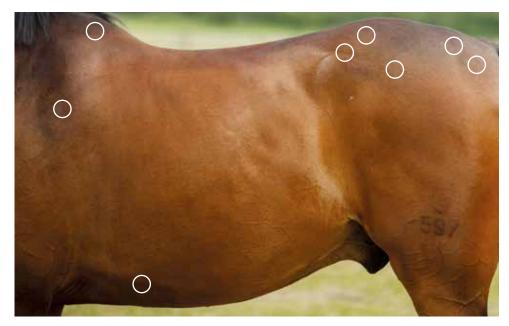
Step 2 — Treatment of stress points

Use the ball attachment to work directly on the trigger points. It is best to feel for the trigger points with your fingertips at the marked areas. To treat these areas, connect the ball attachment, select level 2, and adjust the intensity accordingly. Treat the trigger points for about 1 to 2 minutes each, either by applying light pressure without moving or in small circular movements. After this, treat the next sore area.



spot treatment

TIP To optimise treatment, use the magnetic attachment instead of the cone attachment and concentrate on the stress points of the sacroiliac joint.





Myofascial pain syndrome on the back

As in humans, back pain in horses is a widespread condition. It is important to know that not all back problems originate in the back, but can also stem from other locations. This is why it is important to look for the cause of the pain and not just treat the symptoms. Horses can react very differently to pain. You should look out for changes in behaviour such as unwillingness, taking off, drop in performance, ears laid back, snatching when being saddled and general disobedience. If the back problems are of a purely muscular nature, you can get them under control with the right therapy and the right training plan, enabling your horse to regain its normal resilience.

With the NOVAFON, the entire back musculature can be treated supportively in order to compensate for muscular imbalances and to relieve pain. Treatment with the NOVAFON should last a total of 10 to 15 minutes and can be repeated daily. The intensity setting should be individually adapted to each horse, as every horse perceives the vibration very differently. Always treat both sides.



TIP To optimise treatment, use the disc attachment XL or the pin attachment instead of the disc attachment.



(REHAB Set)

Frequency Level 2 = 50 Hz



continuous gentle circular motion

Step 1 — Stroking the back muscles

In the first step, set the device to vibration level 2 and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion. The direction of treatment plays a subordinate role – pay more attention to whether the horse is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is recommended that you work in the direction of the coat growth. Treat each side of the face for 2 to 3 minutes.

NOTE

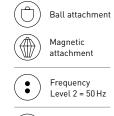
Back problems can have a multitude of causes. Have the diagnosis clarified by a veterinarian and, if necessary, consult an equine therapist specialising in physiotherapy, chiropractic or osteopathy.

POSSIBLE CAUSES

The anatomy of the horse | Weak back muscles | Incorrect riding | Incorrect loading | Badly fitting tack | Traumas such as falling or rolling over | Incorrect shoeing

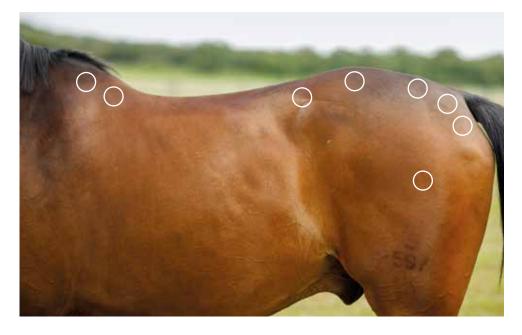
Step 2 — Treatment of stress points

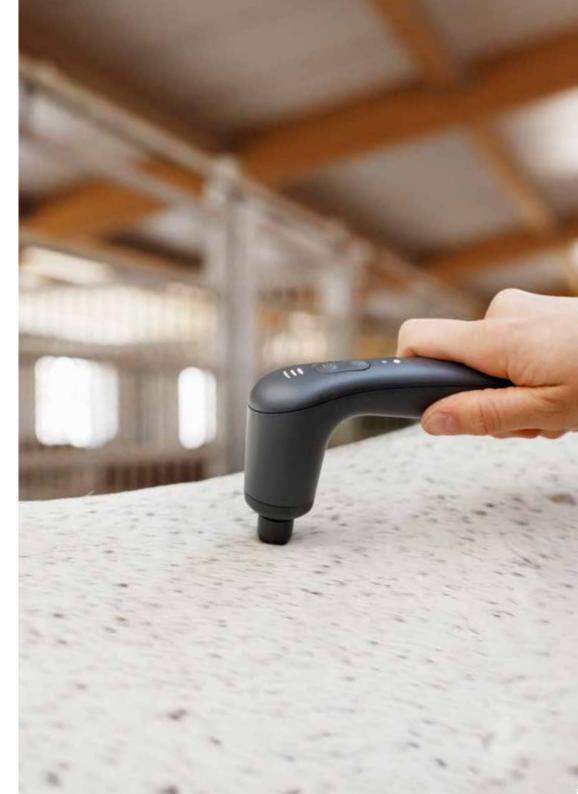
Use the ball attachment to work directly on the trigger points. It is best to feel for the trigger points with your fingertips at the marked areas. To treat these areas, connect the ball attachment, select level 2, and adjust the intensity accordingly. Treat the trigger points for about 1 to 2 minutes each, either by applying light pressure without moving or in small circular movements. After this, treat the next sore area.

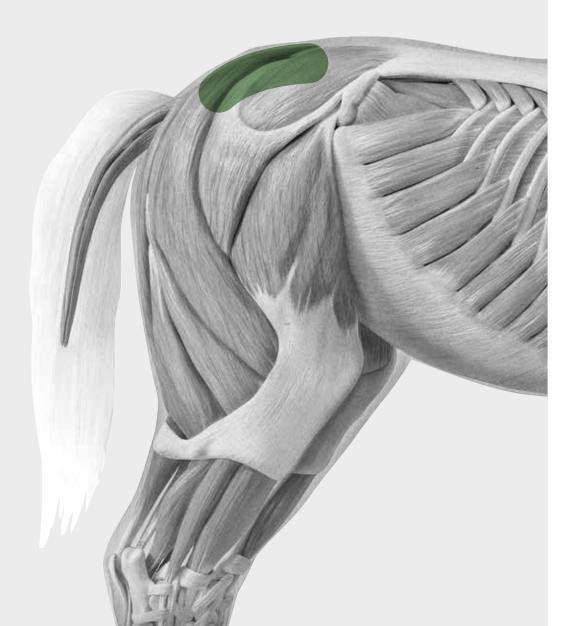


gentle circular motion

TIP To optimise treatment, use the magnetic attachment instead of the ball attachment.







Sacroiliac joint symptoms

The sacroiliac joint is a very small joint that is held together only by ligaments, not by muscles. The sacroiliac joint is also known as the motor of the hindquarters because it is largely responsible for transmitting power from the hindquarters. If the mobility of the sacroiliac joint is disturbed, this also reduces the thrust of the hindquarters. This can have a major impact on the horse's rideability, strength and balance. The sacroiliac joint can also cause lameness. If the sacroiliac joint is blocked, it is absolutely essential to create a therapy and training plan in order to correct the imbalances caused by the blockage.

With the NOVAFON, the entire back musculature can be treated supportively in order to compensate for muscular imbalances and to relieve pain. You should treat the overloaded side with the NOVAFON set to level 2, and the other side with level 1. Treatment with the NOVAFON should last a total of 10 to 15 minutes and can be repeated daily. The intensity setting should be individually adapted to each horse, as every horse perceives the vibration very differently. Always treat both sides.

NOTE

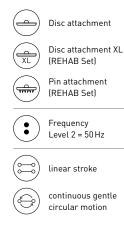
Have the causes clarified by a veterinarian and, if necessary, consult an equine therapist specialising in physiotherapy, chiropractic or osteopathy.

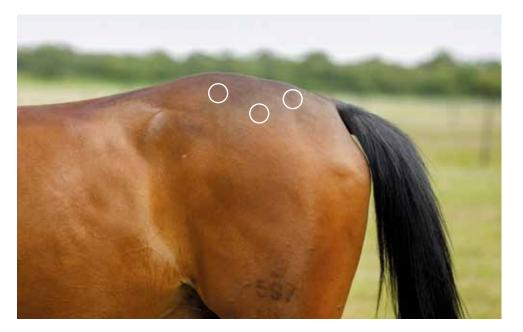
POSSIBLE CAUSES

The anatomy of the horse | Lack of muscles | Incorrect riding | Incorrect loading | Badly fitting tack | Traumas such as falling or rolling over | Incorrect shoeing | Degenerative conditions such as arthrosis

Step 1 — Stroking the back muscles

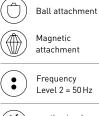
In the first step, set the device to vibration level 1 or level 2 and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion. The direction of treatment plays a subordinate role – pay more attention to whether the horse is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is recommended that you work in the direction of the coat growth. Treat each side of the face for 2 to 3 minutes.





TIP To optimise treatment, use the magnetic attachment instead of the ball attachment.

TIP To optimise treatment, use the disc attachment XL or the pin attachment instead of the disc attachment.



gentle circular motion

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) spot treatment

Step 2 — Treatment of stress points

Use the ball attachment to work directly on the trigger points. It is best to feel for the trigger points with your fingertips at the marked areas. To treat these areas, connect the ball attachment, select level 2, and adjust the intensity accordingly. Treat the trigger points for about 1 to 2 minutes each, either by applying light pressure without moving or in small circular movements. After this, treat the next sore area.

Knee symptoms

In horses, the knee joint is often confused with the hip joint, as the leg only appears to begin from the knee joint. Horse can suffer from a range of knee problems with different causes. Bruises, trauma, inflammation, cartilage damage, chipped joints, meniscus damage, dislocated kneecaps and osteoarthritis are just a few diagnoses that can affect the knee. In the case of knee symptoms, it is therefore of great importance to make the correct diagnosis so that appropriate therapy can be provided and the condition alleviated.

With the NOVAFON, the entire hindquarters can be treated supportively in order to compensate for muscular imbalances and to relieve pain. Treatment with the NOVAFON should last a total of 10 to 15 minutes and can be repeated daily. The intensity setting should be individually adapted to each horse, as every horse perceives the vibration very differently.

NOTE

If your horse has knee problems, always consult a veterinarian, who can make the correct diagnosis using imaging procedures and thus explain the cause of the lameness.

POSSIBLE CAUSES

Anatomy of the horse | Unstable ligaments | Incorrect riding | Incorrect loading | Trauma | Degenerative conditions such as osteoarthritis | Incorrect breeding | Inflammation

Step 1 — Stroking the hind muscles

In the first step, set the device to vibration level 1 and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion. The direction of treatment plays a subordinate role – pay more attention to whether the horse is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is recommended that you work in the direction of the coat growth. Treat for 2 to 3 minutes. Treat the other side with level 2 to counteract overloading of the muscles.



Disc attachment XL

Pin attachment

Level 1 = 100 Hz

TIP To optimise treatment, use the disc attachment XL or the pin attachment instead of the disc attachment.



TIP To optimise treatment, use the magnetic attachment instead of the ball attachment.

Ball attachment Magnetic attachment

Frequency : Level 2 = 50 Hz

gentle circular motion

 $\overline{\mathbf{O}}$

spot treatment

Step 2 — Treatment of stress points

Use the ball attachment to work directly on the trigger points. It is best to feel for the trigger points with your fingertips at the marked areas. To treat these areas, connect the ball attachment, select level 2, and adjust the intensity accordingly. Treat the trigger points for about 1 to 2 minutes each, either by applying light pressure without moving or in small circular movements. After this, treat the next sore area.

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Deficits in the hindquarters

The horse's hindquarters are responsible for the horse's momentum, thrust and load-bearing capacity. Without strong hindquarters, achieving collection is impossible. Suppleness and being "on the bit" also come from the load-bearing capacity of the hindquarters. If the horse's hindquarters are too weak, this can be trained with specific exercises, and muscular imbalances can also be treated.

With the NOVAFON, the entire hindquarters can be treated supportively in order to compensate for muscular imbalances and to relieve pain. Treatment with the NOVAFON should last a total of 10 to 15 minutes and can be repeated daily. The intensity setting should be individually adapted to each horse, as every horse perceives the vibration very differently. Always treat both sides.



TIP To optimise treatment, use the magnetic attachment instead of the ball attachment.

Magnetic attachment

 $\overline{\mathbf{O}}$



Ball attachment

gentle circular

spot treatment

Step 1 — Treatment of stress points

Use the ball attachment to work directly on the trigger points. It is best to feel for the trigger points with your fingertips at the marked areas. To treat these areas, connect the ball attachment, select level 2, and adjust the intensity accordingly. Treat the trigger points for about 1 to 2 minutes each, either by applying light pressure without moving or in small circular movements. After this, treat the next sore area.

NOTE

Have differential diagnoses clarified by a veterinarian and, if necessary, consult an equine therapist specialising in physio-therapy, chiropractic or osteopathy.

POSSIBLE CAUSES

Anatomy of the horse | Incorrect riding | Incorrect loading | Age of the horse | Compensation by other areas of the body

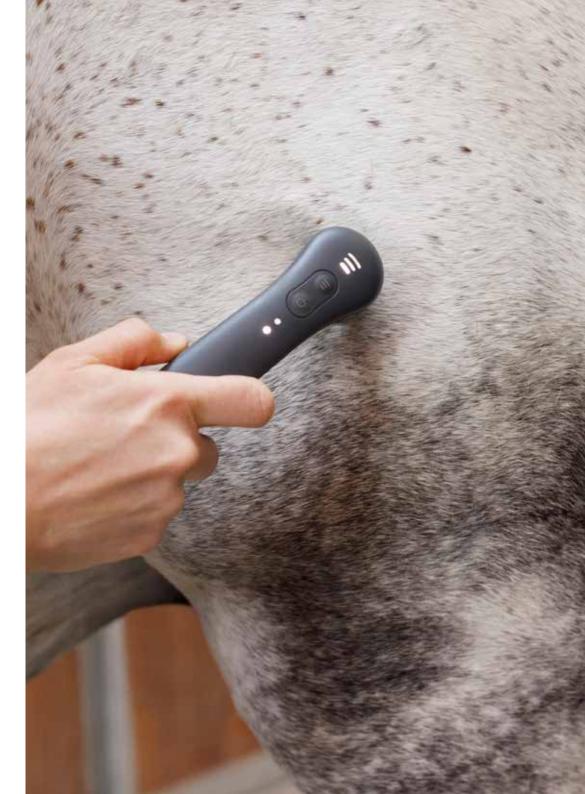
Step 2 — Stroking the hind muscles

In the first step, set the device to vibration level 1 and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion. The direction of treatment plays a subordinate role – pay more attention to whether the horse is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is recommended that you work in the direction of the coat growth. Treat for 2 to 3 minutes.



TIP To optimise treatment, use the disc attachment XL or the pin attachment instead of the disc attachment.





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Tendon disorders

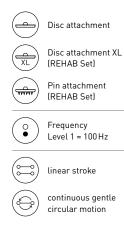
Tendon disorders in horses are very common, and are usually associated with long periods of inactivity and high costs. Tendon issues can vary widely, and be accompanied by inflammation, calcification, tears or complete ruptures of the tendon. Problems can affect the superficial digital flexor tendon, the deep digital flexor tendon, the suspensory ligament or the extensor tendon. Usually the horse shows a clear lameness and there is a visible "tendon arch" or swelling. Exact diagnostics are essential in order to locate the injury and determine its seriousness, before beginning the appropriate therapeutic measures.

For some tendon disorders, depending on the severity of the disorder, you should clarify with your veterinarian what the best treatment is. With the NOVAFON you can treat tendon tissues supportively in order to activate tissue mobilisation and relieve pain. Treatment with the NOVAFON should last a total of 10 to 15 minutes and can be repeated daily. Always start with the lowest intensity. Inflamed tendons should not be treated directly. At the beginning you should only work on the muscular structure – the so-called actors – above the corresponding tendon.

NOTE Consult a veterinarian for an accurate diagnosis using imaging techniques. POSSIBLE CAUSES Trauma | Incorrect riding | Incorrect loading | Badly fitting tack | Degeneration and signs of wear and tear | Blockages or compensation by other areas of the body area

Step 1 — Stroking the actors

In the first step, set the device to vibration level 1 and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion. The direction of treatment plays a subordinate role – pay more attention to whether the horse is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is recommended that you work in the direction of the coat growth. Treat each area for 2 to 3 minutes.

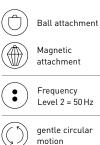


TIP Treat the muscular actors in order to tone them and provide the tendons with the best possible support. Avoid direct contact with the tendons if they are inflamed.



TIP To optimise treatment, use the magnetic attachment instead of the ball attachment.





 $\mathbf{\overline{O}}$

spot treatment

Step 2 — Treatment of stress points

Use the ball attachment to work directly on the trigger points. It is best to feel for the trigger points with your fingertips at the marked areas. To treat these areas, connect the ball attachment, select level 2, and adjust the intensity accordingly. Treat the trigger points for about 1 to 2 minutes each, either by applying light pressure without moving or in small circular movements. After this, treat the next sore area.

Joint symptoms

As with the knee joint described on page 51, the joints of the extremities can also show very different clinical pictures. Bruises, trauma, inflammation and osteoarthritis are not uncommon, and are often associated with lameness and severe swelling. As with knee symptoms, it is very important to make the correct diagnosis so that appropriate therapeutic measures can be initiated.

With the NOVAFON, you can treat all joints and the surrounding areas in a supportive manner in order to alleviate swelling and pain. Treatment with the NOVAFON should not exceed a total of 10 to 15 minutes and can be repeated daily. The intensity setting should be individually adapted to each horse, as every horse perceives the vibration very differently. Only treat the peripheral area, do not place the NOVAFON directly on the swelling or the joint.



TIP To optimise treatment, use the disc attachment XL instead of the disc attachment.

NOTE

Consult a veterinarian for an accurate diagnosis using imaging techniques. When treating the suspensory ligament, please seek advice from our specialist staff or your therapist beforehand.

POSSIBLE CAUSES

Trauma | Incorrect riding | Incorrect loading | Badly fitting tack | Degeneration and signs of wear and tear | Blockages or compensation by other areas of the body area





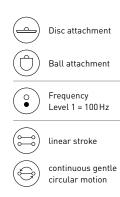
gentle circular motion

Step 1 — Treating sore muscles

Using the disc attachment, slowly smooth out the adjacent muscles, thus ensuring that you stay in the area around the joint. Start with level 2 and adjust the intensity accordingly. Start with the lowest intensity. Treat each area in small circular movements for about 1 to 2 minutes. Then treat the next area.

Step 2 — Circling around the joints

In the first step, set the device to vibration level 1 and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion. The direction of treatment plays a subordinate role – pay more attention to whether the horse is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is recommended that you work in the direction of the coat growth. Treat each area for 2 to 3 minutes.



TIP To optimise treatment, use the ball attachment instead of the disc attachment.





Case studies

»The NOVAFON relaxes the muscle groups you use it on, which are significantly looser afterwards. With regular use, the effect seems to persist over a longer period of time (two to four times a week over a period of about four weeks) ... Most horses show very clear signs of relaxation when you use the NOVAFON: they drop their head and neck, close their eyes and relax their lip muscles.«^{4,6} Yvonne Katzenberger, Dr. Ruth Katzenberger-Schmelcher, PFERGO – 1st Academy for Equine Ergotherapy

»Using the NOVAFON device saves the practitioner a lot of effort, and it also seems to be much more pleasant for the horse than manual treatment. (...) In every horse that I have treated with the NOVAFON in the test phase, I have noticed a striking relaxation of the muscles treated and a significant warming of the areas treated.«^{4,6}

Diana Kampmann, Hands4Horses

»For arthritis, arthrosis, tendonitis and other tendon issues, especially in slightly longer-standing clinical pictures involving gelatinised or indurated synovial fluids, daily use has proven itself.«^{1,4,6} Klaus Gerd Scharf, veterinarian and homeopath

»When I'm inspecting horses, I often come across tense chewing muscles. Before I get started, I always start with a massage of the chewing muscles. Then I apply the NOVAFON. It supports me tremendously in my treatments because it can be used in so many ways.«^{3,4,7}

User V., animal physiotherapist, May 2020, Instagram





Dog 68

Head and neck muscles

Myofascial pain syndrome 73

Spinal column and back muscles

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Myofascial pain syndrome of the head and neck muscles

Many different muscle cords on the head enable dogs to sniff, bark, chew, open or close their eyes and prick up their ears. These muscle cords are also known as "movers" or "agonists". They are located in the extension of the neck muscles. Dogs use these movers to define their entire facial expression. If tension occurs in one or more of these movers, it can affect the dog's whole body. In the case of illness or after a long journey in a pet carrier, these muscles need special attention.

With the NOVAFON, the entire head, neck and throat area can be treated supportively in order to compensate for muscular imbalances and to relieve pain. During treatment, it is not only the muscles themselves that play a role, but above all the fasciae (muscle-tendon attachments) and trigger points associated with them. Treatment with the NOVAFON should last a total of 10 to 15 minutes and can be repeated daily. The intensity setting should be individually adapted to the tolerance of each dog, as every dog perceives the vibration very differently. Always treat both sides.

NOTE

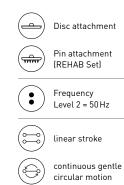
Indications that the dog is in pain can include whining, yapping, heavy panting, rapid breathing, tremors, restlessness, withdrawal or aggression when touched, licking/gnawing the painful parts of the body, rapid pulse, dilated pupils, and an increased body temperature.

POSSIBLE CAUSES

Problems with the joints (e.g. due to blockages or joint diseases) | Vertebral blockages and/or spinal column diseases | Strain on the musculoskeletal system (often associated with joint blockages) | Diseases/problems with the internal organs | Incorrectly used collars and chest harnesses | Psychological stress

Step 1 — Stroking the large muscle groups

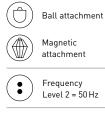
In the first step, set the device to vibration level 2 and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion. The direction of treatment plays a subordinate role – pay more attention to whether the dog is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is recommended that you work in the direction of the coat growth. Treat each side of the face for 2 to 3 minutes.





TIP To optimise treatment, use the magnetic attachment instead of the ball attachment.





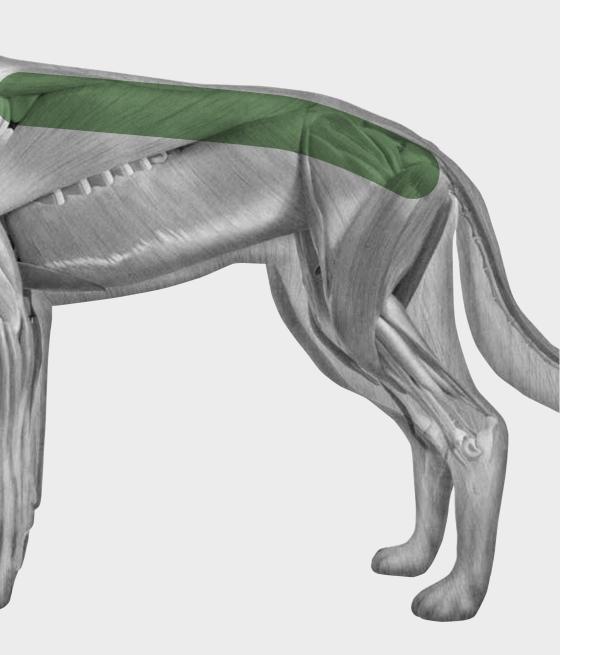
gentle circular motion

) spot treatment

Step 2 — Treatment of sore areas

Use the ball attachment to work directly on the trigger points. It is best to feel for the trigger points with your fingertips at the marked areas. To treat these areas, connect the ball attachment, select level 2, and adjust the intensity accordingly. Treat the trigger points for about 1 to 2 minutes each, either by applying light pressure without moving or in small circular movements. Always treat both sides. Then treat the incorrectly loaded muscle groups with level 1 in order to strengthen and activate them.

TIP To optimise treatment, use the pin attachment instead of the disc attachment.



Myofascial pain syndrome on the back

Dogs can also suffer from back pain. Dogs' spines consists of 27 movable vertebral bodies and are divided into 7 cervical vertebrae, 13 thoracic vertebrae and 7 lumbar vertebrae. In addition to protecting the spinal cord, which runs within the spinal canal, they serve to facilitate movement and ensure a stable posture. The vertebrae represent the starting point for strong torso muscles, which are responsible for proprioception, also known as the sense of balance.

Myofascial pain syndrome does not respond to painkillers (analgesics), so while treating pain with drugs is still common, it makes little sense in this case. Instead, the muscles have to be relaxed. Local vibration therapy stimulates and activates the treatment area. Aching muscles are thus better supplied with blood and thus better cared for. The muscles relax and pain is alleviated. The aim of vibration therapy is to correct the muscular changes caused by incorrect or excessive strain and to restore movement sequences to normal. Treatment with the NOVAFON should last a total of 10 to 15 minutes and can be repeated daily. The intensity setting should be individually adapted, as each animal perceives the vibration very differently. Always treat both sides.

NOTE

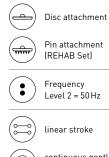
Dogs very often experience myofascial pain in the long back muscles (M. longissimus dorsi), the broad back muscle (M. latissimus dorsi), the shoulder muscles (biceps and triceps) and the long muscles of the hind leg. The trigger points can be activated spontaneously or by applying slight pressure.

POSSIBLE CAUSES

Degenerative diseases of the spine | Strain on the musculoskeletal system (often associated with joint blockages) | Problems with the joints (e.g. due to blockages or joint diseases) | Weak muscles and imbalances | Incorrectly used collars and chest harnesses | Psychological stress 78

Step 1 — Relaxing the muscle groups to the right and left of the spine

In the first step, set the device to vibration level 2 and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion. The direction of treatment plays a subordinate role – pay more attention to whether the dog is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is recommended that you work in the direction of the coat growth. Treat each side of the face for 2 to 3 minutes.

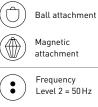


continuous gentle circular motion



TIP To optimise treatment, use the magnetic attachment instead of the ball attachment.





gentle circular motion

 \odot

) spot treatment

Step 2 — Treatment of stress points

Use the ball attachment to work directly on the trigger points. It is best to feel for the trigger points with your fingertips at the marked areas. To treat these areas, connect the ball attachment, select level 2, and adjust the intensity accordingly. Treat the trigger points for about 1 to 2 minutes each, either by applying light pressure without moving or in small circular movements. After this, treat the next sore area.

TIP To optimise treatment, use the pin attachment instead of the disc attachment.

Spondylosis / Spondylarthrosis

Spondylosis is the generic term for a number of degenerative diseases of the spine. Spondylarthrosis, on the other hand, is a more precise definition, and describes signs of wear and tear on the articular cartilage. With age, the cartilage increasingly wears out, which reduces the distance between the vertebrae. As a result, back mobility decreases and dogs increasingly suffer from pain. In the course of this degenerative disease, bony thorns can develop along the edges of the vertebrae. If these thorns meet, they form bony connections between the vertebrae. This changes the shape of the spine and causes stiffening. The whole process is accompanied by pain and severe muscle tension.

Local vibration therapy stimulates and activates the treatment area. Aching muscles are thus better supplied with blood and thus better cared for. The muscles relax and pain is alleviated. The aim of vibration therapy is to correct the muscular changes caused by incorrect or excessive strain and to restore movement sequences to normal. Treatment with the NOVAFON should last a total of 10 to 15 minutes and can be repeated daily. The intensity setting should be individually adapted, as each animal perceives the vibration very differently. Always treat both sides.



TIP To optimise treatment, use the pin attachment instead of the disc attachment.



Pin attachment (REHAB Set)

Frequency Level 2 = 50 Hz

$\stackrel{\circ}{=}$ linear stroke

continuous gentle circular motion

Step 1 — Relaxing the muscle groups to the right and left of the spine

In the first step, set the device to vibration level 2 and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion. The direction of treatment plays a subordinate role – pay more attention to whether the dog is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is recommended that you work in the direction of the coat growth. Treat each side of the face for 2 to 3 minutes.

NOTE

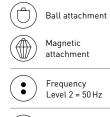
When the thorns on the vertebrae have grown together, the pain usually stops, but the spine stiffens where the thorns are joined and movement is clearly restricted. If there are trapped nerves, this can lead to incontinence, paralysis and lameness. In this case, consult a veterinarian, as surgical intervention cannot be ruled out.

POSSIBLE CAUSES

Herniated discs | inflammatory diseases of the back | Tumours | Osteoporosis | Bad posture | Strain on the musculoskeletal system | Weak muscles and imbalances

Step 2 — Treatment of stress points

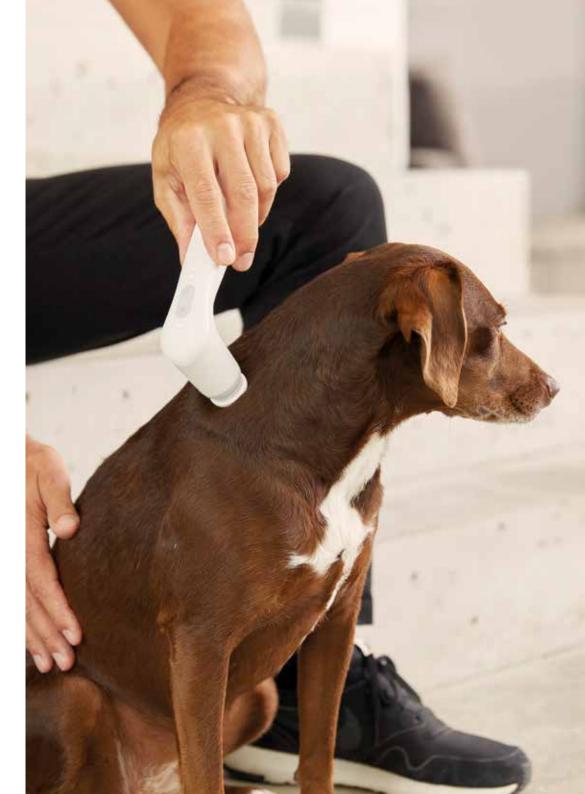
Use the ball attachment to work directly on the trigger points. It is best to feel for the trigger points with your fingertips at the marked areas. To treat these areas, connect the ball attachment, select level 2, and adjust the intensity accordingly. Treat the trigger points for about 1 to 2 minutes each, either by applying light pressure without moving or in small circular movements. After this, treat the next sore area.



gentle circular motion spot treatment

TIP To optimise treatment, use the magnetic attachment instead of the ball attachment.





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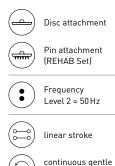
Herniated discs

Sudden paralysis of the hind legs, a pulled back or incontinence in dogs can be signs of a herniated disc. However, symptoms can vary depending on the location and severity of the herniated disc. Small dogs with long backs are particularly prone to herniated discs: nearly all dog owners are familiar with dachshund paralysis.

Local vibration therapy stimulates and activates the treatment area. Aching muscles are thus better supplied with blood and thus better cared for. The muscles relax and pain is alleviated. The aim of vibration therapy is to correct the muscular changes caused by incorrect or excessive strain and to restore movement sequences to normal. Treatment with the NOVAFON should last a total of 10 to 15 minutes and can be repeated daily. The intensity setting should be individually adapted, as each animal perceives the vibration very differently. Always treat both sides, and observe our notes.



TIP To optimise treatment, use the pin attachment instead of the disc attachment.



circular motion

Step 1 — Relaxing the muscle groups to the right and left of the spine

In the first step, set the device to vibration level 2 and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion. The direction of treatment plays a subordinate role – pay more attention to whether the dog is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is recommended that you work in the direction of the coat growth. Treat each side of the face for 2 to 3 minutes. After consultation with your therapist, the area can be toned (level 1) in order to specifically strengthen and build up the muscles and ligaments.

NOTE

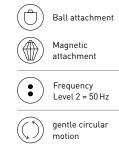
Do not treat an acute herniated disc directly, and seek advice from a veterinarian or therapist. Early diagnosis by a veterinarian is critical to the success of treatment.

POSSIBLE CAUSES

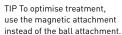
Strain caused by being overweight | Lack of exercise | Strain/one-sided strain in competitive sports | Age | Predisposition of the breed | Injuries and accidents

Step 2 — Treatment of stress points

Use the ball attachment to work directly on the trigger points. It is best to feel for the trigger points with your fingertips at the marked areas. To treat these areas, connect the ball attachment, select level 2, and adjust the intensity accordingly. Treat the trigger points for about 1 to 2 minutes each, either by applying light pressure without moving or in small circular movements. After this, treat the next sore area.



spot treatment







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Degenerative lumbosacral stenosis (DLSS)

Degenerative lumbosacral stenosis can have different causes. If DLSS is triggered by tumours, treatment with the NOVAFON is not suitable. Be aware of the contraindications. DLSS occurs at the transition of the last lumbar vertebra to the sacrum (cauda equina) and does not only affect larger dogs. The transition area between the lumbar vertebra and the sacrum is connected by ligaments that can degenerate and become loose. This instability causes the intervertebral disc to press on individual nerves, which can lead to compression syndrome. The symptoms usually appear slowly and insidiously. If the nerves are very severely compressed, this can cause the animal to drag its hind legs or even to lose control of them completely. If your pet experiences these symptoms, consult a veterinarian immediately.

Regardless of the type of therapy chosen, in cases of DLSS sound wave therapy can provide great supplementary treatment options. Vibration therapy aims to combat pain, build up atrophied muscles, relieve muscle tension and restore movement. Treatment with the NOVAFON should last a total of 10 to 15 minutes and can be repeated daily. The intensity setting should be individually adapted, as each animal perceives the vibration very differently. Always treat both sides.

NOTE

Depending on the course of the disease, dogs may be in a lot of pain and therefore tend to be less active. They rarely run exuberantly, play or jump.

POSSIBLE CAUSES

Degenerative disease of the spine at the transition from the lumbar vertebrae to the sacrum | Strain on the musculoskeletal system | Problems with the joints | Spinal blockages and/or spinal diseases | Incorrectly used collars and chest harnesses | Psychological stress



TIP To optimise treatment, use the pin attachment instead of the disc attachment.





_o) linear stroke

continuous gentle circular motion

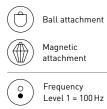
right and left of the spine and in the hindquarters In the first step, set the device to vibration level 2 and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion. The direction of treatment plays a subordinate role – pay more attention to whether the dog is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is

Step 1 — Relaxing tense muscle groups to the

recommended that you work in the direction of the coat growth. Treat each side of the face for 2 to 3 minutes.

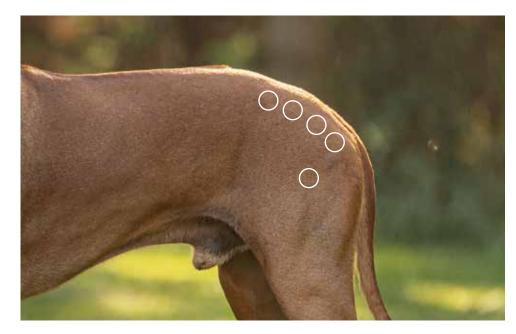
Step 2 — Treatment of the cauda equina region

Depending on the animal's sensitivity, toning treatments can be applied directly in the area of the cauda equina. Use the ball attachment to treat the area in a targeted manner. To treat these areas, connect the ball attachment, and select level 1 and the lowest intensity setting. Treat each area for about 1 to 2 minutes each, either by applying light pressure without moving or in small circular movements. Then treat the next area. Always treat both sides.



gentle circular motion

TIP To optimise treatment, use the magnetic attachment instead of the ball attachment.







Elbow dysplasia (ED)

Like hip dysplasia (HD), elbow dysplasia (ED) is hereditary. Depending on the severity of the condition, symptoms of ED can range from lameness to elbow osteoarthritis. ED is a malformation of the elbow joint, which is made up of the humerus, ulna and radius. In cases of elbow dysplasia, the articular surfaces of these three bones do not fit together properly. Diagnosis is made using X-rays and, in rare cases, computed tomography.

With the NOVAFON, the entire foreleg area can be treated supportively in order to compensate for muscular imbalances and to relieve pain. Treatment with the NOVAFON should last a total of 10 to 15 minutes and can be repeated daily. The intensity setting should be individually adapted, as each animal perceives the vibration very differently. Treat all affected areas.

NOTE

The inheritance of ED is complex and has not yet been fully investigated. Not all dogs whose parents are carriers of ED will develop the condition. Likewise, ED-free animals can pass the disease on and have offspring which suffer from the condition.

POSSIBLE CAUSES

Hereditary disease | Formation of bone growths in the joint | Obesity | Oversupply of nutritional supplements Step 1 — Strengthening of the foreleg muscles In the first step, set the device to vibration level 1 and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion. The direction of treatment plays a subordinate role – pay more attention to whether the dog is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is recommended that you work in the direction of the coat growth. Treat each side of the face for 2 to 3 minutes.



continuous gentle circular motion



TIP To optimise treatment, use the magnetic attachment instead of the ball attachment.



Ball attachment Magnetic attachment

• Frequency Level 2 = 50 Hz

gentle circular motion

spot treatment

Step 2 — Treatment of stress points

Use the ball attachment to work directly on the trigger points. It is best to feel for the trigger points with your fingertips at the marked areas. To treat these areas, connect the ball attachment, select level 2, and adjust the intensity accordingly. Treat the trigger points for about 1 to 2 minutes each, either by applying light pressure without moving or in small circular movements. After this, treat the next sore area.

TIP To optimise treatment, use the pin attachment instead of the disc attachment. 96

Hip dysplasia (HD)

Hip dysplasia (HD) is the most common and well-known disease of the musculoskeletal system in dogs. It develops while the dogs are still growing, meaning that it is a postnatal developmental disorder of the socket and femoral head which leads to degenerative changes. Hip dysplasia occurs in almost all dog breeds. If the hip socket is too flat or the femoral head is too small or too flat, the end of the joint suffers from wear and tear, which leads to loosening of the joint. This prevents the correct development of connective tissue. There is too much play between the head and the socket, and therefore too much freedom of movement. The result is instability in the hip. As a result, the joint capsule and articular cartilage suffer from considerable wear and tear, which then leads to arthrosis. Usually both hips are affected.

With the NOVAFON, the entire foreleg area can be treated supportively in order to compensate for muscular imbalances and to relieve pain. Treatment with the NOVAFON should last a total of 10 to 15 minutes and can be repeated daily. The intensity setting should be individually adapted, as each animal perceives the vibration very differently. Always treat both sides.



TIP To optimise treatment, use the pin attachment instead of the disc attachment.

NOTE

There is no cure for hip dysplasia in dogs. However, depending on the severity of the HD, some treatments can achieve quite remarkable results. Physiotherapy makes a significant contribution to maintaining or restoring joint mobility, building muscles, improving movement sequences and relieving pain.

POSSIBLE CAUSES

Flat hip socket or small/flat femoral head leads to wear and tear on the end of the joint | Loosening of the joint | Spinal blockages and/or spinal disorders | Diseases/functional disorders of the inner organs | Incorrectly used collars and chest harnesses

Disc attachment Pin attachment (REHAB Set) Prequency Level 1 = 100 Hz



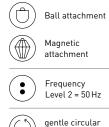
continuous gentle circular motion

Step 1 — Strengthening of the hind leg muscles

In the first step, set the device to vibration level 1 and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion. The direction of treatment plays a subordinate role – pay more attention to whether the dog is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is recommended that you work in the direction of the coat growth. Treat each side of the face for 2 to 3 minutes.

Step 2 — Treatment of stress points

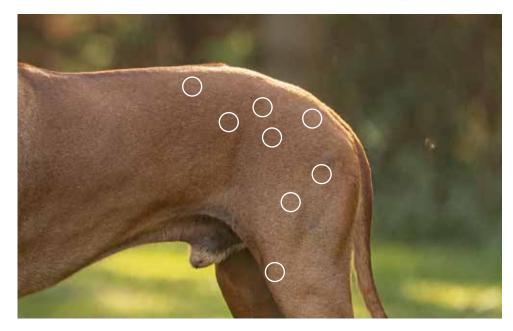
Use the ball attachment to work directly on the trigger points. It is best to feel for the trigger points with your fingertips at the marked areas. To treat these areas, connect the ball attachment, select level 2, and adjust the intensity accordingly. Treat the trigger points for about 1 to 2 minutes each, either by applying light pressure without moving or in small circular movements. After this, treat the next sore area.



attachment

motion \odot spot treatment

TIP To optimise treatment, use the magnetic attachment instead of the ball attachment.





Arthrosis of the joints

Alongside infectious diseases, parasites and allergies, osteoarthritis is one of the most common diseases in dogs and is thus a widespread condition. Osteoarthritis has very specific causes: it is a degenerative disease of the joints and describes the permanent breakdown of the articular cartilage beyond the usual agerelated wear and tear. The breakdown of the cartilage is followed by destruction of the joint surfaces, which causes alterations in the adjacent bones and deformation of the joints. Normal movement becomes almost impossible. Osteoarthritis can manifest itself in all the dog's joints.

With the NOVAFON, the entire foreleg area can be treated supportively in order to compensate for muscular imbalances and to relieve pain. Treatment with the NOVAFON should last a total of 10 to 15 minutes and can be repeated daily. The intensity setting should be individually adapted, as each animal perceives the vibration very differently. Treat all affected areas.



TIP To optimise treatment, use the pin attachment instead of the disc attachment.

Disc attachment

Pin attachment (REHAB Set)

> Frequency Level 2 = 50 Hz

linear stroke

continuous gentle circular motion

Step 1 — Relaxing of the muscles around the affected joint

In the first step, set the device to vibration level 2 and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion. The direction of treatment plays a subordinate role - pay more attention to whether the dog is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is recommended that you work in the direction of the coat growth. Treat each side of the face for 2 to 3 minutes

NOTE

Arthrosis can manifest itself in all the dog's joints, but occurs more frequently in joints that are subject to particular stress due to body weight and movement. In addition to the elbows and knees, this includes the hips, paws and spinal column. Each type of osteoarthritis is given a different name depending on the joint affected. If the elbow joint is affected, this is known as cubital arthrosis, while spondylarthrosis or spondylosis refers to the vertebrae.

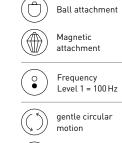
POSSIBLE CAUSES

Poor cartilage quality | Incorrect stress on the joints | Metabolic diseases or disorders | Poor blood circulation | Bad diet | Consequences of already damaged or diseased joints (e.g. hip dysplasia)



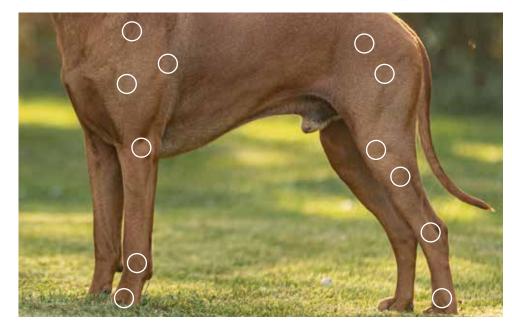
Step 2 — Treatment of the area around the joint Treat the area around the joint using the ball attachment. To treat this area, connect the ball attachment, select level 1 and the lowest intensity setting. Treat each area in small circular move-

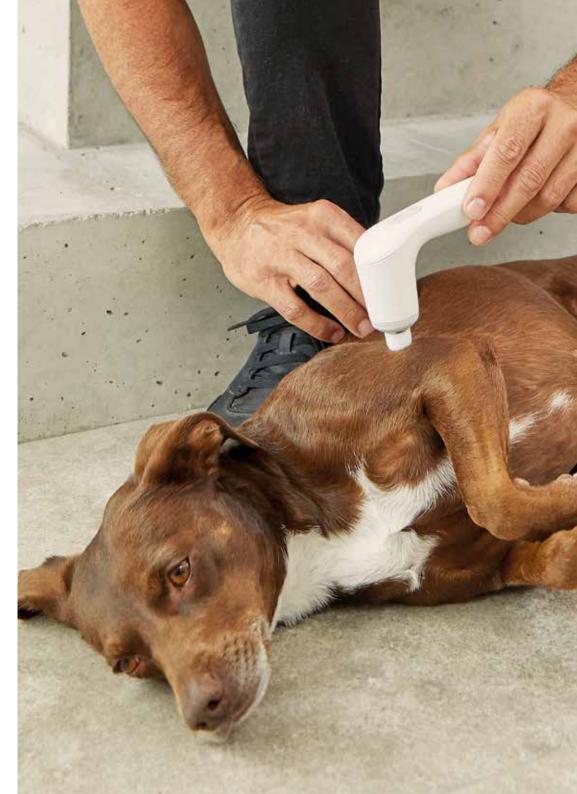
ments for about 1 minute. Then treat the next area.



•) spot treatment

TIP To optimise treatment, use the magnetic attachment instead of the ball attachment.





Case studies

»The NOVAFON can be used to treat old tendon injuries as well as inflammation and irritation of the tendon attachment points.«^{4,7} User L., animal physiotherapist, May 2020, Instagram

»Dogs with weak muscles in the hindquarters in particular show significant tension in the lower lumbar area. Conversely, permanent pain in this area can also lead to disturbed movement patterns and even to injuries. So the NOVAFON has now found a permanent place in our preparation and warm-up before exercise.«^{4,7}

User S., animal healer, April 2020, Instagram

»This 13-year-old dog has been suffering from spondylosis and osteoarthritis for a long time. I've been treating her with the NOVAFON for 2 years, and since then she's been moving much more freely and feeling much better.«^{4,7} User I., animal therapist, April 2020, Instagram

»This 13-year-old grandpa is finding it increasingly difficult to walk. After sound wave therapy, you can see a clear improvement that lasts for almost two weeks. Yes, the NOVAFON has definitely improved his quality of life and brought back his zest for life! «^{4,7} User I., animal therapist, April 2020, Instagram

»I mostly use the NOVAFON to relieve acute, chronic muscle and joint pain. The gentle vibrations from this sound wave device help to reduce pain. But I also use it to treat blockages in the musculoskeletal system, and with great success.«^{1,2,4,7} User N., canine physiotherapist and animal healer, May 2020, Instagram





Cat 106

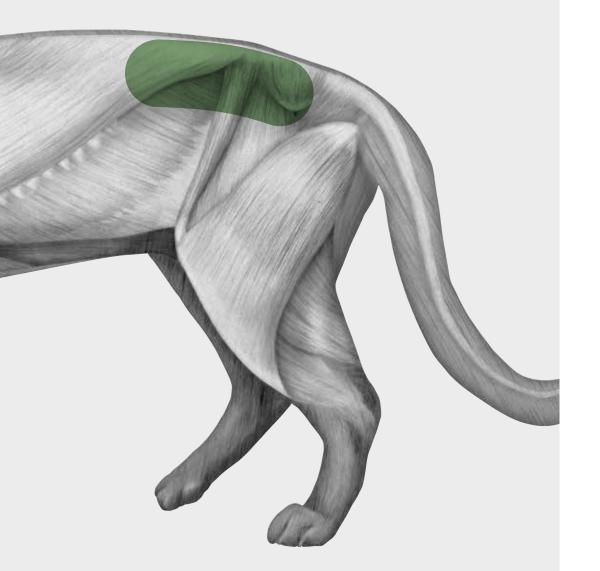
Spinal column and back muscles

Degenerative lumbosacral stenosis (DLSS) 111 Spondylosis/Spondylarthrosis 114

Muscle tension

Myofascial pain syndrome 119

Case studies 122



Degenerative lumbosacral stenosis (DLSS)

Degenerative lumbosacral stenosis can have different causes. If DLSS is triggered by tumours, treatment with the NOVAFON is not suitable. Be aware of the contraindications. DLSS occurs at the transition of the last lumbar vertebra to the sacrum. The transition area between the lumbar vertebra and the sacrum is connected by ligaments that can degenerate and become loose. This instability causes the intervertebral disc to press on individual nerves, which can lead to compression syndrome. The symptoms usually appear slowly and insidiously. If the nerves are very severely compressed, this can cause the animal to drag its hind legs or even to lose control of them completely. If your pet experiences these symptoms, consult a veterinarian immediately.

Regardless of the type of therapy chosen, in cases of DLSS sound wave therapy can provide great supplementary treatment options and support the healing process. Vibration therapy aims to combat pain, build up atrophied muscles, relieve muscle tension and restore movement. Treatment with the NOVAFON should last a total of 10 to 15 minutes and can be repeated daily. The intensity setting should be individually adapted, as each animal perceives the vibration very differently. Always treat both sides.

NOTE

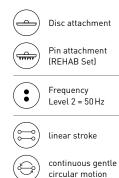
Depending on the course of the disease, cats may be in a lot of pain and therefore tend to be inactive. They rarely run exuberantly, play or jump.

POSSIBLE CAUSES

Degenerative disease of the spine at the transition from the lumbar vertebrae to the sacrum | Strain on the musculoskeletal system | Problems with the joints | Spinal blockages and/or spinal diseases | Psychological stress

Step 1 — Relaxing tense muscle groups to the right and left of the spine and in the hindguarters In the first step, set the device to vibration level 2

and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion. The direction of treatment plays a subordinate role – pay more attention to whether the cat is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is recommended that you work in the direction of the coat growth. Treat each side of the face for 2 to 3 minutes.





TIP To optimise treatment, use the magnetic attachment instead of the ball attachment.









gentle circular motion

 $\overline{\mathbf{O}}$ spot treatment

Step 2 — Treatment of sore areas

Use the ball attachment to work directly on the trigger points. It is best to feel for the trigger points with your fingertips at the marked areas. To treat these areas, connect the ball attachment, select level 1, and adjust the intensity accordingly. Treat the trigger points for about 1 to 2 minutes each, either by applying light pressure without moving or in small circular movements. After this, treat the next sore area.

TIP To optimise treatment, use the pin attachment instead of the disc attachment.

Spondylosis / Spondylarthrosis

Spondylosis is the generic term for a number of degenerative diseases of the spine. Spondylarthrosis, on the other hand, is a more precise definition, and describes signs of wear and tear on the articular cartilage. With age, the cartilage increasingly wears out, which reduces the distance between the vertebrae. As a result, back mobility decreases and cats increasingly suffer from pain. In the course of this degenerative disease, bony thorns can develop along the edges of the vertebrae. If these thorns meet, they form bony connections between the vertebrae. This changes the shape of the spine and causes stiffening. The whole process is accompanied by pain and severe muscle tension.

Local vibration therapy stimulates and activates the treatment area. Aching muscles are thus better supplied with blood and thus better cared for. The muscles relax and pain is alleviated. The aim of vibration therapy is to correct the muscular changes caused by incorrect or excessive strain and to restore movement sequences to normal. Treatment with the NOVAFON should last a total of 10 to 15 minutes and can be repeated daily. The intensity setting should be individually adapted, as each animal perceives the vibration very differently. Always treat both sides.



TIP To optimise treatment, use the pin attachment instead of the disc attachment.







continuous gentle circular motion

Step 1 — Relaxing the muscle groups to the right and left of the spine

In the first step, set the device to vibration level 2 and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion. The direction of treatment plays a subordinate role – pay more attention to whether the cat is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is recommended that you work in the direction of the coat growth. Treat each side of the face for 2 to 3 minutes.

NOTE

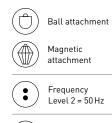
When the thorns on the vertebrae have grown together, the pain usually stops, but the spine stiffens where the thorns are joined and movement is clearly restricted. If there are trapped nerves, this can lead to incontinence, paralysis and lameness. In this case, consult a veterinarian, as surgical intervention cannot be ruled out.

POSSIBLE CAUSES

Herniated discs | Inflammatory diseases of the back | Tumours | Osteoporosis | Bad posture | Strain on the musculoskeletal system | Weak muscles and imbalances

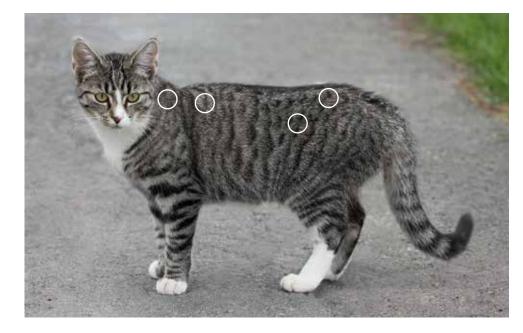
Step 2 — Treatment of stress points

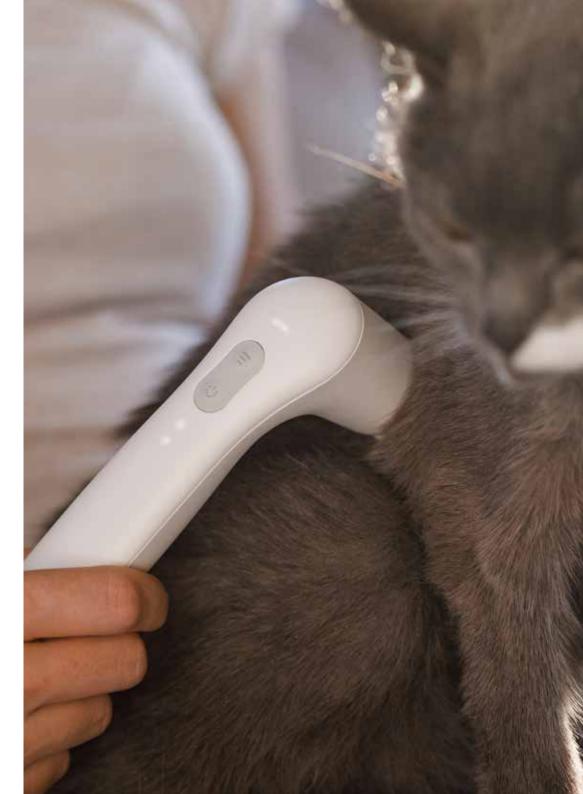
Use the ball attachment to work directly on the trigger points. It is best to feel for the trigger points with your fingertips at the marked areas. To treat these areas, connect the ball attachment, select level 2, and adjust the intensity accordingly. Treat the trigger points for about 1 to 2 minutes each, either by applying light pressure without moving or in small circular movements. After this, treat the next sore area.



gentle circular motion

TIP To optimise treatment, use the magnetic attachment instead of the ball attachment.







Myofascial pain syndrome

Cats can also suffer from back pain. Cats' spines consists of 27 movable vertebral bodies and are divided into 7 cervical vertebrae, 13 thoracic vertebrae and 7 lumbar vertebrae. In addition to protecting the spinal cord, which runs within the spinal canal, they serve to facilitate movement and ensure a stable posture. The vertebrae represent the starting point for strong torso muscles, which are responsible for proprioception, also known as the sense of balance.

Myofascial pain syndrome does not respond to painkillers (analgesics), so while treating pain with drugs is still common, it makes little sense in this case. Instead, the muscles have to be relaxed. Treatment with the NOVAFON should last a total of 10 to 15 minutes and can be repeated daily. The intensity setting should be individually adapted, as each animal perceives the vibration very differently. Always treat both sides.

NOTE

Cats very often experience myofascial pain in the long back muscles (M. longissimus dorsi), the broad back muscle (M. latissimus dorsi), the shoulder muscles (biceps and triceps) and the long muscles of the hind leg. The trigger points can be activated spontaneously or by applying slight pressure.

POSSIBLE CAUSES

Degenerative diseases of the spine | Strain on the musculoskeletal system (often associated with joint blockages) | Problems with the joints (e.g. due to blockages or joint diseases) | Weak muscles and imbalances | Psychological stress

$\label{eq:step1} \begin{array}{l} \mbox{Step 1} - \mbox{Relaxing the muscle groups to the right} \\ \mbox{and left of the spine} \end{array}$

In the first step, set the device to vibration level 2 and use the disc attachment on the marked area. You can work in either a stroking or continuous circular motion. The direction of treatment plays a subordinate role – pay more attention to whether the cat is relaxed and is allowing its muscles to relax. Depending on the condition of the coat, it is recommended that you work in the direction of the coat growth. Treat each side of the face for 2 to 3 minutes.

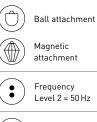


continuous gentle circular motion



TIP To optimise treatment, use the magnetic attachment instead of the ball attachment.





gentle circular motion

 $\overline{\mathbf{O}}$

) spot treatment

Step 2 — Treatment of stress points

Use the ball attachment to work directly on the trigger points. It is best to feel for the trigger points with your fingertips at the marked areas. To treat these areas, connect the ball attachment, select level 2, and adjust the intensity accordingly. Treat the trigger points for about 1 to 2 minutes each, either by applying light pressure without moving or in small circular movements. After this, treat the next sore area.

TIP To optimise treatment, use the pin attachment instead of the disc attachment.

Case studies

»For arthritis, arthrosis, tendonitis and other tendon issues, especially in slightly longer-standing clinical pictures involving gelatinised or indurated synovial fluids, daily use has proven itself.«^{3,4,6} Klaus Gerd Scharf, veterinarian and homeopath

»Today my 'little patient' received sound wave therapy again. After his first treatment last week, he was pain-free and had much more freedom of movement than usual.«^{4,7} User N., animal healer, June 2020, Instagram

»In a cooperative cat, the NOVAFON and its magnetic attachment are great for treating joint problems and muscle tension. Merlin really enjoyed his treatment, as he let me know by purring loudly.«^{4,7} User A., animal physiotherapy and animal osteopathy, June 2019, YouTube



Appendix 124

Footnotes 126 Legal notices 126

- 1 Lundeberg T, Vibratory stimulation for the alleviation of pain. Am J Chin Med. 1984d Summer; 12 (1-4): 60–70. Roy et al. 2003. Reduction of TMD pain by high-frequency vibration: a spatial and temporal analysis. Pain. Murillo et al. 2014. Focal vibration in neurorehabilitation. Eur J Phys Rehabil Med. 50 (2): 231–42. Schindler et al. 2002. Neck muscle vibration induces lasting recovery in spatial neglect. Lundeberg T, Nordemar R, Ottoson D, Pain alleviation by vibratory stimulation. Pain. 1984a Sep; 20 (1): 25–44. Schmitt T, Influence of vibration therapy on unspecific back pain. Dissertation, Faculty of Medicine, University of Regensburg, 2013. Please note that this is a human study. There is no evidence of transferability to animals.
- 2 Melzack R, Wall PD. Pain mechanisms: a new theory. Science. 1965 Nov 19; 150 (3699): 971-9. Smith KC, Comite SL, Balasubramanian S, Carver A, Liu JF. Vibration anaesthesia: a non-invasive method of reducing discomfort prior to dermatologic procedures. Dermatol Online J. 2004 Oct 15; 10 (2): 1. Please note that this is a human study. There is no evidence of transferability to animals.
- 3 Jaw pain is a common symptom of temporomandibular joint dysfunction (TMJ). The pain-relieving effect of local vibration therapy with 100Hz was proven in a clinical study by Roy et al. in 2003: Reduction of TMD pain by high-frequency vibration: a spatial and temporal analysis. Pain. Please note that this is a human study. There is no evidence of transferability to animals.
- 4 Individual case studies: There may not be sufficient clinical data to verify the general adequacy of local vibration therapy for the symptoms described.
- 5 This is a user quotation taken from NOVAFON product evaluations on our website.
- 6 This is a user quotation taken from a case study published on our website.
- 7 This is a user quotation that was published on the user's social networks (Facebook or Instagram).

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