Opinion Lab
Offene innovative Pflege

Non-pharmacological measures for pain reduction

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Version 02

Caritas

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Inhalt

Introduction

Pain management

Effective pain management should always consist of different approaches and include both pharmacological and non-pharmacological therapies which are tailored to the respective nursing home resident's needs. This frequently requires cooperation between different health professions such as general practitioners, physiotherapists, and nursing staff.

Pain assessment and evaluation

Whenever a resident reports or expresses any pain or this is perceived by nursing staff, it is necessary to perform a pain assessment. To select the appropriate assessment tool, the resident's cognitive state must also be taken into consideration.

The use of a pain assessment is not only restricted to the initial assessment of a person's pain but also serves to observe and evaluate their pain status and management measures.

It is suggested that pain assessments should be performed at regular intervals in people with chronic pain.

Adverse effects and/or other anomalies

Medical expertise should be sought if any adverse effects and/or other anomalies or changes in condition occur during or after a pain intervention.

Consulting a physician is absolutely necessary if the following symptoms or anomalies are observed:

- Redness and swelling
- Pain after an accident
- Numbness or signs of paralysis
- Very severe pain
- A limb or joint (e.g., shoulder) can no longer be moved properly
- Perceived instability in a joint / a dislocated joint
- Alteration in the state of health
- Physical discomfort/indisposition

Key information on pain management

What are the regulations regarding pain management measures? Who may perform which measures?

The legal situation may differ between countries with regard to prescribing, initiating and performing pain management interventions. While in Austria, for example, nurses' competencies encompass the independent use of complementary nursing measures and the continued observation and evaluation of a person's health status, this may not be the case in other countries. It is therefore imperative to always be informed about any current regional laws with regard to pain management measures, in particular regarding when a physician has to be consulted and whether/which pain management measures require medical prescription.

What is pain? What is the difference between acute and chronic pain?

Pain is defined as an unpleasant sensory and emotional experience. It may be associated with actual or potential tissue damage. It is important to note that pain is always a personal and individual experience; therefore, every expression of pain is valid and should be taken equally seriously.

Acute pain usually occurs suddenly and has an underlying cause. There are different definitions of how long acute pain may last. If the underlying cause is still present and the process of healing is still ongoing, the respective pain is defined as acute. This process can last from a few minutes to up to 3 or even 6 months.

Chronic pain occurs continually or repeatedly and persists longer than 3 months. Furthermore, chronic pain is subject to multifactorial mechanisms, i.e., it is influenced by biological, psychological and social factors.

What is specific pain and what is non-specific pain?

Specific pain is defined as being caused by a clear identifiable cause, such as an illness. Pain without a recognizable, clear medical cause is known as non-specific pain. Both specific and non-specific pain can be acute or chronic.

Are all kinds of back pain the same?

No! Just as the human back is a complex combination of anatomical structures (e.g., large and small bones, the spinal discs connecting the vertebrae of the spine, the spinal nerves, large and smaller muscles), the types of back pain and their underlying causes may be just as complex and, consequently, often difficult to diagnose. Therefore, in order to determine the right treatment approach, it is necessary to get a precise and clear description: for instance, where the pain is located, whether it is constant or throbbing, sharp or dull, or searing like an electric shock, whether it varies in intensity, or whether it radiates to other areas like the butt, hips or legs, etc.

Why rest/bed rest is not beneficial

Avoiding physical activity may help to provide short-term pain relief, but in the long term it leads to increased pain and, in addition, to pain-related mobility restriction. A lack of physical activity and therefore of muscular stimulation weakens important muscle groups. When under strain, these muscle groups then tend to prematurely respond with pain. As a result, complaints may gradually worsen, leading to functional limitation, inactivity/inertia, and negative moods.

A few exceptional situations, such as acute or traumatic pain, may require short-term rest or bed rest, which is commonly prescribed by a physician and must then be strictly adhered to.

Why measures of unclear evidence may also be applied in certain cases

In principle, the healthcare team should primarily offer so-called recommended or suggested measures to residents in pain. If a resident, however, requests a measure of unclear evidence, it may still be applied. These are often measures which the residents have always resorted to in the past, and they are convinced of their benefit. With regard to pain management interventions, it is important to also take into account and focus on a person's preferences and needs! However, should any occurring side or adverse effects be observed, it is imperative to strongly advise against the respective pain management measure.

How was the toolkit developed?

All nursing care should be evidence-based. This means that available research findings, the nursing staff's clinical experience and expertise, the residents' needs, and the available resources are all relevant aspects which have a decisive impact on nursing care and its daily practice.

This toolkit is based on current available research findings which were systematically reviewed and summarized by researchers of the Institute of Nursing and Health Sciences of the Medical University of Graz, Austria.

Which kind of evidence is the basis for this knowledge/toolkit?

The knowledge was either obtained from rapid reviews conducted specifically for this purpose or was derived from reliable websites with trustworthy information.

Rapid reviews are a type of literature synthesis which produce evidence in a resource-efficient manner, using specific methods to acquire, appraise, and summarize findings from existing research studies within a short period of time.

The used websites have to meet certain quality criteria, such as full authorship information, plausible and verifiable sources and references, regular updates (intervals of no longer than 5 years), full disclosure about the website operators, no product advertising within published content, and any publications/content must have been created independently, i. e., without industry funding.

With regard to some measures, it currently remains unclear whether they are effective in relieving pain. These are therefore mentioned under the heading "Evidence unclear". This is mostly due to a lack of conclusive current studies. Further findings from future studies may change this knowledge gap.

As a general rule: KNOWLEDGE IS ALWAYS CHANGING!

Science is constantly evolving, and further future studies may confirm, challenge or even refute current findings.

Key facts

Effective pain management usually consists of pharmacological and non-pharmacological interventions.

Medical expertise should be sought in case of adverse effects or changes in health status.

Residents‘ wishes/preferences and needs must always be taken into account.

Generally, rest/bed rest is not beneficial and should be used only in exceptional cases as a pain management measure!

Indications and suggested measures

Acute back pain

Elevating extremities (see page 20)

Strengthening exercises (see page 13)

Meditative forms of activity/exercise (tai chi, yoga, Pilates) (see page 17)

Massage (see page 41)

Acute lower back pain

Encouraging movement and physical activity (see page 13)

Acute pain

Progressive muscle relaxation (see page 17)
Autogenic training (see page 17)

Acute shoulder pain

Cold application (see page 28)

Ankle joint fracture

Cold application (see page 28)

Back pain

Encouraging movement and physical activity (see page 13)

Massage (see page 41)

Use of special pillows and mattresses (see page 20)

Cognitive behavioral therapy (see page 26)

Promoting positive thoughts (see page 26)

Baker's cysts

Cold application (see page 28)

Heat application (see page 30)

Carpal tunnel syndrome

Splints (see page 20)

Chronic lower back pain

Encouraging movement and physical activity (see page 13)

Progressive muscle relaxation (see page 17)

Autogenic training (see page 17)

Non-specific back pain

Progressive muscle relaxation (see page 17)

Non-specific chronic lower back pain

Encouraging movement and physical activity (see page 13)

Low-intensity endurance training (see page 13)

Non-specific lower back pain

Self-heating patches (see page 30)

Heat ointment (see page 30)

Massage (see page 41)

Progressive muscle relaxation (see page 17)

Non-specific pain

Encouraging movement and physical activity (see page 13)

Music (see page 37)

Non-specific physical complaints (functional physical complaints)

Progressive muscle relaxation (see page 17)

Autogenic training (see page 17)

Self-hypnosis and fantasy journeys (see page 19)

Distraction (see page 22)

Promoting sleep (see page 23)

Oral mucositis

Gargling with essential oils (see page 38)

Osteoarthritis (especially knee, hip, finger or spinal joint osteoarthritis)

Encouraging movement and physical activity (see page 13)

Low-intensity endurance training (see page 13)

Movement therapy (see page 13)

PAD pain (occlusive peripheral arterial disease)

Walking training (see page 13)

Pain after total knee endoprosthesis (total knee joint replacement)

Cold application (see page 28)

Pain due to chronic disease

Laughter therapy (see page 34)

Pain due to a herniated disc in the lumbar spine

Progressive muscle relaxation (see page 17)

Autogenic training (see page 17)

Empathic attention and communication

List of suggested measures

- If a resident expresses/reports pain, make it clear for them that they are being believed and that their symptoms and complaints are being acknowledged.
- Explaining how pain arises
- Reassuring them with regard to the causes of their pain
- Describing the likely development of their pain
- Asking them to observe, measure, and express their pain using a self-assessment scale
- Explaining the necessity of symptomatic pain treatment
- Explaining the reason for the choice/necessity of the respective pain management intervention or analgesic medication
- Explaining how the pain management intervention will be applied / the medication will be administered
- Making sure that the resident has been able to say everything they wanted to
- Offering them a therapeutic partnership

Indications

This measure can be used in combination with any pain management intervention (it increases the effectiveness of other treatment options). It is more effective in acute pain management than in chronic pain management.

Contraindications/adverse effect

These measures have no adverse effects.

Tips, tricks and further information

- The resident should be informed that, as a result of the intervention, their pain will subside within a short time.
- It is helpful to emphasize that the applied pain management intervention has proven to be successful in residents with similar pain or that the respective intervention is very effective in eliminating this kind of pain.

Source of knowledge (evidence)

The knowledge summarized in this chapter was obtained and derived from a rapid review conducted specifically for this purpose.

Physical exercise

List of suggested measures *(depending on the indication - see Table p.16)*

- Low-intensity endurance training (e.g., brisk walking, Nordic/fitness walking, cycling, dancing, gymnastics, swimming)
- Encouraging movement and physical activity (e.g., sitting in a rocking chair, motivating residents to go for a walk)
- Stretching exercises
- Gardening
- Strengthening exercises
- Meditative forms of activity/exercise
- Arranging for physiotherapy
- Special types of physical exercise (e.g., eccentric training, vibration training)

Indications

- Osteoarthritis (degenerative joint disease), notably osteoarthritis of the knee, hip, finger, or spinal joints
- Non-specific chronic lower back pain
- Non-specific lower back pain
- Acute lower back pain
- Chronic lower back pain
- Chronic pain
- Back pain
- Lower back pain
- Fibromyalgia
- Golfer‘s elbow
- Lower back pain due to a herniated disc
- Neuropathic pain
- Pain due to occlusive peripheral artery disease (PAD)
- Rheumatoid joint inflammation (rheumatoid arthritis)
- Non-specific pain
- Shoulder pain
- Frozen shoulder
- Tennis elbow

Tips, tricks and further information

- Exercise produces pain-relieving substances in the body. Exercise also stimulates blood circulation, metabolism and the supply of nutrients to the bones and cartilage, which can help to alleviate pain.
- **Meditative forms of exercise** include, for example, tai chi, qigong, yoga, or Pilates.
- Low-intensity **endurance training** includes, for instance, brisk walking, hiking, cycling, dancing, gymnastics or swimming.
- **Strengthening exercises** may be performed using light weights, resistance bands or other equipment.
- Movement therapy for **osteoarthritis** should be tailored to the affected joint (possibly with the assistance of an occupational therapist).
- When suffering from **fibromyalgia**, movement exercises should be started slowly and then increased gradually over time. Combining different types of movement exercise provides additional benefit.
- **Golfer's elbow / tennis elbow:** It is important to first rest the affected arm for the necessary period of time (a few days to a few weeks), i.e., to avoid or reduce any exertion. When the pain has subsided, activity/exercise should be started slowly and carefully, taking care to not put too much strain on the arm. In addition, eccentric training, which involves special exercises to stretch and strengthen the arm and wrist muscles, may help recovery. These exercises should be carried out 3 times a day over a period of around 1 to 3 months.
- Bed rest is not suggested for **acute lower back pain**! Avoiding physical activity may temporarily help to relieve pain, but in the long term it will increase the pain and lead to pain-related activity restrictions.
- Exercise is the most effective treatment for **chronic and non-specific lower back pain**; but a regular basis is an important factor (at least twice a week). It is important to take into account a person's individual fitness level as well as their preferences. Strengthening exercises are particularly suggested for the deep abdominal, back and pelvic muscles. Studies have shown that gardening may have a preventive effect on chronic lower back pain in men.
- In the case of **lower back pain due to a herniated disc**, prolonged bed rest can weaken the muscles and bones, thus causing further health problems.
- Standing on one leg on an unstable surface (air cushion, foam surface, balance board, vibration plate, etc.) is a simple balance and coordination exercise which is suggested for **neuropathic pain**.
- Walking training for **PAD pain** should be performed at least 3 times a week for 30-60 minutes over a period of at least 3 months.
- In the case of **rheumatoid arthritis**, physical activity should be tailored to the individual severity of symptoms/complaints and the disease stage. It is important to avoid excessive strain! If severe joint damage has occurred, overly intensive training should be avoided. To strengthen the arm and leg muscles, strengthening exercises can be carried out with light weights or using fitness equipment (2-3 times a week, 30-60 minutes). Modelling clay may be used for functional training and hand-strengthening.
- To alleviate **non-specific pain**, movement exercises should be started gently to

avoid excessive strain.

- A simple exercise to gently mobilize the shoulder joint and to alleviate **shoulder pain** is to hold on to a table or chair with the pain-free arm, bend the upper body slightly forward and let the painful arm hang freely. Then, like a pendulum of a clock, let the arm circle or swing back and forth gently. This exercise can be repeated 2-3 times a day for 1-2 minutes. Consulting a physician is imperative if severe shoulder pain, redness, swelling or mobility restriction occurs.
- When suffering from a **frozen shoulder**, it is important to start any exercises very gently to avoid exacerbating symptoms and pain.

Source of knowledge (evidence)

The knowledge summarized in this chapter was derived from the following sources:

Type of physical exercise / **Type of pain/diagnosis**	Promotion of physical activity/ movement	Low-intensity endurance training[3]	Strengthening exercises	Stretching exercises	Meditative forms of activity/exercise	Physiotherapy sessions	Special types of physical training
Osteoarthritis (especially knee, hip, finger or spinal joint osteoarthritis)	■	■					Movement therapy
Fibromyalgia	■	■	■	■	■		Vibration training
Golfer‘s elbow			■	■			Eccentric training
Acute lower back pain	■						
Non-specific chronic lower back pain	■	■	■		■		
Lower back pain due to a herniated disc	■					■	
Neuropathic pain						■	Sensorimotor training, balance exercises, coordination exercises
PAD pain							Walking training
Rheumatoid arthritis	■	■	■			■	Functional Training
Non-specific pain	■						
Shoulder pain						■	Shoulder mobilization exercise
Frozen shoulder				■		■	
Tennis elbow			■	■			Eccentric Training

Relaxation techniques and mindfulness training

List of suggested measures

- Autogenic training
- Progressive muscle relaxation (=Jacobson's relaxation technique or deep muscle relaxation)

Indications

- Non-specific physical complaints (functional physical complaints)
- Acute pain
- Chronic lower back pain
- Additional indications for progressive muscle relaxation: non-specific back pain, non-specific lower back pain, and pain due to a herniated disc in the lumbar spine.

Evidence unclear

It is unclear whether relaxation techniques are helpful in alleviating pain due to fibromyalgia.

Contraindications/adverse effects

These measures have no known adverse effects.

Tips, tricks and further information

Autogenic training is the visualization of individual body parts, focusing attention on them, and purposefully relaxing them.

Source of knowledge (evidence)

The knowledge summarized in this chapter was derived from the following sources:

Institute for Quality and Efficiency in Health Care, 2024	https://www.gesundheitsinformation.de/was-kann-bei-unklaren-koerperlichen-beschwerden-helfen.html, https://www.gesundheitsinformation.de/entspannungstechniken-bei-rueckenschmerzen.html https://www.gesundheitsinformation.de/bandscheibenvorfall-nicht-operative-behandlungsmoeglichkeiten.html https://www.gesundheitsinformation.de/bewegung-entspannung-und-stressbewaeltigung.html
Gesundheitswissen, 2024	https://stiftung-gesundheitswissen.de/wissen/kreuzschmerzen/behandlung

Self-hypnosis and mindfulness exercises

List of suggested measures

- Guided self-hypnosis
- Fantasy journeys, fairytale journeys, dream journeys, or „guided imagery”

Indications

- Acute pain
- Chronic pain
- Chronic lower back pain
- Non-specific physical complaints (functional physical complaints)
- Pain due to a herniated disc in the lumbar spine

Contraindications/adverse effect

These measures have no known adverse effects.

Evidence unclear

- The evidence regarding the effectiveness of guided imagery and fantasy journeys on fibromyalgia is unclear.
- The evidence regarding the effectiveness of mindfulness exercises (mindfulness-based stress reduction/MBSR) on fibromyalgia is unclear.

Tips, tricks and further information

- Guided self-hypnosis is a form of hypnosis which is practiced independently, i.e., on one's own, or using recorded instructions. For beginners, the use of an audio file or recording may help and guide them along an individually appealing session to achieve the desired deep relaxation.
- During a fantasy journey or guided imagery session, the resident is encouraged to visualize a certain scene, place or event which evokes exclusively positive emotions. The imagery session is guided by a narrator or by means of recorded instructions (e.g., CD). The participant follows the instructions to generate and evoke mental images or films for the inner eye which incorporate as many positive sensory perceptions as possible.
- Mindfulness exercises aim at paying more attention to one's own thoughts, and feelings and to what is currently happening around oneself – without judgement or a wish for change. This may improve self-perception: Events, activities or single moments may be experienced and enjoyed more intensely. Negative

thoughts and feelings are acknowledged as such more easily. Such exercises include, for instance, paying more attention to everyday sensations (e.g., when eating or taking a walk) or not reacting immediately to statements or actions in order to gain more inner distance. Mindfulness techniques can also be learnt independently by means of courses, CDs or audio files. Psychotherapists also apply this method.

Source of knowledge (evidence)

The knowledge summarized in this chapter was derived from the following sources:

Institute for Quality and Efficiency in Health Care, 2024	https://www.gesundheitsinformation.de/bewegung-entspannung-und-stressbewaeltigung.html

Relieving pressure on affected body parts/ positioning

List of suggested measures – depending on the indication

- Walking sticks/canes for knee arthrosis (gonarthrosis) and hip arthrosis (coxarthrosis)
- Splints and bandages
- Grip pens, gripping and opening devices for finger arthrosis
- Decompressing position (lying down briefly in a position that relieves as much pressure as possible) for herniated disc pain
- Elevating extremities (the person lies on their back, with their lower legs on a supporting surface enabling a 90-degree angle of the legs) for acute back pain
- Elevating extremities for hand-foot syndrome
- Use of specific aids and devices (see tips and tricks) for rheumatoid joint inflammation (rheumatoid arthritis)

Contraindications/adverse effects

Carpal tunnel syndrome: After having removed splints in the morning, the skin may occasionally tingle, be swollen or feel numb for a short time. Studies suggest that wearing a splint may provide relief within a few weeks. However, this relief is often only temporary and/or symptoms may return after a while.

No adverse effects are known with regard to positioning and elevation of extremities. However, individual needs and preferences must be taken into account.

Evidence unclear

- It is unclear whether bandages and splints worn around the elbow or the forearm to provide relief for the muscles when suffering from tennis elbow and golfer‘s elbow are helpful in providing pain relief.
- It is unclear whether posture correctors (straps or braces that aim to improve posture) can relieve neck pain. They may provide short-term relief and posture improvement. When wearing them for longer periods, however, there is a risk of weakening the back muscles, which, in turn, may lead to back pain.
- It is unclear whether splints and braces designed to correct a bunion (hallux valgus) can alleviate pain and provide relief.

Tips, tricks and further information

- When suffering from **hand-foot syndrome** it is important to avoid friction and/ or rubbing, heat, and pressure (e.g., from lifting and carrying heavy loads, long walks, tight-fitting footwear) as much as possible.
- Affected persons should avoid lying down for long periods but rather stay as active as possible.
- Walking sticks/canes should have an easy-to-grip handle.
- When suffering from **carpal tunnel syndrome:**
  - The wrists should be moved as usual during the day to avoid stiffening and weakening muscles.
  - A wrist support bandage may be worn instead of a support splint.
  - For mild to moderate complaints, a splint may be used for a few weeks at night in order to keep the wrist in a neutral position. Symptoms and complaints are usually most severe at night because wrist flexion often occurs during sleep involuntarily.
  - There are numerous models of splints and braces. If one model does not fit properly or provide the desired relief, it is suggested to try another one.
- Numerous aids and devices are available specifically for **rheumatoid arthritis** to prevent or alleviate pain:
  - **Walking and standing:** shoe inserts, special footwear (to relieve pressure on the foot joints), walking sticks/canes, walking frames, rollators and non-slip mats.
  - **Eating and drinking:** cutlery with extra-large rubber or foam handles, angled cutlery, specially shaped can and bottle openers, special cups/ glasses, and holders for cups and glasses.
  - **Getting dressed:** various types of dressing aids for socks/ stockings/ trousers, buttoning aids, or even wall-mounted racks to facilitate putting on tops.
  - **Personal hygiene:** Shower stools or bathtub lifts may help to make personal care and hygiene routines less difficult. Combs, brushes and bath sponges with long handles are also useful aids when suffering from impaired mobility.
  - **Gripping and holding:** Grip/handle attachments and extensions placed on everyday objects, such as cutlery, keys, door handles, pens, and water taps, make it easier to grasp, hold or operate them. Special gripping aids such as buttoning and zip aids make getting dressed/undressed easier. Non-slip pads prevent, for example, plates or chopping boards from slipping away.

Source of knowledge (evidence)

The knowledge summarized in this chapter was derived from the following sources:

Institute for Quality and Efficiency in Health Care, 2024	https://www.gesundheitsinformation.de/ruecken-und-kreuzschmerzen.html#Behandlung https://www.gesundheitsinformation.de/bandscheibenvorfall-nicht-operative-behandlungs-moeglichkeiten.html

Distraction

List of measures – depending on the indication

- Crafting with beads, e.g., making jewelry/sun catchers/bells using wires or cord
- Meeting with friends
- Engaging in textile/fiber crafts (knitting, crocheting, etc.)
- Pursuing creative activities (e.g., plasticine, paper crafts like collages or papier-mâché, making/decorating wooden objects, etc.)
- Maintaining hobbies (e.g., dancing, painting, playing a musical instrument)
- Painting and drawing (e.g., painting objects/on canvas/on paper with acrylic paint, painting tiles with alcohol ink, watercolor painting on paper)
- Participating in social activities, engaging in social interactions

Indications

- Neoplasm
- Neurological disorders
- Gastrointestinal diseases
- Non-specific physical complaints (functional physical complaints)

Contraindications/adverse effects

These measures have no adverse effects.

Tips, tricks and further information

- Women accept and appreciate these measures particularly well.
- A significant decrease in pain has been observed before and after such activities at the patient‘s bedside. There was no observed difference with respect to the type of activity (painting, creative crafts, textile crafts).

Source of knowledge (evidence)

The knowledge presented in this chapter was obtained and derived from a rapid review conducted specifically for this purpose.

Promoting sleep

List of suggested measures

- Adhering to fixed bedtimes
- Making sure the residents get enough sleep at night
- Tailoring sleep-promoting measures to the individual residents

Indications

- Non-specific physical complaints (functional physical complaints)
- Restless legs syndrome
- Migraine

Contraindications/adverse effects

These measures have no adverse effects.

Tips, tricks and further information

Good sleeping habits:

- It is suggested to avoid excessive naps during the day because these can delay falling asleep or cause interrupted sleep.
- Light physical activity during the day helps to feel sleepy in the evening, but it should be avoided shortly before bed or after 6 p.m.
- Soaking up the morning sun reinforces the sleep-wake cycle.
- Spending the day doing things which bring joy also helps.
- It is suggested to prefer light and easily digestible meals for dinner because
- heavy food can cause heartburn and acid reflux.
- Avoiding nicotine (cigarettes etc.) and caffeine-containing beverages (coffee, black/green tea) in the late afternoon or in the evening helps night sleep.
- It is also important to avoid alcohol in the late afternoon or in the evening; because although it makes it easier to fall asleep, it is likely to cause interrupted sleep at night.
- Sleep-related adverse effects and other aspects of any medication should be discussed with a physician (medication times, dosage, effect on sleep).

Building a routine:

- The bed should only be used for sleeping. Other activities like reading or watching TV should take place somewhere else (e.g., chair, sofa).
- Falling asleep on the sofa, in the lounge chair/recliner should be avoided.
- Establishing and adhering to consistent evening rituals/times has proven helpful.
- The same applies to morning rituals, i.e., getting up at the same time as much and often as possible.
- A resident should only go to bed when they are truly tired.
- If a resident struggles with falling asleep, they should not remain in bed. If they are still awake after more than 30 minutes, it is suggested that they sit up or get out of bed. Afterwards, they should do something “boring” or relaxing/ calming (i.e., not watch an exciting or gripping TV show) and wait until they feel sleepy again. Then they can try again to go to bed and fall asleep.
- Midday naps should not last longer than 30 minutes and should not be taken
- after 3 p.m., as this might make it more difficult to fall asleep in the evening.

Things to keep in mind or try when in bed and being unable to fall asleep:

- Relaxation exercises, such as mindfulness exercises or abdominal and diaphragmatic breathing (i.e., belly breathing), can help to relax and fall asleep.
- If somebody struggles with falling asleep, they should avoid looking at their watch or clock repeatedly.
- Arising thoughts may be registered and allowed as such – but without fussing over them or getting stuck in the subject.
- Any obtrusive thoughts relating to a negative or worrying topic should better be pushed aside to be dealt with during the next day. Residents may be suggested to keep a notepad to write them down for this purpose.

Words of encouragement:

- Reassure and remind residents that it is absolutely normal to not fall asleep immediately or easily when suffering from pain.
- Help residents not to get frustrated with themselves if they struggle with falling asleep or if they wake up during the night.
- Explain to the residents that even if they are unable to fall asleep, their body will still benefit from the time to rest and recover.

Creating a sleep-friendly environment:

- The bedroom or area around a resident’s bed should be a pleasant place to sleep - photos prompting positive feelings/memories or a pleasant scent may help to achieve this goal.
- Additional pillows or bed support cushions may help them to find a more comfortable sleeping position.
- The room should be clean and tidy.
- Disturbing noises should be avoided or reduced (with the help of earplugs, if necessary).

- It is important to adjust lighting conditions (not too bright/too dark; a night-light may help).
- A bedroom temperature of 16-18 °C (60-65°F) is considered best for sleep (i.e., no open windows overnight when it is cold outside; it is sufficient to air the room twice).
- If couples share a bed, a sufficiently large bed (at least 1.80m x 2m) with separate mattresses and blankets which match their individual needs is ideal to foster restful sleep.
- Electronic devices emit blue light which corresponds to the midday sun. This type of light suppresses melatonin production (sleep hormone). When using such devices at night, it is important to switch on an additional light source in the room and to activate its night mode.

How health care employees may help to improve the residents' quality of sleep

- All sleep-related requirements and preferences should be included in the resident's care plan.
- Night-time care delivery should be timed and structured in a way that does not unnecessarily disturb the residents.
- Switching on main/bright lights during care delivery should be avoided, as this will fully wake up the residents and make it harder for them to fall asleep again. A torch, for example, may provide sufficient safety when going to the toilet without waking up anybody else in the room.
- If a resident wakes up, it may be helpful to offer them a warm drink and some relaxing breathing exercises to calm down again.
- If a resident exhibits challenging/problematic behavior at night, it is suggested to review their pain management therapy and to discuss other possible causes within the multidisciplinary team meeting.

Source of knowledge (evidence)

The knowledge presented in this chapter was derived from expert knowledge (Australian Pain Society 2019).

Institute for Quality and Efficiency in Health Care, 2024	https://www.gesundheitsinformation.de/was-kann-bei-unklaren-koerperlichen-beschwerden-helfen.html
German Agency for Quality in Medicine, 2024*	https://www.patienten-information.de/kurzinformationen/restless-legs https://www.patienten-information.de/kurzinformationen/insomnie#macht-schlaflosigkeit-krank
Tips, tricks, and additional information are provided by the Australian Pain Society 2019: https://www.apsoc.org.au/PDF/Publications/Pain_in_RACF2-Resources/7_APS_Pain-in-RACF-2_Ch3_Sleep_tips.pdf	

Psychological support

Suggested measure

- Cognitive behavioral therapy (CBT)

Indications

- Chronic pain
- Fibromyalgia (if other therapeutic approaches have proven to be insufficient)
- Back and lower back pain (if other therapeutic approaches have proven to be insufficient)

Contraindications/adverse effect

No contraindications or adverse effects are to be expected.

Tips, tricks and further information

- CBT does not make the pain disappear, but it does alleviate it, and people learn to deal with it better. It should be noted that waiting times between referral and the first appointment may be longer for CBT.
- CBT is particularly suggested for chronic pain.
- Psychotherapists also use CBT as a treatment approach.

Additional tips and tricks for promoting positive thoughts

- In principle, even the briefest conversation or interpersonal exchange may still convey compassion and empathy.
- It is best to start by acknowledging/validating the resident‘s situation („I am sorry to hear how much you are suffering right now“).
- Validation techniques can be used to reduce the pressure of residents having to explain or “prove” the extent of their pain.
- It is helpful for healthcare professionals to put themselves in the residents‘ shoes and imagine what they, personally, would appreciate being told in such a situation.
- It is important to work with the residents and their relatives and significant others in order to become aware of and get an insight into their thoughts.
- Within this context, it is important to identify any thoughts about pain which are currently maintaining a negative cycle.
- It is beneficial to try and change these thoughts (see Table below: „Examples of how to promote positive thinking or react to negative statements“).

Examples of how to promote positive thinking or react to negative statements:

Negative thoughts	Possible answers
„I cannot deal with it (anymore).“	„You may perhaps be able to deal with it better if you manage to relax, at least a little bit. Concentrate on your deep breathing to make the pain easier to bear.“
„I cannot go on like this.“	„Maybe take one step at a time; this may help you to get through the day better.“
„It is terrible and it will never get better. I cannot take it anymore.“	„Pain is usually worse on some days and better on others. Let‘s see what tomorrow brings. Maybe you can try and manage to feel better tomorrow. Perhaps you can take a short walk and try to distract yourself a little bit.“
„I cannot bear this pain, it is terrible and overwhelming, there is nothing I can do to ease my pain. I cannot enjoy anything because I am in so much pain.“	„I have trust in you. You can deal with this pain because you have done it before, and I trust that you can do it again. Pain also tells you that your body is healing. If you plan and engage in activities, you can prevent your pain from getting worse. There are many options to help you to deal with pain better.“

Source of knowledge (evidence)

The knowledge summarized in this chapter was derived from the following sources:

Institute for Quality and Efficiency in Health Care, 2024	https://www.gesundheitsinformation.de/multimodale-schmerztherapie-und-kognitive-verhaltenstherapie.html https://www.gesundheitsinformation.de/bewegung-entspannung-und-stressbewaeltigung.html https://www.gesundheitsinformation.de/schmerztherapie-und-verhaltenstherapie.html
Tips, tricks, and additional information on fostering positive thoughts are provided by the Australian Pain Society 2019: https://www.apsoc.org.au/PDF/Publications/Pain_in_RACF2-Resources/6_APS_Pain-in-RACF-2_Ch3_Psych_mgmt_pain.pdf	

Cold application

Suggested measure

- Application of low-temperature agents (e.g., frozen or cold water) around the affected area (e.g., by means of gel pads, cooling pads or cold packs)

Indications

- Acute shoulder pain
- Baker's cysts
- Diseases of the musculoskeletal system
- Rheumatic diseases
- Pain after total knee endoprosthesis (total knee joint replacement)
- Ankle joint fracture
- Traumatic pain
- Injuries
- General inflammation and pain
- General knee pain

Adverse effects

- Irritation of the skin
- Discomfort
- Hypothermia (freezing or shivering)

Evidence unclear

It is unclear whether cold applications can provide pain relief with regard to the following indications:

- Acute pain due to chronic diseases
- Nerve irritation due to a herniated disc
- Diseases of the musculoskeletal system
- Golfer's elbow
- Hypothermia (freezing or shivering)

Cold applications might provide short-term pain relief for lower back and back pain.

Tips, tricks and further information

- A combination with other physiotherapeutic approaches has proven beneficial.
- When suffering from inflammatory diseases of the knee (e.g., rheumatoid joint inflammation/rheumatoid arthritis), the application of cold agents is often perceived as more pleasant, while heat may feel more beneficial for cartilage damage.
- The cold pack must not be too cold.
- A cloth around the pack protects the skin from injury.

Source of knowledge (evidence)

The knowledge summarized in this chapter was derived from the following sources:

Institute for Quality and Efficiency in Health Care, 2024	https://www.gesundheitsinformation.de/passive-behandlungen-massagen-waerme-und-manuelle-therapien.html https://www.gesundheitsinformation.de/bandscheibenvorfall-nicht-operative-behandlungsmoeglichkeiten.html https://www.gesundheitsinformation.de/schulterschmerzen.html https://www.gesundheitsinformation.de/baker-zyste.html#Behandlung https://www.gesundheitsinformation.de/behandlung-einer-baker-zyste.html https://www.gesundheitsinformation.de/sprunggelenkbruch.html#Behandlung
Cochrane, 2024	https://www.cochrane.org/de/CD007911/MUSKEL_kryotherapie-nach-dem-operativen-einsatz-einer-knie-totalendoprothese
Medical University of Graz, 2024	https://pflegewissenschaft.medunigraz.at/frontend/user_upload/OEs/institute/pflegewissenschaft/pdf/Eis_zur_lokalen_Schmerztherapie.pdf

Heat application

Suggested measure

- Application of a heat agent warmer than the skin (e.g., self-heating patches without capsaicin/chili pepper extract, heat ointments)

Indications

- Baker's cysts
- General knee pain
- Non-specific lower back pain
- Lower back pain

Contraindications/adverse effects

Contraindications include:

- Allergies
- Skin diseases
- Wounds and injuries of the skin
- Note: Do not use heat patches during the night to avoid overheating!

Adverse effects include:

- Skin irritation/reddening which will disappear within a few days
- Possible skin irritation/reddening due to heat patches
- Feeling overheated
- Burning and itching upon application of a heat ointment
- In principle, no serious adverse effects are to be expected.

Evidence unclear

- The effect of heat applications on back pain, neck pain, and non-specific
- neck pain is generally unclear, but especially so with regard to heat plasters (self-heating, without capsaicin/chili pepper extract) for neck pain, and warm/ woolen scarves for non-specific neck pain
- It is unclear to which extent heat applications in the form of hot baths, sauna sessions, infrared radiation, or thermal ultrasound therapy can alleviate pain due to a herniated disc.

Tips, tricks and further information

- Heat applications are suggested for longer-lasting complaints.
- Heat applications may provide short-term relief from back pain and lower back pain.
- Combining heat applications with other physiotherapeutic approaches has proven beneficial.
- When suffering from inflammatory diseases of the knee (e.g., rheumatoid joint inflammation/rheumatoid arthritis), the application of cold agents is often perceived as more pleasant, while heat may feel more beneficial for cartilage damage.
- The heat agent must not be too hot!
- Wrapping the heat pack in a cloth before the application protects the skin from injury.
- Heat may improve a person's well-being.
- Wearing self-heating patches for three days may alleviate lower back pain. The improvement may not be great, but it is still noticeable.
- When suffering from lower back pain, movement exercises or analgesics are suggested in addition to heat patches, or the pain relief will be only temporary.

Source of knowledge (evidence)

The knowledge summarized in this chapter was derived from the following sources:

Cochrane Austria. (2024b)	https://medizin-transparent.at/waermepflaster-ruecken/ https://medizin-transparent.at/waermepflaster-nacken/
Institute for Quality and Efficiency in Health Care, 2024	https://www.gesundheitsinformation.de/passive-behandlungen-massagen-waerme-und-manuelle-therapien.html https://www.gesundheitsinformation.de/bandscheibenvorfall-nicht-operative-behandlungs-moeglichkeiten.html https://www.gesundheitsinformation.de/behandlung-einer-baker-zyste.html https://www.gesundheitsinformation.de/was-tun-bei-unspezifischen-nackenschmerzen.html
Gesundheitswissen, 2024	https://stiftung-gesundheitswissen.de/wissen/waermepflaster-bei-nicht-spezifischen-kreuzschmerzen https://stiftung-gesundheitswissen.de/wissen/waermesalbe-bei-nicht-spezifischen-kreuz-schmerzen

Wraps and compresses

Suggested measure

- Cold or warm compresses

Indication

- Restless legs syndrome

Contraindications/adverse effects

Warm ear compresses: If the compresses cause discomfort or even worsen the pain, it is advised to remove them.

Curd/cottage cheese compresses: It is important to consider possible adverse effects, e.g., in individuals with sensitive skin or with allergies to milk components.

Evidence unclear

- The evidence regarding the effectiveness of wraps and compresses is unclear with regard to the following types of application and complaints: warm and humid throat compresses for a sore throat that has persisted for several days, cold throat compresses for severe pain due to acute sore throat, warm ear compresses with chamomile extract for ear pain.
- The same applies to compresses with curd/cottage cheese when suffering from pain and inflammation due to muscle and joint injuries, phlebitis (inflammation of a vein) after insertion of an intravenous catheter, and general pain.

Tips, tricks and further information

Cold neck compress: may provide relief. The inner layer is a cloth soaked in cool water which is wrung out and then wrapped around the neck for 20-40 minutes.

Curd/cottage cheese compress: This traditional household remedy may well have a beneficial soothing and cooling effect. Perhaps the positive effect is due to the ritual of applying the curd/cottage cheese wrap and the associated feeling of being able to do something. However, it is unclear whether the applied curd/cottage cheese has any other benefits. In some countries, curd/cottage cheese wraps are also available as a ready-to-use product (e.g., “Quarkpack”/curd pack in Germany).

Source of knowledge (evidence)

The knowledge summarized in this chapter was derived from the following sources:

Gesundheitswissen, 2024	https://stiftung-gesundheitswissen.de/wissen/ohrenschmerzen/hintergrund https://stiftung-gesundheitswissen.de/wissen/halsschmerzen/hintergrund#halswickel-so-geht‘s https://stiftung-gesundheitswissen.de/wissen/halsschmerzen/hintergrund#halswickel-so-geht‘s
German Agency for Quality in Medicine, 2024*	https://www.patienten-information.de/kurzinformationen/restless-legs
Cochrane Austria. (2024b)	https://medizin-transparent.at/topfenwickel/
Cochrane Austria. (2024a)	https://ebninfo.at/topfenauflage_phlebitis_nach_peripherem_venenzugang/

Laughter therapy

Suggested measure

- Laughing

Indication

- Pain due to chronic disease

Contraindications/adverse effects

No adverse effects or contraindications have been specified for this measure.

Tips, tricks and further information

- Laughter therapy increases pain tolerance.
- Laughter is more contagious, the more, louder, and more boomingly someone is laughing.
- During guided laughter therapy sessions, participants first practice simulated laughter and then real laughter.

Source of knowledge (evidence)

The knowledge summarized in this chapter was derived from the following source:

Gesundheitswissen, 2024	https://stiftung-gesundheitswissen.de/gesundes-leben/psyche-wohlbefinden/ist-lachen-gesund

Massages and rubs

Suggested measure

- Massages or rubs, with or without auxiliary agents (e.g., oils)

Indications

- Non-specific chronic lower back pain
- Pain in patients with malignant diseases (cancer)
- Restless legs syndrome
- Back pain
- Neuropathic pain
- Pain due to malignant diseases (cancer)

Contraindications/adverse effects

Allergic or intolerance reactions may occur, depending on the selected oil. It is therefore imperative to consult with trained aromatherapy staff and to test for allergies/ intolerances before applying a product.

Evidence unclear

- The evidence regarding massages as a pain-relieving measure is unclear with respect to various types of complaints: shoulder pain, acute and chronic lower back pain, non-specific acute back and lower back pain non-specific physical complaints (functional physical complaints), and pain due to a herniated disc.
- The same applies to therapeutic massages for non-specific back pain as well as massages for fibromyalgia. At best, therapeutic massages may provide short-term relief from non-specific neck pain.
- The effectiveness of deep friction massage (at the tendons and muscles, with one or two fingertips transversely to the specific tissue) for tennis and golfer‘s elbow has not been proven either.
- The same applies to Matrix therapy (= matrix rhythm therapy, ZRT® Matrix Therapy, biomechanical muscle stimulation). The evidence with regard to chronic lower back pain, pain due to frozen shoulder, upper back pain, and neck pain remains unclear as well.

Tips, tricks and further information

- Depending on the health care regulations of the respective countries, medical massage therapy requires a physician/therapist referral and must be performed by qualified professionals.
- Massages and rubs may also be performed using essential oils (e.g., peppermint, chamomile, rosemary, ginger). Essential oils should always be used in diluted form (e.g., in a carrier oil).
- After a massage therapy session, some patients suffering from fibromyalgia reported relief, while others experienced significantly increased pain.
- Massage therapy may provide short-term relief from non-specific physical complaints.

Source of knowledge (evidence)

The knowledge summarized with regard to the application of essential oils was obtained and derived from a rapid review conducted specifically for this purpose. The summarized knowledge relating to massages and rubs war derived from the following sources:

Institute for Quality and Efficiency in Health Care, 2024	https://www.gesundheitsinformation.de/wie-wird-ein-tennisarm-behandelt.html https://www.gesundheitsinformation.de/passive-behandlungen-massagen-waerme-und-manuelle-therapien.html https://www.gesundheitsinformation.de/ruecken-und-kreuzschmerzen.html https://www.gesundheitsinformation.de/was-tun-bei-unspezifischen-nackenschmerzen.html#K%C3%B6nnen-manuelle-Therapien-und-Massagen-helfen https://www.gesundheitsinformation.de/bandscheibenvorfall-nicht-operative-behandlungsmoeglichkeiten.html https://www.gesundheitsinformation.de/was-hilft-bei-schulterschmerzen.html https://www.gesundheitsinformation.de/was-kann-bei-unklaren-koerperlichen-beschwerden-helfen.html https://www.gesundheitsinformation.de/fibromyalgie.html
Gesundheitswissen, 2024	https://stiftung-gesundheitswissen.de/presse/mythen-ueber-rueckenschmerzen-was-stimmt-was-nicht https://stiftung-gesundheitswissen.de/wissen/kreuzschmerzen/leben-mit-kreuzschmerzen#was-ist-dran-an-diesen-fuenf-gaengigen-vorstellungen
German Agency for Quality in Medicine, 2024*	https://www.patienten-information.de/kurzinformationen/fibromyalgiesyndrom https://www.patienten-information.de/kurzinformationen/restless-legs https://www.patienten-information.de/kurzinformationen/akuter-kreuzschmerz https://www.patienten-information.de/kurzinformationen/chronischer-kreuzschmerz
Cochrane Austria. (2024b)	https://medizin-transparent.at/matrix-therapie/
Medical University of Graz, 2024;	https://pflegewissenschaft.medunigraz.at/forschung/forschung-trifft-praxis
Cochrane, 2024	https://www.cochrane.org/de/CD012551/PROSTATE_interventionen-zur-behandlung-von-chronischer-prostatitis-und-chronischen-beckenschmerzen-bei

Music

Suggested measures

- Active – making music, or passive – listening to music
- Can be performed by a music therapist, a health care professional or the residents themselves

Indications

- Pain due to malignant diseases (cancer)
- Non-specific pain
- Fibromyalgia
- Chronic pain

Contraindications/adverse effects

No negative effects are to be expected. The acceptance of music as a therapeutic approach is generally high.

Tips, tricks and further information

- In shared rooms, music can be played via headphones to avoid disturbing others.
- It is important to analyze and consider the respective resident's music preferences.
- Not only the choice of music is important but also the place and duration of making/playing it (once/regularly).
- It is also possible to apply this measure within a group setting (e.g., making music together or listening to live music together)

Source of knowledge (evidence)

The knowledge summarized in this chapter was derived from the following sources:

Medical University of Graz, 2024	https://pflegewissenschaft.medunigraz.at/frontend/user_upload/OEs/institute/pflegewissenschaft/pdf/Musiktherapie_zur_komplement%C3%A4ren_Schmerztherapie.pdf
Cochrane, 2024	https://www.cochrane.org/de/CD006911/GYNAECA_konnen-musikinterventionen-menschen-mit-krebserkrankungen-helfen

Aromatherapy

Suggested measures

- Gargling with essential oils
- Application: 2-3 times a day for about 8 days
- Gargling solution: one drop of the chosen essential oil in 15ml of warm water
- Gargling with manuka and kanuka essential oils

Indication

- Oral mucositis

Contraindications/adverse effects

Allergic or intolerance reactions may occur. It is therefore imperative to consult with trained aromatherapy staff and to test for allergies/intolerances before applying a product.

Evidence unclear

- The evidence on essential oil inhalation by means of diffusors or soaked pads, especially lavender oil, is unclear. This particularly applies to patients with malignant diseases (cancer) or to nociceptive pain.
- A study investigated the effectiveness of lymphatic drainage with frankincense oil (essential oil) in almond oil (carrier oil) in patients with breast cancer. The measure was not proven effective for alleviating pain. Generally, confidence in the available evidence has to be rated as very low. Consequently, the evidence with respect to this therapy is currently unclear.

Source of knowledge (evidence)

The knowledge presented in this chapter was obtained and derived from a rapid review conducted specifically for this purpose.

Pharmacological and non-pharmacological hypes

Suggested measures

- Avocado/soybean unsaponifiables (oral) dietary supplements for osteoarthritis
- Boswellia serrata extract (oral) for osteoarthritis
- Tripterygium wilfordii (tablet) for rheumatoid joint inflammation (rheumatoid
- arthritis)
- High-dose (8%) capsaicin patches for pain after shingles, pain caused by diabetes mellitus (neuropathic pain) or by HIV-infection
- Heat patches with capsaicin (chili pepper extract) for lower back pain
- Frankincense extract (tablet or capsule) for hip osteoarthritis (coxarthrosis) or knee osteoarthritis (gonarthrosis)

Contraindications/adverse effects

Adverse effects of frankincense have rarely been researched to date.

The following adverse effects may occur when applying capsaicin heat patches:

- In rare cases, blood pressure may rise temporarily.
- After removing the patch, many patients complain of temporary reddening and a burning sensation on the application site.
- In rare cases, inflammation or haematoma may occur.

Tips, tricks and further information

- Due to possible adverse effects, only medical professionals may apply the capsaicin patch to a painful area! To prevent pain and/or burning, an anaesthetic cream is applied to the application site beforehand. Medical staff should also wear gloves to protect themselves from the capsaicin when applying the patch.
- If residents are already using herbal or plant-based remedies, it should be checked whether any adverse effects have occurred.

Source of knowledge (evidence)

The knowledge summarized in this chapter was derived from the following sources:

Cochrane Austria. (2024b)	https://medizin-transparent.at/dreifluegelfrucht-vielleicht-hilfreich-bei-rheuma/ https://medizin-transparent.at/waermepflaster-ruecken/
Gesundheitswissen, 2024	https://stiftung-gesundheitswissen.de/wissen/kniearthrose/leben-mit-kniearthrose https://www.gesundheitsinformation.de/arthrose.html#Behandlung

Pharmacological and non-pharmacological hypes with unclear evidence

List of measures

- Stinging nettle for hip osteoarthritis (coxarthrosis)
- Comfrey (ointment) for back pain, knee pain, sprained ankles and sore muscles
- Gargling with salt water or herbal infusions (e.g., sage or chamomile tea) for sore throat
- Tropaeolum (nasturtium) and horseradish (tablet) for complaints due to urinary tract infections
- Cat‘s claw for rheumatoid joint inflammation (rheumatoid arthritis) and knee osteoarthritis (gonarthrosis)
- Leoligin from edelweiss (leontopodium alpinum) for abdominal pain
- Devil‘s claw (hapargophytum) for hip osteoarthritis (coxarthrosis) and knee osteoarthritis (gonarthrosis)
- Frankincense extract for hip osteoarthritis (coxarthrosis)

Contraindications/adverse effects

The following adverse effects may occur when using devil‘s claw remedies:

- Diarrhea
- Nausea
- Vomiting
- Abdominal pain
- Headache
- Dizziness
- Allergic reactions

The following adverse effects may occur when using capsaicin heat patches:

- In rare cases, blood pressure may rise temporarily.
- After removing the patch, many patients complain of temporary reddening and a burning sensation on the application site.
- In rare cases, inflammation or haematoma may occur.

The use of comfrey remedies may cause skin rash.

Source of knowledge (evidence)

The knowledge summarized in this chapter was derived from the following sources:

Cochrane Austria. (2024b)	https://medizin-transparent.at/dreifluegelfrucht-vielleicht-hilfreich-bei-rheuma/ https://medizin-transparent.at/edelweiss-wirkung-leoligin/ https://medizin-transparent.at/katzenkralle/ https://medizin-transparent.at/blasenentzuendung-kapuzinerkresse-meerrettich/
Gesundheitswissen, 2024	https://stiftung-gesundheitswissen.de/wissen/kniearthrose/leben-mit-kniearthrose https://www.gesundheitsinformation.de/hueftarthrose-coxarthrose.html#Behandlung https://www.gesundheitsinformation.de/arthrose.html#Behandlung

Pharmacological and non-pharmacological hypes with no proven evidence

List of measures

- FGXpress Power Strips for general pain
- Kinesio taping for chronic lower back pain
- Magnets embedded in jewelry, shoe inserts or in sports wristbands for general pain
- Super Patch (with a pattern on the underside of the patch) for general pain
- Neuro Socks (with a special pattern on the underside/sole designed to stimulate sensitive points on the sole of the foot) for pain in the feet, the back and elsewhere

Which measures and indications were studied?

Kinesiotapes have no proven effect on chronic lower back pain.

A pain-relieving effect of Neuro Socks, Super Patches and FGXpress Power Strips has not been proven and is, in addition, not plausible.

The effectiveness of magnets with regard to alleviating/relieving pain has not been proven.

Source of knowledge (evidence)

The knowledge presented in this chapter was derived from the following sources:

Cochrane Austria. (2024b)	https://medizin-transparent.at/kinesio-tape-ruecken/ https://medizin-transparent.at/neuro-socks/ https://medizin-transparent.at/superpatch/ https://medizin-transparent.at/fgxpress-power-strips-das-naechste-wunder-pflaster/ https://medizin-transparent.at/magnete-gegen-schmerz/