



GLOBAL
OBSERVATORY
OF LONG-TERM
CARE



A practical toolkit with non-pharmacological interventions for pain management in nursing homes

Global Observatory of Long-term care (GOLTC)
Pain in Care homes Interest Group
Webinar 11. November 2025, 11 GMT

PD. Dr. Manuela Hoedl MSc, BSc

Agenda

- The project behind the toolkit
- Why did we develop the toolkit?
- How did we develop the toolkit?
- The toolkit



**Non-pharmacological
measures for pain reduction**

The project behind the toolkit

- OPINION lab = **OP**en **I**novation **N**ursing **l**ab
- 5-year project: 01 June 2022-31 May 2027
- Funded by FWF with 557.148€ (CM 3, Grant-DOI: 10.55776/CM3)
- In cooperation with

**Caritas
&Du**

How does it work practically?

CARITAS

- Organisation of the Catholic Church
- Non-profit organisation
- Divided into 9 regions
- 16 nursing homes in Styria

How does it work practically?

Nursing home St. Peter/Graz



How does it work practically?

Nursing home St. Peter

- 3 wards, with 3 wings in each ward
- ~120 residents
 - Single & double bed rooms
- 1 nursing home director
- 1 nursing director
- 11 registered nurses
- 18 social welfare workers
- 26 nursing assistants
- 8 care aides

How does it work practically?

Scientists work with the nursing home linking pin



- Every wednesday
- 8 hours

How does it work practically?

Wolfgang supports us regarding:

- Literature search
- Writing ethics proposals
- Development of questionnaires/guidelines for interviews...
- Collecting data
- Calculating/evaluating results
- Interpretation of results
- Writing articles
- Communication with health care practitioners.....

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**Non-pharmacological
measures for pain reduction**

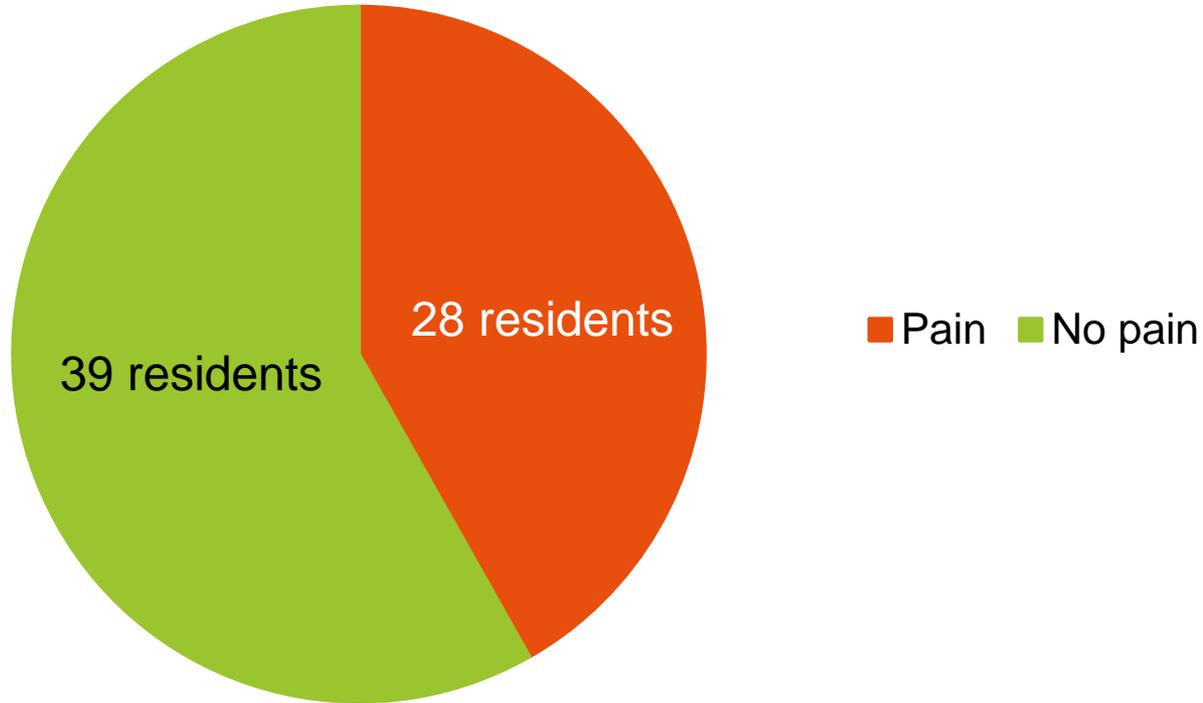
Why did we develop the toolkit?

Study 1 Pain & Quality of Life (01.2023-06.2023)

67 of 121 residents participated

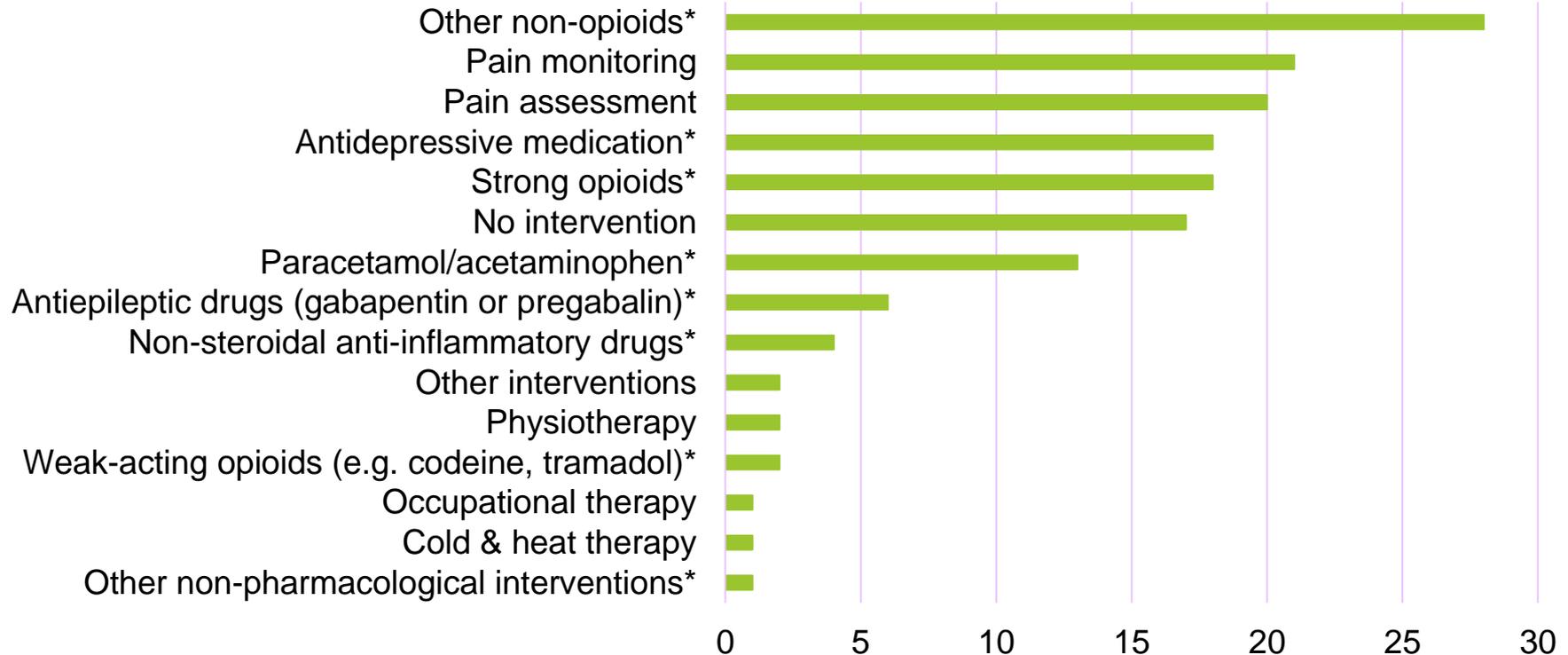


Pain prevalence (N=67)



Pain management

154 pain relief interventions in total

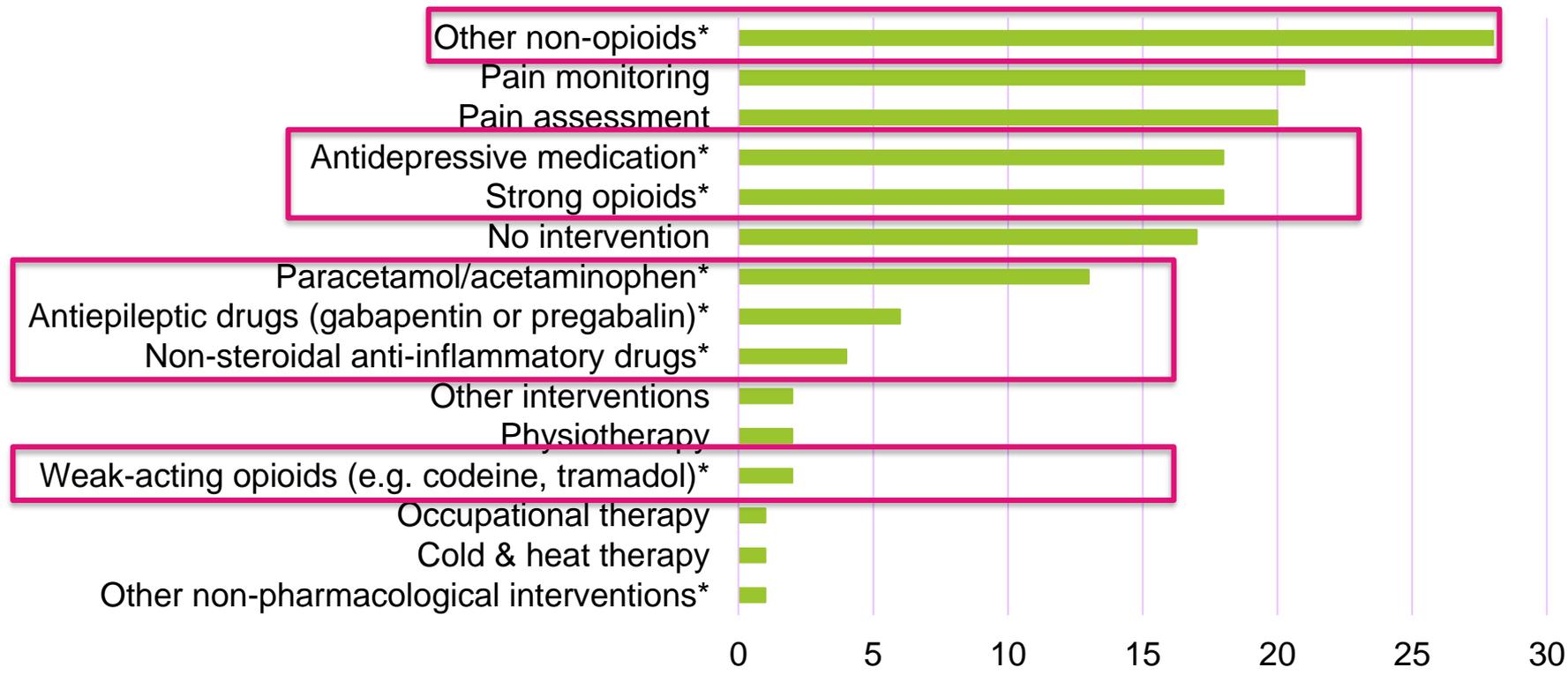


* Pharmacological interventions

■ Residents (N=67)

Pain management

154 pain relief interventions in total



* Pharmacological interventions

■ Residents (N=67)

Pain management

From the perspective of the residents

Nursing staff
mostly used
medication

Residents mostly
used non-
pharmacological
interventions

Residents can,
but are reluctant
to have a say in
treatment
decisions

Residents have the
feeling that they are
not supported by the
staff

Residents don't want
to disturb anyone or
be a burden



Mainly medication was used.
There is a lack of non-pharmacological interventions.

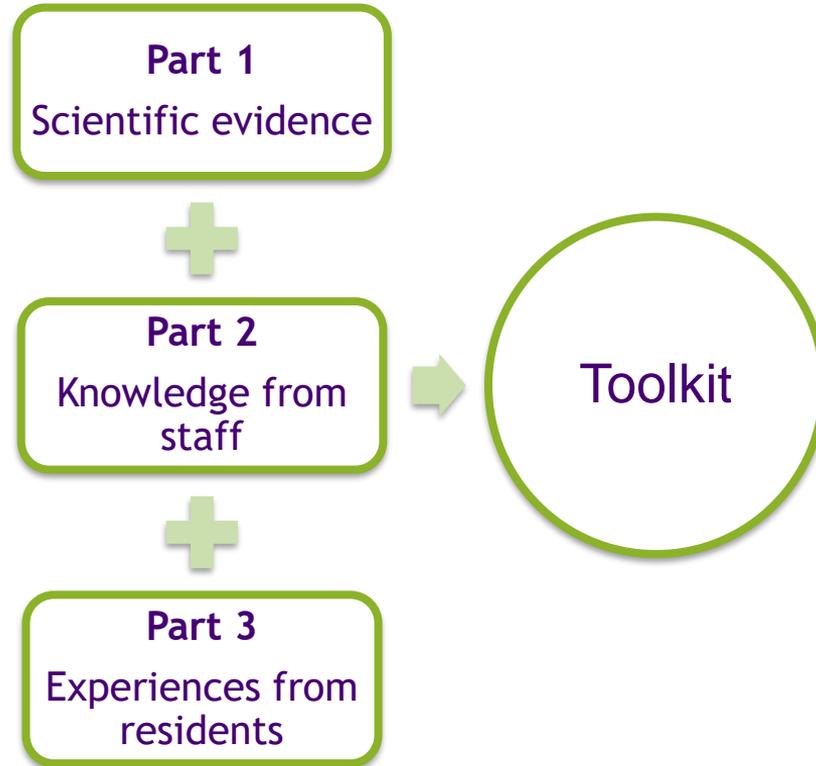




Toolbox with non-pharmacological interventions for pain management

How did we develop the toolkit?

Study 2: Development of the toolkit (09.2023-06.2024)



Agenda

- The project behind the toolkit
- Why did we develop the toolkit?
- How did we develop the toolkit?
- The toolkit



**Non-pharmacological
measures for pain reduction**

The toolkit



Non-pharmacological measures for pain reduction



Toolkit: General part

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Toolkit: Introduction

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.

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 „non-recommended measures“ may also be implemented in certain cases

In principle, the healthcare team should primarily offer so-called recommended measures to residents in pain. If a resident, however, requests a non-recommended measure or a measure with 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 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.

Toolkit

Indications & recommended measures

Indications and recommended measures

Acute back pain

Elevating extremities (see page 25)

Strengthening exercises (see page 17)

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

Massage (see page 45)

Acute lower back pain

Encouraging movement and physical activity (see page 17)

Acute pain

Progressive muscle relaxation (see page 21)

Autogenic training (see page 21)

Acute shoulder pain

Cold application (see page 36)

Ankle joint fracture

Cold application (see page 36)

Back pain

Encouraging movement and physical activity (see page 17)

Massage (see page 45)

Use of special pillows and mattresses (see page 25)

Cognitive behavioral therapy (see page 34)

Promoting positive thoughts (see page 34)

Baker's cysts

Cold application (see page 36)

Heat application (see page 38)

Carpal tunnel syndrome

Splints (see page 25)

Chronic lower back pain

Encouraging movement and physical activity (see page 17)

Progressive muscle relaxation (see page 21)

Autogenic training (see page 21)

Toolkit

Indications & measures with unclear evidence

Indications and measures with unclear evidence

Acute lower back pain

Massage (see page 46)

Acute pain due to chronic diseases

Cold application (see page 37)

Back pain

Cold application (see page 37)

Heat application (see page 40)

Bunion (hallux valgus)

Splints/braces (see page 28)

Shoe inserts (see page 28)

Chronic pelvic pain syndrome

Prostate massage (see page 46)

Chronic prostatitis

Prostate massage (see page 46)

Diseases of the musculoskeletal system

Cold application (see page 37)

Ear pain

Warm ear compress with chamomile extract (see page 43)

Fibromyalgia

Biofeedback (see page 22)

Progressive muscle relaxation (see page 22)

Autogenic training (see page 22)

Mindfulness training (see page 53)

General pain

Curd/cottage cheese wrap (see page 43)

Toolkit

Indications & non-recommended measures

Indications and non-recommended measures

Breast cancer

Lymphatic drainage with essential oils (see page 52)

Chronic lower back pain

Matrix therapy (see page 47)

Frozen shoulder

Matrix therapy (see page 47)

Neck pain

Matrix therapy (see page 47)

Upper back pain

Matrix therapy (see page 47)

Recommended

Empathic attention & communication

Empathic attention and communication

Recommended

List of 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 and tricks

- 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 systematic reviews or evidence-based guidelines.

Recommended

List of measures – depending on the Indication (see Table p.18)

- 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

Recommended Physical exercise

Tips and tricks

- 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:** Exercise should be started slowly and carefully, taking care to not put too much strain on the arm. Eccentric training involves special exercises to stretch and strengthen the arm and wrist muscles. These should be carried out 3 times a day over a period of around 1 to 3 months.

Type of physical exercise	Promotion of physical activity/movement	Low-intensity endurance training ¹	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

Indications & measures with unclear evidence

Relaxing therapies

Unclear evidence

List of measures

- Biofeedback
- Progressive muscle relaxation
- Autogenic training

Indications

- Fibromyalgia

Contraindications/adverse effects

These measures have no adverse effects.

Source of knowledge (evidence)

The knowledge presented in this chapter is based on uncontrolled or less carefully conducted individual studies.

Unclear evidence

List of measures – depending on the indication

- Special mattresses for rheumatic pain
- 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
- Posture correctors (straps or braces that improve posture) for neck pain

Contraindications/adverse effects

Posture correctors only provide short-term relief and improvement. It is unclear whether wearing them for longer periods may entail harmful effects. If wearing a posture corrector for extended periods indeed supports the posterior back muscles and thus improves posture, it may, however, also cause muscle dependency, i.e., weaken the muscles responsible for maintaining a proper/straight posture. This, in turn, may cause lower back pain due to the weakened muscles.

There are no other known adverse effects.

Tips and tricks

When suffering from tennis elbow/golfer's elbow, it is advisable to rest the arm, avoid strain, and avoid/reduce triggering activities during the first few days/weeks after the symptoms occur.

Once the pain has subsided, usual activities may gradually be resumed.

Source of knowledge (evidence)

The knowledge presented in this chapter is based on uncontrolled or less carefully conducted individual studies.

Not recommended

Lymphatic drainage with essential oils

Aromatherapy: lymphatic drainage with essential oils

Not recommended

Type of measure

Lymphatic drainage with frankincense oil (essential oil) in almond oil (carrier oil)

Which measures and indications were studied?

A study investigated the effectiveness of lymphatic drainage with an essential oil in patients with breast cancer. The measure has not proven to be effective in alleviating pain.

How much can we trust knowledge?

Due to possible biases in the study, confidence in the evidence must be rated as very low. This knowledge is likely to change due to further, well-conducted studies.

OPINON Lab

- **Relevance:**
 - Regular exchange
 - Work together
 - Decide together
 - Respond fast
- **Applicability**
 - Get familiar/build trust
 - Know the important things for practice
 - Work on the important things for practice

...in order to bridge the gap between academia and practice!





Thank you!