

# **Evolent Clinical Guideline 1507 for Passive Treatment**

**Guideline Number:** 

Evolent\_CG\_1507

"Evolent" refers to Evolent Health LLC and Evolent Specialty Services, Inc. © 2015 - 2025 Evolent. All rights Reserved.

Original Date:	Last Revised Date:	Implementation Date:
November 2015	November 2024	July 2025

# TABLE OF CONTENTS

STATEMENT	2
GENERAL INFORMATION	2
Purpose	2
SCOPE	2
	_
INDICATIONS	
DOCUMENTATION REQUIREMENTS	
APPROPRIATE USE	
Clinically Appropriate Use of Passive Treatment	
Clinically Inappropriate Use of Passive Treatment	
Exclusions	3
PROCEDURES AND MODALITIES	
Thermotherapy/Cryotherapy	3
Light Therapy (aka Phototherapy)	
Electrical Stimulation Therapy	4
Mechanical Therapy	4
Therapeutic Massage and Manual Therapy	4
CODING AND STANDARDS	5
Applicable Lines of Business	
APPLICABLE LINES OF DUSINESS	5
BACKGROUND	5
DEFINITIONS	5
POLICY HISTORY	~
	Ø
LEGAL AND COMPLIANCE	6
GUIDELINE APPROVAL	6
Committee	6
DISCLAIMER	6
REFERENCES	7



# STATEMENT

# **General Information**

It is an expectation that all patients receive care/services from a licensed clinician.- All appropriate supporting documentation, including recent pertinent office visit notes, laboratory data, and results of any special testing must be provided.-<u>If If</u> applicable: All prior relevant imaging results and the reason that alternative imaging cannot be performed must be included in the documentation submitted.

### Purpose

This organization does not recognize the use of multiple passive treatments for the care of musculoskeletal pain as within the scope of network practitioners. Most passive treatments have similar physiological effects related to pain control and reduction of inflammation. The use of treatments with duplicative physiological effects is unnecessary and inappropriate.

All recommendations in this guideline reflect practices that are evidence-based and/or supported by broadly accepted clinical specialty standards.

### Scope

<u>This guideline applies to all p</u>Physical medicine participating network practitioners, including rendering chiropractors, physical therapists, occupational therapists, speech therapists, and therapist assistants as applicable. This <u>guideline policy</u> also applies to out of network practitioners as dictated by the health plan.

# INDICATIONS

# **Documentation Requirements**

The treatment plan or plan of care must include the clinical rationale for each service, a description of the service, the area of the body <u>for which</u> the service will be provided, goals for each service, and a time component, if indicated.

# Appropriate Use

### **Clinically Appropriate Use of Passive Treatment**

- The initial period of an episode of treatment or exacerbation of a sub-acute or chronic condition for pain control, reduction of inflammation, or reduction of muscle spasm
  - <u>Most studies show the duration of treatment effectiveness was typically</u> reported as short (2 weeks to 2 months).
- When there are no contraindications to the intervention
- Self-administration is implausible or places the patient at risk of harm.
- Used primarily during the initial period of an episode of treatment.
- Used to support an active care approach (i.e., therapeutic exercise)
  - <u>Most international guidelines recommend these interventions should only</u> <u>be reservedly used based upon individual circumstances and not as a</u>

Page 2 of 8



#### principal component of a treatment regime.

 Used for a particular condition for which there is an evidence-basis of significant benefit.

#### **Clinically Inappropriate Use of Passive Treatment**

- When patient safety is jeopardized by the application of the modality
- When the treatment can safely and effectively be administered by the patient or another individual
- Used during a course of treatment, which continues beyond the initial period.
  - <u>As a condition progresses passive care should be replaced by active</u> <u>treatment modalities, such as therapeutic exercise. Insufficient evidence</u> <u>exists to support the continued use of passive treatment as a means for</u> <u>improved clinical outcomes.</u>
- Used as the primary or sole therapy.
- GreaterMore than onetwo -passive treatments is are used involving the same body region(s)
- Used largely for the comfort and convenience of the patient.
- Used as part of the routine office protocol.

#### Exclusions

- The use of chiropractic manipulation (CPT codes: 98940 98943) is not considered a duplication of service or physiological effect when used in conjunction with passive treatment, except for the following:
  - The National Correct Coding Initiative (NCCI) edits require that the manual therapy techniques be performed in a separate anatomic site than the chiropractic adjustments in order to be reimbursed separately.

### **Procedures and Modalities**

#### Thermotherapy/Cryotherapy

The superficial or deep application of heat or cold.

- Superficial
  - o Hot/cold packs (97010)
  - o Paraffin bath (97018)
  - Whirlpool (97022)
- Deep
  - o Diathermy (97024)
  - o Microwave (97020)
  - Ultrasound (US) (97035)



**NOTE:** Thermal therapy has been found to be most successful in the short-term relief of musculoskeletal pain but is also often used in conjunction with other therapies to improve outcomes  $\left[\frac{1}{2}, \frac{1}{2}, \frac{3}{2}\right]$ .

**NOTE:** US<u>Ultrasound</u> therapy is used as both thermal therapy and mechanical therapy [<sup>(3)</sup> and may provide short-term pain relief for knee osteoarthritis. (4,5,-6].)

### Light Therapy (aka Phototherapy)

Light concentrated in a narrow beam to excite cells in local tissues.

- Ultraviolet (97028)
- Infrared (97026)
- Laser therapy
  - o Low level
  - o High level

**NOTE:** Ultraviolet therapy is primarily used to treat skin disorders and promote wound healing.

**NOTE:** Both low (including infrared) and high level laser therapy have been shown effective in reducing pain and as adjuncts to other physical therapy modalities [7, 8, 9, 10, 11]. (4,6,7)

#### **Electrical Stimulation Therapy**

- Administration of an electrical current to a specific, localized body site.
- Volt
  - o High
  - o Low
- Interferential current (IFC)
- Transcutaneous electrical nerve stimulation (TENS) (97014 and 97032)
- Neuromuscular electrical stimulation (NMES)

**NOTE:** IFC and TENS have consistently been found to reduce pain during and shortly after application, helping facilitate other therapies and/or improving outcomes [12, 13, 14, 15]. <sup>(8,9)</sup>

#### Mechanical Therapy

Mechanically assisted and often sustained pull of the spine or limb

• Traction

**NOTE:** Lumbar traction has been shown to be effective in relieving low back pain and lumbar radiculopathy [16, 17, 18]. (10,11)

**NOTE:** Cervical traction may offer some short-term pain relief for neck pain and cervical radiculopathy [19, 20]. (12,13)

#### Therapeutic Massage and Manual Therapy

Includes but not limited to (97124 and 97140):

• Active Release Technique

Page 4 of 8 Evolent Clinical Guideline 1507 for Passive Treatment



- Trigger point therapy
- Myofascial release
- Mobilization/manipulation
- Manual lymphatic drainage
- Manual traction

**NOTE:** A range of manual therapies have been found to be effective in treating tension-type headaches [21, 22]. (14,15)

**NOTE:** Manual therapies can decrease pain, increase range of motion, and improve functionality in a range of musculoskeletal conditions, including osteoarthritis [23, 24, 25]. (4,16,17)

# **CODING AND STANDARDS**

### **Applicable Lines of Business**

CHIP (Children's Health Insurance Program)
Commercial
Exchange/Marketplace
Medicaid
Medicare Advantage

# BACKGROUND

### Definitions

<u>Modality</u>: any group of agents that may include thermal, acoustic, radiant, mechanical, or electrical energy to produce physiologic changes in tissues for therapeutic purposes. Modalities affect tissue at the cellular level.

<u>Multiple Modalities</u>: the use of and/or billing of two or more physical medicine modalities each visit or during the same session to the same region.

<u>Passive Treatment</u>: treatment that is applied by the provider or in a clinical setting and does not involve active participation by the patient.

<u>Procedure</u>: a service provided to increase the functional abilities in self-care, mobility, or safety.<sup>‡</sup>The prependerance of evidence appears to support either a lack of efficacy or insufficient data to make a judgment on benefit for the modalities evaluated. When a positive outcome was described, the reported treatment effects were modest. Similarly, the duration of treatment effectiveness was typically reported as short (2 weeks to 2 months). <u>Similarly</u>, Most international guidelines recommend these interventions should only be reservedly used based upon individual circumstances and not as a principal component of a treatment



regime. As a condition progresses passive care should be replaced by active treatment modalities, such as therapeutic exercise. Insufficient evidence exists to support the continued use of passive treatment as a means for improved clinical outcomes.

# **POLICY HISTORY**

Date	Summary
November <u>2024</u>	<u>This guideline replaces Evolent Clinical Guideline 604 for</u> <u>Passive Treatment</u>
	<u>Updated references</u>
	Added knee osteoarthritis to ultrasound section
December 2023	<u>Clinical guidance was reorganized to emphasize</u> indications rather than contraindications

# LEGAL AND COMPLIANCE

### **Guideline Approval**

### Committee

Reviewed / Approved by Evolent Specialty Clinical Guideline Review Committee

### Disclaimer

Evolent Clinical Guidelines do not constitute medical advice. Treating health care professionals are solely responsible for diagnosis, treatment, and medical advice. Evolent uses Clinical Guidelines in accordance with its contractual obligations to provide utilization management. Coverage for services varies for individual members according to the terms of their health care coverage or government program. Individual members' health care coverage may not utilize some Evolent Clinical Guidelines. A list of procedure codes, services or drugs may not be all inclusive and does not imply that a service or drug is a covered or non-covered service or drug. Evolent reserves the right to review and update this Clinical Guideline in its sole discretion. Notice of any changes shall be provided as required by applicable provider agreements and laws or regulations. Members should contact their Plan customer service representative for specific coverage information.



# **REFERENCES**

<u>1. Riaz H M, Ashraf Cheema S. Paraffin wax bath therapy versus therapeutic ultrasound in</u> management of post burn contractures of small joints of hands. International journal of burns and trauma. 2021; 11: 245-250.

2. Karaarslan F, Yılmaz H, Akkurt H E, Kaya F M, Şafak Yılmaz E. Comparison of the efficacy of <u>mud-pack and hot-pack treatments in chronic non-specific neck pain: A single-blind,</u> randomized-controlled study. Turkish journal of physical medicine and rehabilitation. 2022; 68: 381-390.

<u>3. Watson T. Ultrasound in contemporary physiotherapy practice. Ultrasonics. 2008; 48: 321 - 329. https://doi.org/10.1016/j.ultras.2008.02.004.</u>

<u>4. Flynn D. Chronic Musculoskeletal Pain: Nonpharmacologic, Noninvasive Treatments.</u> <u>American family physician. 2020; 102: 465-477.</u>

5. Luo Y, Rahmati M, Kazemi A, Liu W, Lee S et al. Effects of therapeutic ultrasound in patients with knee osteoarthritis: A systematic review and meta-analysis. Heliyon. 2024; 10: 10.1016/j.heliyon.2024.e30874.

<u>6. Arroyo-Fernández R, Aceituno-Gómez J, Serrano-Muñoz D, Avendaño-Coy J. High-Intensity</u> Laser Therapy for Musculoskeletal Disorders: A Systematic Review and Meta-Analysis of Randomized Clinical Trials. 2023; 12: 10.3390/jcm12041479.

7. DE Oliveira M F, Johnson D S, Demchak T, Tomazoni S S, Leal-Junior E C. Low-intensity LASER and LED (photobiomodulation therapy) for pain control of the most common musculoskeletal disorders. European journal of physical and rehabilitation medicine. 2022; 58: 282-289.

8. Rampazo É, Liebano R. Analgesic Effects of Interferential Current Therapy: A Narrative Review. 2022; 58: 10.3390/medicina58010141.

<u>9. Johnson M, Paley C, Jones G, Mulvey M, Wittkopf P. Efficacy and safety of transcutaneous electrical nerve stimulation (TENS) for acute and chronic pain in adults: a systematic review and meta-analysis of 381 studies (the meta-TENS study). BMJ Open. 2022; 12: true. 10.1136/bmjopen-2021-051073.</u>

10. Vanti C, Saccardo K, Panizzolo A, Turone L, Guccione A A. The effects of the addition of mechanical traction to physical therapy on low back pain? A systematic review with metaanalysis. Acta orthopaedica et traumatologica turcica. 2023; 57: 3-16.

<u>11. Wang W, Long F, Wu X, Li S, Lin J. Clinical Efficacy of Mechanical Traction as Physical</u> <u>Therapy for Lumbar Disc Herniation: A Meta-Analysis. Computa and Math Meth in Med. 2022;</u> 2022: true. https://doi.org/10.1155/2022/5670303.

<u>12. Romeo A, Vanti C, Boldrini V, Ruggeri M, Guccione A et al. Cervical Radiculopathy:</u> Effectiveness of Adding Traction to Physical Therapy-A Systematic Review and Meta-Analysis of Randomized Controlled Trials. Phys Ther. Apr 1 2018; 98: 231-242. 10.1093/physth/pzy001.

13. Yang J, Tam K, Huang T, Huang S, Liou T. Intermittent Cervical Traction for Treating Neck Pain: A Meta-analysis of Randomized Controlled Trials. Spine. 2017; 42: https://journals.lww.com/spinejournal/fulltext/2017/07010/intermittent\_cervical\_traction\_for\_tre ating\_neck.4.aspx.

14. Cumplido-Trasmonte C, Fernández-González P, Alguacil-Diego I, Molina-Rueda F. Manual therapy in adults with tension-type headache: A systematic review. Neurología (English Edition). 2021; 36: 537 - 547. https://doi.org/10.1016/j.nrleng.2017.12.005.

15. Repiso-Guardeño A, Moreno-Morales N, Armenta-Pendón M, Rodríguez-Martínez M, Pino-Lozano R. Physical Therapy in Tension-Type Headache: A Systematic Review of Randomized Controlled Trials. 2023; 20: 10.3390/ijerph20054466.



<u>16. Jiménez-del-Barrio S, Cadellans-Arróniz A, Ceballos-Laita L, Estébanez-de-Miguel E, López-de-Celis C et al. The effectiveness of manual therapy on pain, physical function, and nerve conduction studies in carpal tunnel syndrome patients: a systematic review and metaanalysis. International Orthopaedics. 2022; 46: 301 - 312. 10.1007/s00264-021-05272-2.</u>

<u>17. Skelly A C, Chou R, Dettori J R, Turner J A, Friedly J L et al. Noninvasive</u> Nonpharmacological Treatment for Chronic Pain: A Systematic Review. AHRQ Comparative Effectiveness Reviews, Rockville (MD). 2020.



# Evolent Clinical Guideline 1507 for Passive Treatment

**Guideline Number:** 

Evolent\_CG\_1507

"Evolent" refers to Evolent Health LLC and Evolent Specialty Services, Inc. © 2015 - 2025 Evolent. All rights Reserved.

Original Date:	Last Revised Date:	Implementation Date:
November 2015	November 2024	July 2025

# **TABLE OF CONTENTS**

STATEMENT	2
GENERAL INFORMATION	2
Purpose	2
SCOPE	2
	~
DOCUMENTATION REQUIREMENTS	
APPROPRIATE USE	
Clinically Appropriate Use of Passive Treatment	
Clinically Inappropriate Use of Passive Treatment	
Exclusions	3
PROCEDURES AND MODALITIES	
Thermotherapy/Cryotherapy	
Light Therapy (aka Phototherapy)	4
Electrical Stimulation Therapy	4
Mechanical Therapy	4
Therapeutic Massage and Manual Therapy	4
CODING AND STANDARDS	F
Applicable Lines of Business	
BACKGROUND	5
DEFINITIONS	5
DOLICY LISTORY	~
POLICY HISTORY	O
LEGAL AND COMPLIANCE	6
GUIDELINE APPROVAL	6
Committee	6
DISCLAIMER	6
REFERENCES	7



# STATEMENT

# **General Information**

It is an expectation that all patients receive care/services from a licensed clinician. All appropriate supporting documentation, including recent pertinent office visit notes, laboratory data, and results of any special testing must be provided. If applicable: All prior relevant imaging results and the reason that alternative imaging cannot be performed must be included in the documentation submitted.

### Purpose

This organization does not recognize the use of multiple passive treatments for the care of musculoskeletal pain as within the scope of network practitioners. Most passive treatments have similar physiological effects related to pain control and reduction of inflammation. The use of treatments with duplicative physiological effects is unnecessary and inappropriate.

All recommendations in this guideline reflect practices that are evidence-based and/or supported by broadly accepted clinical specialty standards.

### Scope

This guideline applies to all physical medicine participating network practitioners, including rendering chiropractors, physical therapists, occupational therapists, speech therapists, and therapist assistants as applicable. This guideline also applies to out of network practitioners as dictated by the health plan.

# INDICATIONS

### **Documentation Requirements**

The treatment plan or plan of care must include the clinical rationale for each service, a description of the service, the area of the body for which the service will be provided, goals for each service, and a time component, if indicated.

# Appropriate Use

### **Clinically Appropriate Use of Passive Treatment**

- The initial period of an episode of treatment or exacerbation of a sub-acute or chronic condition for pain control, reduction of inflammation, or reduction of muscle spasm
  - Most studies show the duration of treatment effectiveness was typically reported as short (2 weeks to 2 months).
- When there are no contraindications to the intervention
- Self-administration is implausible or places the patient at risk of harm.
- Used primarily during the initial period of an episode of treatment.
- Used to support an active care approach (i.e., therapeutic exercise)
  - Most international guidelines recommend these interventions should only be reservedly used based upon individual circumstances and not as a principal

Page 2 of 8



component of a treatment regime.

• Used for a particular condition for which there is an evidence-basis of significant benefit.

### **Clinically Inappropriate Use of Passive Treatment**

- When patient safety is jeopardized by the application of the modality
- When the treatment can safely and effectively be administered by the patient or another individual
- Used during a course of treatment, which continues beyond the initial period.
  - As a condition progresses passive care should be replaced by active treatment modalities, such as therapeutic exercise. Insufficient evidence exists to support the continued use of passive treatment as a means for improved clinical outcomes.
- Used as the primary or sole therapy.
- More than two passive treatments are used involving the same body region(s)
- Used largely for the comfort and convenience of the patient.
- Used as part of the routine office protocol.

#### Exclusions

- The use of chiropractic manipulation (CPT codes: 98940 98943) is not considered a duplication of service or physiological effect when used in conjunction with passive treatment, except for the following:
  - The National Correct Coding Initiative (NCCI) edits require that the manual therapy techniques be performed in a separate anatomic site than the chiropractic adjustments in order to be reimbursed separately.

### **Procedures and Modalities**

#### Thermotherapy/Cryotherapy

The superficial or deep application of heat or cold.

- Superficial
  - Hot/cold packs
  - Paraffin bath
  - o Whirlpool
- Deep
  - o Diathermy
  - o Microwave
  - o Ultrasound (US)

**NOTE:** Thermal therapy has been found to be most successful in the short-term relief of musculoskeletal pain but is also often used in conjunction with other therapies to improve outcomes. <sup>(1,2)</sup>

Page 3 of 8

Evolent Clinical Guideline 1507 for Passive Treatment



**NOTE:** Ultrasound therapy is used as both thermal therapy and mechanical therapy  $^{(3)}$  and may provide short-term pain relief for knee osteoarthritis.  $^{(4,5)}$ 

### Light Therapy (aka Phototherapy)

Light concentrated in a narrow beam to excite cells in local tissues.

- Ultraviolet
- Infrared
- Laser therapy
  - o Low level
  - o High level

**NOTE:** Ultraviolet therapy is primarily used to treat skin disorders and promote wound healing.

**NOTE:** Both low (including infrared) and high level laser therapy have been shown effective in reducing pain and as adjuncts to other physical therapy modalities. <sup>(4,6,7)</sup>

#### **Electrical Stimulation Therapy**

- Administration of an electrical current to a specific, localized body site.
- Volt
  - o High
  - o Low
- Interferential current (IFC)
- Transcutaneous electrical nerve stimulation (TENS)
- Neuromuscular electrical stimulation (NMES)

**NOTE:** IFC and TENS have consistently been found to reduce pain during and shortly after application, helping facilitate other therapies and/or improving outcomes. <sup>(8,9)</sup>

#### **Mechanical Therapy**

Mechanically assisted and often sustained pull of the spine or limb

• Traction

**NOTE:** Lumbar traction has been shown to be effective in relieving low back pain and lumbar radiculopathy. <sup>(10,11)</sup>

**NOTE:** Cervical traction may offer some short-term pain relief for neck pain and cervical radiculopathy. <sup>(12,13)</sup>

#### Therapeutic Massage and Manual Therapy

Includes but not limited to:

- Active Release Technique
- Trigger point therapy
- Myofascial release

Page 4 of 8 Evolent Clinical Guideline 1507 for Passive Treatment



- Mobilization/manipulation
- Manual lymphatic drainage
- Manual traction

**NOTE:** A range of manual therapies have been found to be effective in treating tension-type headaches. <sup>(14,15)</sup>

**NOTE:** Manual therapies can decrease pain, increase range of motion, and improve functionality in a range of musculoskeletal conditions, including osteoarthritis. <sup>(4,16,17)</sup>

# **CODING AND STANDARDS**

### Applicable Lines of Business

$\square$	CHIP (Children's Health Insurance Program)
$\square$	Commercial
	Exchange/Marketplace
	Medicaid
	Medicare Advantage

# BACKGROUND

### Definitions

<u>Modality</u>: any group of agents that may include thermal, acoustic, radiant, mechanical, or electrical energy to produce physiologic changes in tissues for therapeutic purposes. Modalities affect tissue at the cellular level.

<u>Multiple Modalities</u>: the use of and/or billing of two or more physical medicine modalities each visit or during the same session to the same region.

<u>Passive Treatment</u>: treatment that is applied by the provider or in a clinical setting and does not involve active participation by the patient.

<u>Procedure</u>: a service provided to increase the functional abilities in self-care, mobility, or safety.



# POLICY HISTORY

Date	Summary
November 2024	<ul> <li>This guideline replaces Evolent Clinical Guideline 604 for Passive Treatment</li> </ul>
	Updated references
	<ul> <li>Added knee osteoarthritis to ultrasound section</li> </ul>
December 2023	<ul> <li>Clinical guidance was reorganized to emphasize indications rather than contraindications</li> </ul>

# LEGAL AND COMPLIANCE

### **Guideline Approval**

### Committee

Reviewed / Approved by Evolent Specialty Clinical Guideline Review Committee

### Disclaimer

Evolent Clinical Guidelines do not constitute medical advice. Treating health care professionals are solely responsible for diagnosis, treatment, and medical advice. Evolent uses Clinical Guidelines in accordance with its contractual obligations to provide utilization management. Coverage for services varies for individual members according to the terms of their health care coverage or government program. Individual members' health care coverage may not utilize some Evolent Clinical Guidelines. A list of procedure codes, services or drugs may not be all inclusive and does not imply that a service or drug is a covered or non-covered service or drug. Evolent reserves the right to review and update this Clinical Guideline in its sole discretion. Notice of any changes shall be provided as required by applicable provider agreements and laws or regulations. Members should contact their Plan customer service representative for specific coverage information.



# REFERENCES

1. Riaz H M, Ashraf Cheema S. Paraffin wax bath therapy versus therapeutic ultrasound in management of post burn contractures of small joints of hands. International journal of burns and trauma. 2021; 11: 245-250.

2. Karaarslan F, Yılmaz H, Akkurt H E, Kaya F M, Şafak Yılmaz E. Comparison of the efficacy of mudpack and hot-pack treatments in chronic non-specific neck pain: A single-blind, randomized-controlled study. Turkish journal of physical medicine and rehabilitation. 2022; 68: 381-390.

3. Watson T. Ultrasound in contemporary physiotherapy practice. Ultrasonics. 2008; 48: 321 - 329. https://doi.org/10.1016/j.ultras.2008.02.004.

4. Flynn D. Chronic Musculoskeletal Pain: Nonpharmacologic, Noninvasive Treatments. American family physician. 2020; 102: 465-477.

5. Luo Y, Rahmati M, Kazemi A, Liu W, Lee S et al. Effects of therapeutic ultrasound in patients with knee osteoarthritis: A systematic review and meta-analysis. Heliyon. 2024; 10: 10.1016/j.heliyon.2024.e30874.

6. Arroyo-Fernández R, Aceituno-Gómez J, Serrano-Muñoz D, Avendaño-Coy J. High-Intensity Laser Therapy for Musculoskeletal Disorders: A Systematic Review and Meta-Analysis of Randomized Clinical Trials. 2023; 12: 10.3390/jcm12041479.

7. DE Oliveira M F, Johnson D S, Demchak T, Tomazoni S S, Leal-Junior E C. Low-intensity LASER and LED (photobiomodulation therapy) for pain control of the most common musculoskeletal disorders. European journal of physical and rehabilitation medicine. 2022; 58: 282-289.

8. Rampazo É, Liebano R. Analgesic Effects of Interferential Current Therapy: A Narrative Review. 2022; 58: 10.3390/medicina58010141.

9. Johnson M, Paley C, Jones G, Mulvey M, Wittkopf P. Efficacy and safety of transcutaneous electrical nerve stimulation (TENS) for acute and chronic pain in adults: a systematic review and meta-analysis of 381 studies (the meta-TENS study). BMJ Open. 2022; 12: true. 10.1136/bmjopen-2021-051073.

10. Vanti C, Saccardo K, Panizzolo A, Turone L, Guccione A A. The effects of the addition of mechanical traction to physical therapy on low back pain? A systematic review with meta-analysis. Acta orthopaedica et traumatologica turcica. 2023; 57: 3-16.

11. Wang W, Long F, Wu X, Li S, Lin J. Clinical Efficacy of Mechanical Traction as Physical Therapy for Lumbar Disc Herniation: A Meta-Analysis. Computa and Math Meth in Med. 2022; 2022: true. https://doi.org/10.1155/2022/5670303.

12. Romeo A, Vanti C, Boldrini V, Ruggeri M, Guccione A et al. Cervical Radiculopathy: Effectiveness of Adding Traction to Physical Therapy-A Systematic Review and Meta-Analysis of Randomized Controlled Trials. Phys Ther. Apr 1 2018; 98: 231-242. 10.1093/physth/pzy001.

13. Yang J, Tam K, Huang T, Huang S, Liou T. Intermittent Cervical Traction for Treating Neck Pain: A Meta-analysis of Randomized Controlled Trials. Spine. 2017; 42: https://journals.lww.com/spinejournal/fulltext/2017/07010/intermittent\_cervical\_traction\_for\_treating\_n eck.4.aspx.

14. Cumplido-Trasmonte C, Fernández-González P, Alguacil-Diego I, Molina-Rueda F. Manual therapy in adults with tension-type headache: A systematic review. Neurología (English Edition). 2021; 36: 537 - 547. https://doi.org/10.1016/j.nrleng.2017.12.005.

15. Repiso-Guardeño A, Moreno-Morales N, Armenta-Pendón M, Rodríguez-Martínez M, Pino-Lozano R. Physical Therapy in Tension-Type Headache: A Systematic Review of Randomized Controlled Trials. 2023; 20: 10.3390/ijerph20054466.

16. Jiménez-del-Barrio S, Cadellans-Arróniz A, Ceballos-Laita L, Estébanez-de-Miguel E, López-de-Celis C et al. The effectiveness of manual therapy on pain, physical function, and nerve conduction



studies in carpal tunnel syndrome patients: a systematic review and meta-analysis. International Orthopaedics. 2022; 46: 301 - 312. 10.1007/s00264-021-05272-2.

17. Skelly A C, Chou R, Dettori J R, Turner J A, Friedly J L et al. Noninvasive Nonpharmacological Treatment for Chronic Pain: A Systematic Review. AHRQ Comparative Effectiveness Reviews, Rockville (MD). 2020.