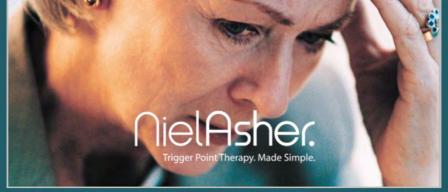
Trigger Point Workbook

Simeon Niel Asher BSc (Ost)

Tension Headache - Pain Relief and Rehabilitation



About the authors



Simeon Niel Asher BSc (Ost), BPhil, NAT qualified as an osteopath in England, in 1992. He is an acknowledged pioneer in the field of advanced trigger point therapy, and is credited with discovering the original Niel Asher technique for treating complex shoulder issues. He has since been involved in the development of numerous trigger point techniques that are used by manual therapists worldwide.

Simeon is the author of the best selling "Concise Book of Trigger Points" and numerous other publications which have been translated into 18 languages. Simeon was named one of London's top ten osteopaths by the London Evening Standard, and has won a number of CAM awards for his work in promoting self-help to consumers.



Jonas Broome Dip C BSc (Hons) Ost, NAT is a personal trainer, qualified in both sports training, coaching and Osteopathy. Jonas qualified, at the European School of Osteopathy in 1992 and is involved in injury prevention, treatment, and rehabilitation for elite sports and athletics. Jonas worked together with Simeon Niel Asher in the early 90's as part of the team who developed the original Niel Asher Technique for treating complex shoulder conditions. Jonas currently lectures in Sweden, New Zealand and England, in addition to treating, research, and writing.



Talia Tzadok BSc (Physiotherapy), NAT qualified as a physiotherapist from Witwatersrand University, South Africa. Over the last decade, Talia has been a vociferous proponent of self-help education for manual therapy, with a special focus on the needs of the retirement-age community.

Talia's experience includes working in an outpatient clinic in a general hospital, orthopaedic clinic, and has consulted to several retirement homes on professional and self-care for pain relief and the treatment of musculoskeletal conditions. Talia has completed a wide range of studies in kinesio tape therapy, spinal manipulation, dry needling, intramuscular stimulation and functional movement systems. Talia is currently involved in treating, writing, research, and lectures for professional carers who work with the aged.

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About Us

Niel Asher Healthcare was founded in 1997 and is now the leading online publisher of educational material and other learning resources for manual therapy.

We provide e-learning tools and services to medical and para-medical practitioners, and information, advice and self-help solutions to patients, using digital media.

We deliver continuous enhancements providing the most relevant solutions for our customers. This commitment to excellence keeps us at the forefront of this industry.

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What is Tension Headache?

Tension headache refers to a mild headache, which feels as though a tight band is wrapped around your head. Tension headaches materialize when the neck muscles are tight.

There are two types of tension headache. The first refers to a frequent headache, which can last between 30 minutes to a week; and which appears less than 15 days within 3 months. This type of headache may develop into the second type: chronic headache. This type of tension headache is known to last for hours and be consistent for 15 days or more in a month.

Although tension headache is very common, the explanation for it is still unknown. Environmental or internal tension appears to be the primary cause.

Introduction

Chronic Daily Headache (CDH) has a prevalence of 4-5% of adults. It affects males to females in a 1:2-3 ratio. These headaches often start as episodic but can 'transform' over time to CDH. Medication (rebound) induced headache is believed to play a role in up to 30% of CDH patients. Interestingly 50-80% of those treated in tertiary headache centers, are recorded as having 'medication overuse'. Those with CDH often have a poorer quality of life than 'episodic headachers'. CDH can be either primary or secondary.

Whilst many people reach for the bottle, some realize that medications can mask underlying mechanical problems such as stiff and tense muscles and look to us for long term help. For these reasons manual therapy has become 'a popular choice' for patients with common and benign forms of headaches, such as Cervicogenic (CGH) and Tension Type (TTH), because these two conditions are often associated with mechanical neck pain.

Symptoms and causes of headaches

A headache is defined as 'aching or pain in one or more areas of the head or neck'. Both the frequency and pain level can var y greatly. Depending on the classification between 65-90 percent of all headaches are due to Tension Type Headaches (TTH). The remaining 10-35 percent are: migraines, neck based/Cer vicogenic headaches (CGH), TMJ type, sinus and cluster headaches. In terms of trigger point therapy TTH & CGH are the most accessible and amenable to intervention, although some authorities recognize that trigger points may have an important role to play in relieving migraines.

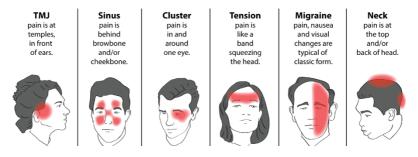
How are they classified?

Headaches are defined as primary or secondary. Primary headaches are benign, recurrent headaches not caused by underlying disease or structural problems. For example, migraine is a type of primary headache. While primary headaches may cause significant daily pain and disability, they are not dangerous. Secondary headaches are caused by an underlying disease, like an infection, head injury, vascular disorders, brain bleed or tumors. Secondary headaches can be harmless or dangerous. Certain 'red flags' or warning signs indicate a secondary headache may be dangerous.

Here is a list of conditions that are known to cause a secondary headache:

- Sinus headache
- Giant cell arteritis (associated with polymyalgia rheumatica)
- Carotid artery dissection (in the neck)
- Vasculitis
- Headache associated with nonvascular intracranial disorders
- Neoplasm (tumors)
- Idiopathic intracranial hypertension
- Infection
- Post-traumatic headache
- Subdural hematoma
- Cervical spinal disorders (CGH)
- Temporomandibular joint (TMJ) dysfunction
- Headache caused by sleep disorders such as obstructive sleep apnea.

As you can see, a headache can be a sign that something very wrong is happening inside, so we must always approach them with caution. Fortunately most headaches are benign. Here is a table with characteristics of the most common types of headaches that should help deepen our understanding.



The International Headache Classification III (ICDH)

We will be following the standardized International Headache Classification III (ICDH) – a full classification can be found <u>here</u>. This classification is hierarchical, and you must decide how detailed you want to make your diagnosis. A diagnosis should be based around the main headache that clients present with (over the last year). When a patient receives more than one diagnosis, these should be listed in the order of importance to the patient. To receive a particular headache diagnosis the patient must, in many cases, experience a minimum number of attacks of (or days with) that headache. When a patient is suspected of having more than one headache type or subtype, it is highly recommended that he or she fill out a 'headache diary' to record each headache episode.

Tension Type Headaches (TTH)

TTH are by far the most common type of chronic headache. People who experience migraines typically also have tension headaches in between their migraines these are also known as transformed headaches.

	Cervicogenic headache	Tension-type headache	
General population (%)	0.4 – 2.5 %	3 %	
Headache clinics (%)	15 – 20 %	40%	
Mean age	42.9 y/o (all ages are affected)	Onset any age but most commonly during adolescence or young Adulthood	
Gender	4 x more prevalent in female (79.1 % ? and 20.9 % \$)	88 % female and 69 % male	
Other	CGH is a common sypmtom after neck trauma; 54 % –66 % of patients with whiplash- associated disorder	Chronic TTH commonly occur during periods of stress and emotional upset.	
Intensity	Moderate to severe	Mild to moderate	

Prevalence of TTH and CGH

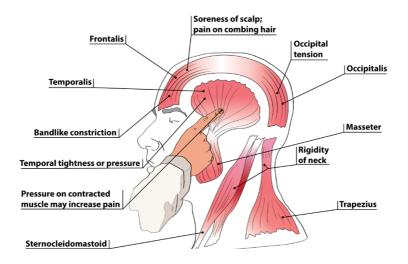
Symptoms of TTH

Tension headaches usually affect both sides of the head and last from thirty minutes to several days or more. They often have a characteristic tight-band or vice like pain with a 'dull steady aching' quality. Symptoms can vary in intensity from mild to moderate to severe; they may also affect sleep. They are not accompanied by the additional symptoms that traditionally distinguish migraine headaches such as light sensitivity (photophobia), flashes and patterns in the eyes (visual scotoma) and warning signs (prodromal). Tension headaches affect about 1.4 billion people (20.8% of the population) and are more common in women than men (23% to 18% respectively).

TTH and trigger points

Muscular problems and tension are commonly associated with TTH and trigger points within muscles may either be causative or may perpetuate TTH. The most commonly affected muscles are: trapezius, sternocleidomastoid, temporalis, masseter and occipitofrontalis. There is also a strong association with postural issues such as the upper crossed pattern. The pain processing part of the central nervous system is almost certainly involved in TTH as it shows up abnormal in scans. Trigger points often add to the misery of headaches because they are associated with peripheral and central sensitization (see later). Longterm inputs from trigger points may lead to a vicious cycle that converts periodic headaches into chronic tension headaches. In such cases even if the original initiating factor is eliminated, the trigger point-central sensitization cycle can perpetuate or even worsen.

TTH are often aggravated by stress, anxiety, depression, fatigue, noise, and glare, but they can also be associated with neck arthritis or neck disc problem.



Seven major causes of TTH

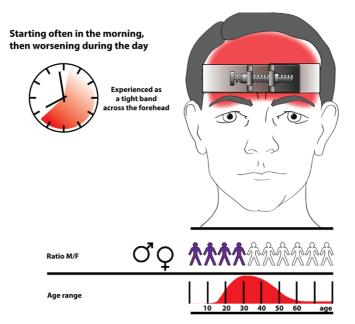
- Stress: usually occurs in the afternoon after long stressful work hours or after an exam
- Sleep deprivation
- Uncomfortable stressful position and/or bad posture
- Irregular meal time (hunger is reported in up to 50% of people)
- Eyestrain
- Tooth clenching (bruxism)
- Postural issues

Acute or Chronic

TTH headaches can be episodic or chronic. Episodic tension-type headaches are defined as tension-type headaches occurring fewer than 15 days a month, whereas chronic tension headaches occur 15 days or more a month for at least 6 months. Headaches can last from minutes to days, months or even years, though a typical tension headache lasts 4–6 hours

TTH fact file - (Vernon H, 2009)

- 1. The most prevalent form of benign primary headache with a reported prevalence varying from 65-90%, depending on the classification, description, and severity of headache features.
- 2. The psychosocial impacts of TTH include disruptions of daily activities, quality of life & work and are accompanied by considerable costs.
- 3. The International Headache Society (IHS) characterizes TTH as bilateral headaches of mild-to-moderate intensity that experienced with an aching, tightening, or pressing quality of pain.
- Headaches may last from 30 minutes to 7 days, are not accompanied by nausea or vomiting, and may have light sensitivity (photophobia) or sound sensitivity (phonophobia) but not both.
- 5. Headache frequency is classified as 'episodic' (<15 headaches per month) or 'chronic' (>15 per month).



- 6. Episodic TTH is by far the more prevalent category.
- 7. The chronic TTH patient has a higher frequency of both active and latent triggers points in the suboccipital mm.
- 8. The chronic TTH patient with active trigger points may have a greater headache intensity and frequency and forward head posture than those with latent trigger points.

Differential diagnosis - What else could it be?

Differential diagnosis is an essential tool to assess the risk of any problems when they come to the office for treatment. Early detection and treatment can facilitate effective recovery plus we don't want to hurt someone who comes to us in pain.

We highly recommend using the pathological sieve **CDFIMNRT** to sift through the potential alternatives when it comes to a headache, as we have said, rarely, they can be the result of a more serious underlying condition. Remember too that it is possible to have two or more conditions happening at the same time. This sieve is a quick and easy format that you can apply to all complaints. Don't forget to add **'emotional'** to this list.

PATHOLOGICAL SIEVE					
HEADACHES					
CONGENITAL	Vascular malformation, Syringomyelia, Intracranial				
	anomoly				
DEGENERATIVE	Cervical issues, arthritis/disc C3/4/5/6/7, shoulder				
	issues, Carotid artery dissection (in the neck),				
	Vertebral artery disease (VAD)				
FUNCTIONAL	Sinus headache, Idiopathic intracranial				
	hypertension, Post sex Headache, Swimming goggle				
	headache, Post exercise headache, Cervical spinal				
	disorders (CGH), Temporomandibular joint (TMJ)				
	dysfunction, sleep disorders such as obstructive				
	sleep apnea, COPD Headache. Hypertension (raised				
	blood pressure)				
INFECTIVE	Abscess, Shingles, Vasculitis, Respiratory, Meningitis				

METABOLIC	Hormonal: Hyperparathyroidism, Pituitary disease			
	related, menopause. Inflammatory arthritis			
	(HLAB27), Psoriatic Artropathy, Polymyalgia			
	Rheumatica - Giant cell arteritis (GCA).			
NEOPLASTIC	Most commonly secondary metastases (brain),			
	Glioma of the optic Nerve, Neuromas of the inner			
	ear. Pheochromocytoma of the adrenal glands can			
	cause flushing and headache			
RETICULO-	Neuropathy: e.g., Mononeuropathy monoplex,			
ENDOTHELIAL	Systemic Lupus Erythematosus - (SLE), Multiple			
	myeloma, Pagets disease			
TRAUMATIC	Whiplash associated disorder, Post-traumatic			
	headache, Subdural hematoma			

We advise you to follow the **SNOOP** criteria if you are worried about the headache:

• **S**ystemic symptoms (fever, weight loss) or secondary headache risk factors (HIV, systemic cancer)

• Neurologic symptoms or abnormal signs (confusion, impaired alertness, or consciousness)

• Onset: sudden, abrupt, or split-second

• Older: new onset and progressive headache, especially in middle-age >50 (giant cell arteritis - GCA)

• **P**revious headache history or headache progression: first headache or different (change in attack frequency, severity, or clinical features)

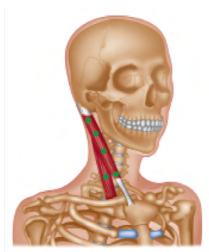
Patients who have a sudden or abrupt headache that peaks in seconds or minutes require careful assessment to exclude causes such as

subarachnoid hemorrhage (SAH), venous sinus thrombosis, arterial dissection, or raised intracranial pressure.

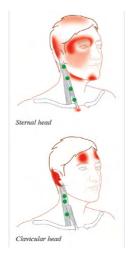
Beliefs, attitudes and emotions

Beliefs and attitudes about pain have a role to play in all types of pain. Sometimes even if the pain improves, the patient becomes 'hyper' symptom focused and is unable to recover fully. Pain behavior is complex; it is influenced by many factors as diverse as anger, depression and hopelessness to childhood and family pain behavior. Other factors such as family problems, work problems litigation issues or even diagnostic and treatment issues may also have a role to play. We need to keep all of these factors in mind as we approach treatment. Which Muscles May be Affected by Tension Headache?

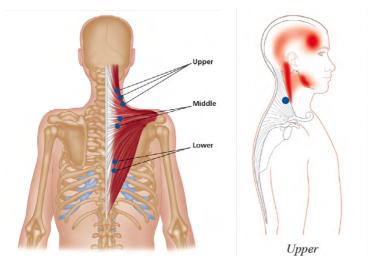
(The image on the right details the trigger point and pain map).



STERNOCLEIDOMASTOID

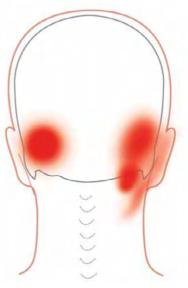


UPPER TRAPEZIUS

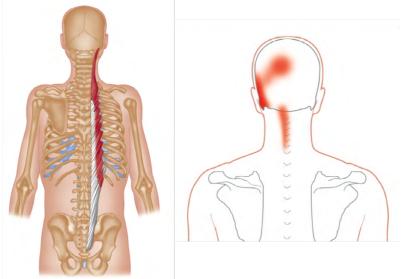


SUB OCCIPITALS - OBLIQUUS CAPITIS

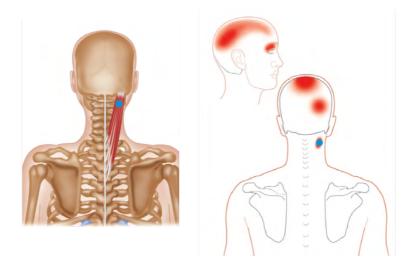




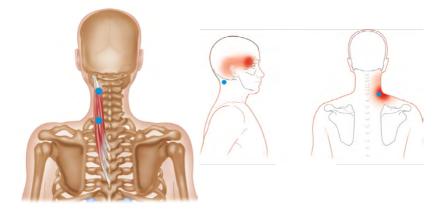
LONGISSIMUS CAPITIS



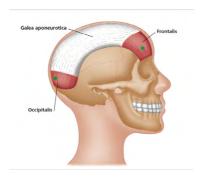
SPLENEUS CAPITIS

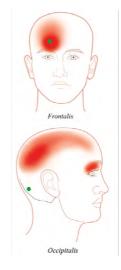


SPLENEUS CERVICIS

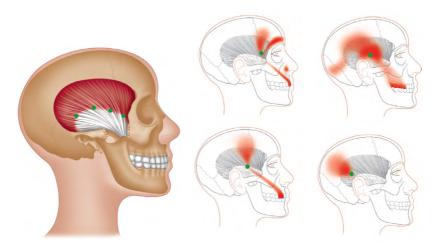


OCCIPITOFRONTALIS



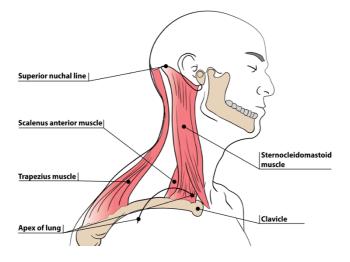


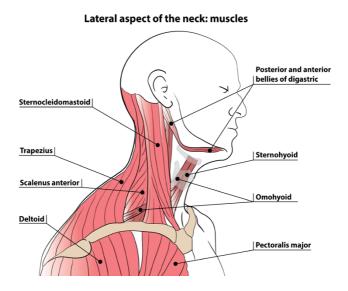
TEMPORALIS



SURFACE ANATOMY

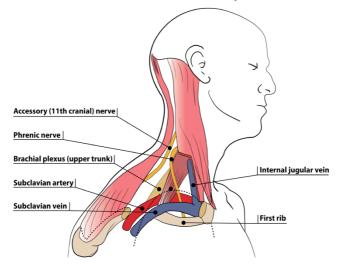
Posterior triangle of the neck



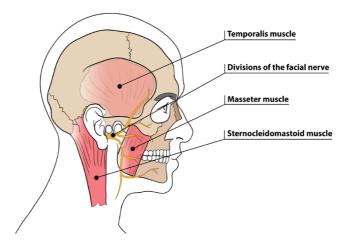


SURFACE ANATOMY

Subclavian vessels and branchial plexus



Lateral aspect of the head: soft tissues



Your Trigger Point Treatment Program for Tension Headache

Before starting this Program we recommend consulting with a therapist or doctor to obtain a proper diagnosis.

This program has been written specifically for sufferers of Tension Headache.

In this section we will introduce 3 techniques to help alleviate the pain from Tension Headache. They are:

- Trigger Point Therapy (TPT)
- Stretching
- Exercise

For each, we have provided clear and simple instructions on how to perform the technique and how often. There are also associated images to help you.

We would recommend starting with the Trigger Point Therapy followed by gentle stretching and ending with some exercises.

If at any time you experience an adverse reaction to any of these techniques or your pain is greatly increased as a result, stop immediately and seek medical advice where necessary.

TECHNIQUE	REPETITIONS	HOW OFTEN?	FOR HOW MANY WEEKS?
TRIGGER POINT THERAPY	As per instructions	3-4 times per day	6
STRETCHING	3 times	2-3 times daily	6
EXERCISES	30 times	2-3 times daily	6

TRIGGER POINT THERAPY

The treatment protocol provided here is based on a technique called Trigger Point Therapy (TPT).

TPT includes a range of hands-on pressure-point techniques, two of which are explained here:

- 'Deep Stroking Massage' (DSM) where the sore/trigger point is gently massaged rhythmically to and fro to stimulate inner repair and,
- Inhibition Compression Technique (ICT) which uses sustained pressure on the sore/trigger point until it releases.

Both DSM and ICT are very safe and effective but can leave some soreness for a few minutes to hours afterwards. Very occasionally they may leave bruising if performed overzealously or if you are on certain medication (especially blood thinners).

How do I know it is a trigger point?

You are looking for:

- Stiffness in the affected muscle
- Spot tenderness (exquisite pain)
- A palpable taut/tight nodule or band
- Presence of referred pain (as indicated on the trigger point maps showing you where you should feel pain when pressed)
- Reproduction of your symptoms (accurate)
- The affected area may be moister or warmer (or colder) than the surrounding tissues, and may feel a little like sandpaper

Take a look at the images below and follow these instructions for maximum effect.

Technique - Inhibition Compression Technique (ICT)

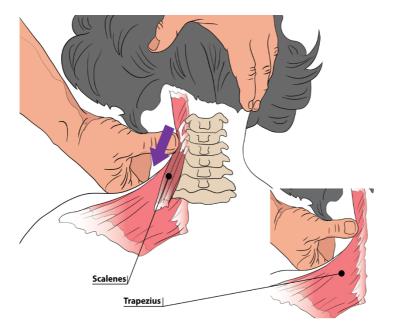
- 1. Identify the tender/trigger point you wish to work on.
- 2. Place the host muscle in a comfortable position, where it is relaxed and can undergo full stretch.
- 3. Apply gentle, gradually increasing pressure to the tender point until you feel resistance. This should be experienced as discomfort and not as pain. You should feel some radiation of the pain.
- 4. Apply sustained pressure until you feel the tender point yield and soften. This can take from a few seconds to several minutes.
- 5. Steps 3-4 can be repeated, gradually increasing the pressure on the tender/trigger point until it has fully yielded.
- 6. To achieve a better result, you can try to change the direction of pressure during these repetitions.
- 7. At the end of each self help "treatment", massage the area with some cream, oil or lotion in the direction of the muscle. You can also apply warmth or a heat rub afterwards.

How Often?

3 to 4 times per day for up to 6 weeks.

Technique - Deep Stroking Massage : (DSM)

- Identify the trigger point by having a look at the illustrations and then feel for the taut muscle or band
- Lubricate the skin with oil, cream or lotion
- Identify and locate the tender/trigger point or taut band
- In one-direction only work from the waist level towards the buttocks - don't forget to go right down to the sacrum; perform slow stroking rhythmic massage using your thumb/elbow/trigger point tool on the taut band, and reinforce with your other hand; it should feel a bit like squeezing toothpaste from a tube. This should be experienced as discomfort and not as pain. Come away and repeat three times.



Example DSM for the Upper Trapezius

Spray and stretch

According to the pioneers of trigger point therapy, spray and stretch is the 'single most effective noninvasive method' for deactivating trigger points. The basic spray and stretch technique is quite straightforward, as it does not require the same precise localization of trigger points as for ICT. You need only locate and identify the affected/host muscle to release its fibers. Apply a cold spray and then stretch the muscle. This is especially good for the **upper trapezius** and **spleneus cervicis** muscles. There are several great cold sprays on the market.

Procedure

1. Identify the taut band then **spray**: The spray is aimed out of the inverted bottle nozzle at 30 degrees to the skin in a fine jet over a distance of about 20–50 cm (do not aim at a single spot).

2. **Stretch**: This is the therapeutic component of the technique. While two to three sweeps of spray are applied to the affected/host muscle, the muscle is gently extended to its full stretch length.



Example - spleneus cervicis spray and stretch

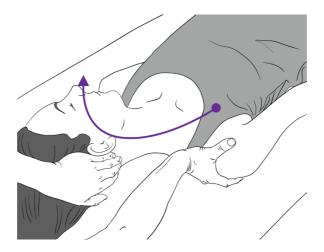
Isometric contraction technique: Muscle Energy Technique - MET

This technique is hugely effective for the upper trapezius. Remember we talked about the concept of an over-stimulated motor endplate? Utilizing contraction and relaxation while fixing through the trigger point may well 'normalize' the sarcomere length. It is believed that MET's sets in place a cascade, releasing the affected actin and myosin, and reducing the energy crisis.

Procedure

- 1. Hold or fix through the shoulder and neck either a) in side bending or b) side bending with slight rotation.
- 2. Ask the patient to actively contract the muscle with 30-40% resistance for a slow count of ten whilst you hold back against them **keeping the neck in the same position**.
- 3. Ask the patient to relax.
- 4. Actively and passively stretch the muscle a) in side bending, b) in rotation and side bending.

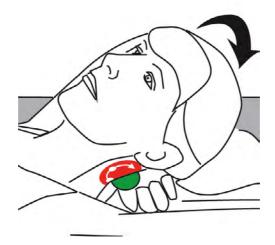
Upper trapezius MET



SCM and lateral neck flexors MET

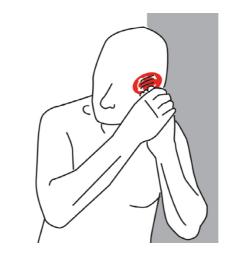


Spleneus Capitis and Cervicis



Use your tool as shown

Temporalis

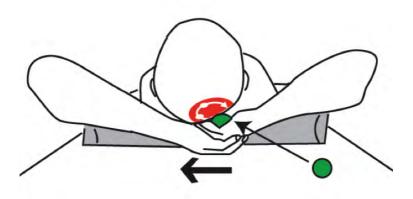


Use your fingers or tool as shown

Occipitofrontalis



Use your fingers or tool as shown

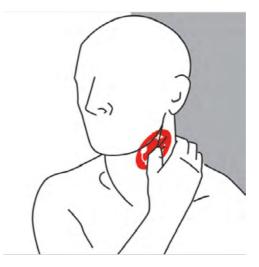


Use your tool as shown

Sternocleidomastoid

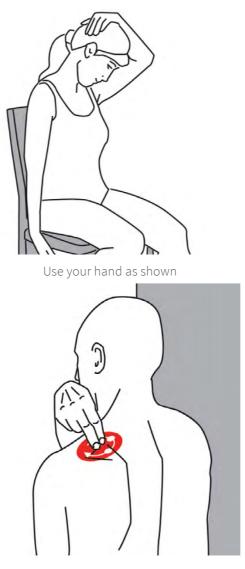


Use your fingers or tool as shown



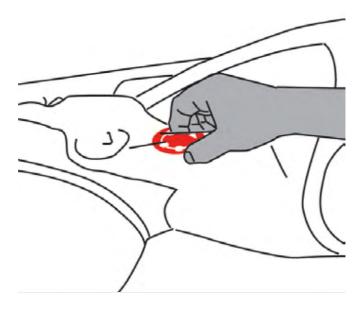
Use your thumb or tool as shown

Upper Trapezius



Use your fingers or tool as shown

Sternocleidomastoid



Technique:

- Identify the trigger point by having a look at the illustration and then feel for the taut band of muscle
- Feel for the sweetest tender point in the taut band
- Using delicate fingertip pressure, gently and gradually pinch the trigger point increasing until you feel resistance. This should be experienced as sweet discomfort rather than pain
- Apply sustained pressure until you feel the point yield and soften. This can take from a few seconds to several minutes
- Steps 3–4 can be repeated, gradually increasing the pressure until the point has fully yielded

• To achieve a better result, you can try to change the direction of pressure during these repetitions and move in a clockwise direction

Dose

Perform three to four times a day for up to six weeks

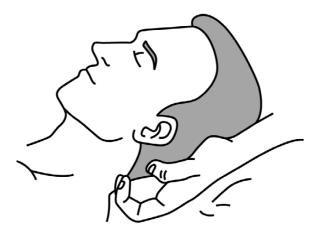
What then?

Follow pressure sessions by massaging the area with some cream, oil or lotion in the direction of the muscle. You can use warmth or heat-rub afterwards

Follow the pressure sessions with a good neck stretch

Perform self-stretching on the hour every hour for 2-3 minutes

Sub-Occipitals



Technique:

- Identify the trigger point by having a look at the illustration and then feel for the taut band of muscle
- Feel for the sweetest tender point in the taut band
- Using delicate fingertip pressure gently and gradually press on the trigger points increasing until you feel resistance. This should be experienced as sweet discomfort rather than pain
- Apply sustained pressure until you feel the point yield and soften. This can take from a few seconds to several minutes
- Steps 3–4 can be repeated, gradually increasing the pressure until the point has fully yielded
- To achieve a better result, you can try to change the direction of pressure during these repetitions and move in a clockwise direction

Dose

Perform three to four times a day for up to six weeks

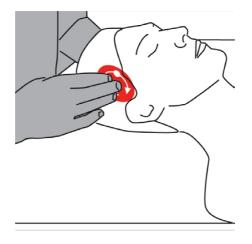
What then?

Follow pressure sessions by massaging the area with some cream, oil or lotion in the direction of the muscle. You can use warmth or heat-rub afterwards

Follow the pressure sessions with a good neck stretch

Perform self-stretching on the hour every hour for 2-3 minutes

Temporalis



Technique:

- Identify the trigger point by having a look at the illustration and then feel for the taut band of muscle
- Feel for the sweetest tender point in the taut band
- Using delicate fingertip pressure gently and gradually press on the trigger points increasing until you feel resistance. This should be experienced as sweet discomfort rather than pain
- Apply sustained pressure until you feel the point yield and soften. This can take from a few seconds to several minutes
- Steps 3–4 can be repeated, gradually increasing the pressure until the point has fully yielded
- To achieve a better result, you can try to change the direction of pressure during these repetitions and move in a clockwise direction

Dose

Perform three to four times a day for up to six weeks.

What then?

Follow pressure sessions by massaging the area with some cream, oil or lotion in the direction of the muscle. You can use warmth or heat-rub afterwards.

Follow the pressure sessions with a good neck stretch

Neck Muscles



Stretch as shown

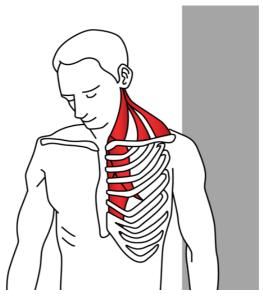


Stretch as shown

STRETCHING

One of the main causes of tension headaches are the tight muscles in the neck, shoulder and below the skull. Regular stretching and exercises of these muscles lengthens the muscle fibers and promotes healthy blood flow. This in turn reduces tension on the muscle and referred pain to the head is reduced. Always take note that keeping the neck and shoulder in a neutral and relaxed position will help immensely in reduction and prevention of this type of headache.

Stretch 1:



Adopt position as shown

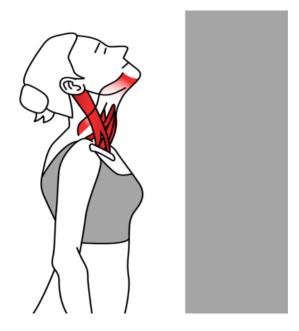
Technique

- Assume the correct postural position
- Start with your head centred and gently bring your right ear down towards your right shoulder
- At this point slightly rotate the neck to the side that it is bent to
- A normal stretch of the muscles on the side of your neck may be experienced. The exercise should be pain free

How Often?

Hold for 30-50 seconds 3 x each side, twice daily

Stretch 2:



Adopt position as shown

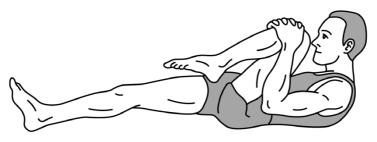
Technique

- Position the head in a normal posture
- Face forward with neck in neutral position
- Gently drop your head back and look towards the ceiling

How Often?

Hold for 20-50 seconds three times with breaks in between to prevent dizziness

Stretch 3: Wind relieving position



Adopt position as shown

Technique

The wind relieving pose in yoga stretches your back all the way from your lumbar spine up your neck. It is called the wind relieving pose because it can expel excess gas from the body.

- To begin, lie face up on the floor
- Extend both legs straight and point your toes at the ceiling
- Bend your left knee in toward your chest, clasp your hands below the knee and bring your forehead to your knee by raising your chest off the floor
- Lower back down and repeat by raising your right knee

How Often?

Hold stretch for 30-50 seconds and repeat 3 times on each side, twice daily

Stretch 4: Trapezius stretch



Adopt position as shown

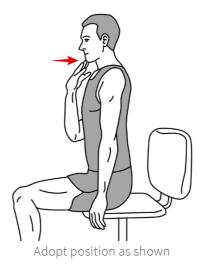
Technique

- Turn your head 45 degrees to the right
- Reach over the top of your head with your right hand and cradle the back of your head with your fingers
- Gently pull your head toward your right shoulder, and hold for a count of 20-30
- Repeat on the left side using your left hand

How Often?

Repeat 3 times on each side, twice daily

Exercise 1: Chin Tucks



Technique

- Sit up straight in a chair
- Sit to the front, not against the back of the chair
- Sitting up will help you to strengthen the muscles you need for good posture
- Think of lifting the crown of your head to the ceiling
- Be careful not to tip the head back. Your chin should be parallel to the floor
- Without tipping the head in any direction, pull your chin and head straight back. You will feel a stretch in the back of your neck
- Relax the chin back forward to a neutral position

How Often?

Repeat for 8 to 12 repetitions x 3, twice daily

Exercise 2: Lumbar spine mobilizations



Adopt position as shown

Technique:

- Lay down on all fours
- Place one hand behind the back
- While the opposite hand remains on the floor
- Rotate the upper body (side that the arm is behind the back) with the elbow pointing to the sky as far as possible
- Return to start position

How often?

Repeat 5-10 times on each side, twice daily

YOUR PERSONAL 6 WEEK DIARY

Tick each box on completion

WEEK 1	MON	TUES	WED	THUR	FRI	SAT	SUN
ТРТ							
STRETCH							
EXERCISE							

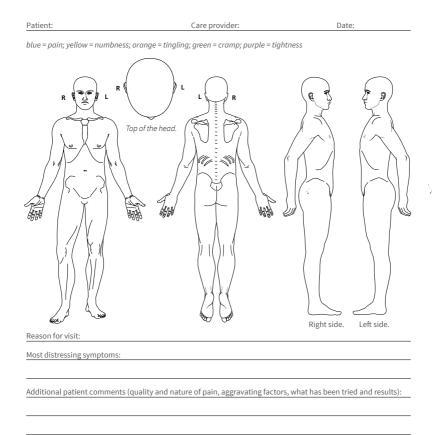
WEEK 2	MON	TUES	WED	THUR	FRI	SAT	SUN
ТРТ							
STRETCH							
EXERCISE							

WEEK 3	MON	TUES	WED	THUR	FRI	SAT	SUN
ТРТ							
STRETCH							
EXERCISE							

WEEK 4	MON	TUES	WED	THUR	FRI	SAT	SUN
ТРТ							
STRETCH							
EXERCISE							

WEEK 5	MON	TUES	WED	THUR	FRI	SAT	SUN
ТРТ							
STRETCH							
EXERCISE							

WEEK 6	MON	TUES	WED	THUR	FRI	SAT	SUN
ТРТ							
STRETCH							
EXERCISE							



Changes:

Needs (including prescriptions, therapies or tests):

Action items (patient and care provider):

Patient: Care provider: Date: blue = pain; yellow = numbness; orange = tingling; green = cramp; purple = tightness R L L R _ Pubic bone Top of the head. Sitting bones L Anus *Coccyx* _Sacrum Underarm areas. Pelvic area. Additional patient input: Care provider comments: Action items patient: Next visit: Action items care provider:

Lifestyle Changes to Consider

Lifestyle changes can be beneficial in reducing the frequency and intensity of tension headaches. Many different approaches are used to successfully reduce the signs and onset by taking into consideration physical, mental and psychological factors.

Training the body to relax - many techniques can be used to help the body and mind relax. Some examples are breathing techniques, imagery, hypnosis and yoga.

Managing stress and daily activities can provide a format for a more relaxed body.

Eating healthily and exercising promotes healthy muscle function and good circulation, thus keeping muscles at optimal tone and stretch.

Healthy lifestyle habits such as drinking a lot of water, reducing or quitting smoking, resting enough and regular exercise are beneficial as well.

Various remedies can be done at home including:

Compression - heat or cold to reduce muscle tension.

Keeping cool in the summer with a wet towel on the forehead.

Changes in workstation ergonomics - adapting seating, height of desk and computer to promote a healthy back and spine.

Adjusting pillow or mattress - perhaps purchasing a firmer more supportive pillow or mattress.

Orthodontic or dental care - many people clench their jaw while they sleep. Bite plates can be made to sleep with at night, reducing tension in the muscles that we use to eat with. These muscles when strained can often cause headaches.

Sports and Activities - Need to Consider

Headaches may occur as a result of sport.

Contact sports such as rugby or football can cause headaches due to trauma to the head – also known as "footballers head".

Swimming can cause headaches as a result of the goggles pressing too tightly on the head.

Divers can experience something called "divers headache" due to the increase in pressure under the water, which causes changes in carbon dioxide in the blood.

Mountain climbers may experience headaches due to changes in altitude – usually from 4000 - 6000 feet. This is known as "high altitude" headache.

Weightlifting and other sports that require "over exertion" may cause headaches too.

In general sport can be beneficial to headache reduction as long as tension on the shoulder and neck is kept to a minimum

- Yoga, pilates and feldenkreis can be used to relax the muscles if done correctly
- Swimming without tensing the neck
- Water aerobics
- Jogging and walking remembering to keep shoulders relaxed

Diet

Studies have demonstrated that underlying health issues—such as folic acid, iron, vitamin, and/or mineral deficiency—may both contribute to and perpetuate trigger point activity.

It is worth noting that tendons do not repair in the presence of nicotine! Furthermore, recent studies have indicated that the modern lifestyle tends to "under load" muscles and tendons, leading to internal fatty changes and increased vulnerability to damage.

Other factors such as fatty foods and exposure to free radicals may also have a detrimental effect on our soft tissues. Supplements—for example omega-3, zinc, magnesium, iron, and vitamins K, B12, and C, as well as folic acid—may help to speed up your recovery.

What Next?

We would always recommend seeing a doctor or therapist for an initial consultation to get a proper diagnosis if you haven't done so already.

To diagnose your doctor or therapist should give you a thorough physical exam and look at your neck range of motion and feel if you have tight/ tense muscles. If your symptoms persist your doctor may think it is appropriate to offer you X-rays, MRIs (Magnetic Resonance Imaging), CT (Computed Tomography) scans; and/or other tests.

Much of the advice here will depend on how 'fresh' or severe your problem has become. As a rule if your headaches have been on and off for more than six weeks then try the self help for three to four weeks and if there is no change then see a therapist. If your problem has been there for less time then you should get a proper diagnosis but can try our self help tips for up to six weeks. If there is no improvement after six weeks then we would urge you to see a therapist. Once you have a diagnosis you should review our self-help and advice pages and then put together a treatment plan. This should include: self massage and trigger point massage with balls/tools, stretching and modifying your lifestyle to avoid or modify any aggravating activities.

You can search for a local manual therapist at www.nielasher.com/therapists.

Look out for other workbooks in the Trigger Point Workbooks series.

We wish you a speedy recovery!

Team NAT

More About Trigger Points and Trigger Point Therapy

Trigger Points

We first heard the term trigger point used in 1942 by a woman called Dr. Janet Travell. She came up with the phrase to describe the painful lumps, or nodules, felt within tight bands of muscle. Since then, we've learnt a lot more about trigger points and the features they have in common:

- Pain, often exquisite, at the specific point
- A nodule set deep within a tight band of muscle
- When pressed, pain radiates out in a specific way that can be reproduced (map)
- The pain felt can not be explained by a neurological examination

One thing to remember about trigger points is that where you feel pain, may not be the same place as where the trigger point is embedded. This is partly the reason that some therapies fail to help because a therapist or doctor will tend to concentrate on the place that hurts, rather than locating the source of the pain.

What a trigger point does is to make its host muscle shorter and fatter, as well as reducing its level of efficiency. This can can lead to significant pressure being put on your nerves and blood vessels. However, by taking the time to understand trigger points and their maps, you can get closer towards finding the source of your pain.

What are the physical characteristics of trigger points?

Sadly, we do not have suitable language to define the sensation felt from a trigger point. The following points though should together provide an adequate description:

- Small nodules the size of a pinhead
- Pea-sized nodules
- Large lumps
- Multiple large lumps next to each other
- Sore spots embedded in tightly-stretched bands of semi-hard muscle that feels like a cord
- Rope-like bands lying next to each other like partially cooked spaghetti
- The skin over a trigger point is slightly warmer to the touch (due to increased metabolic/autonomic activity)

Acute and chronic pain

It is estimated that in 75 to 95% of muscular pain cases myofascial trigger points are one of the main causes! In understanding more about trigger points, hopefully one day we can learn to "switch them off" and help end unnecessary pain for good.

Long-standing, or chronic pain, is due to the muscles around the pain area (and sometimes ones not even nearby) altering themselves in order to compensate for the pain. Trigger points are divided into two categories; active (painful), or inactive (latent). In addition, they can also cause pain in different parts of the body to the one they appear in.

When a trigger point becomes active, the pain emitted can mimic a wide range of medical conditions: angina, bursitis, prostatitis, appendicitis, cystitis, arthritis, esophagitis, carpal tunnel syndrome, pelvic inflammatory disease, diverticulosis, costochondritis, sciatica, and pain from a heart or gall bladder attack.

What is Trigger Point Therapy?

Many of us suffer from stiff, achy muscles caused by knots. Trigger point therapy encompasses a variety of ways to deactivate these painful knots and eventually get rid of them. One of the great things about trigger point therapy is that it's simple to perform, both at home with a partner, or on your own with some special trigger point tools.

If you combine trigger point therapy with some simple changes in your lifestyle, the results can be almost instant. And, what's more, they can last. Many manual therapists already use trigger point therapy as part of their daily work because it's a great way to:

- identify the correct trigger point(s)
- understanding how, or why, they manifest themselves in the first place
- work out the best way to deactivate the point(s)
- develop methods to stop them returning in the future

What happens when you press on a trigger point? By doing so you:

- numb and reduce the pain, not only in the treated area, but also where you perceive the pain to be
- lessen the pain feedback pathways
- interrupt the pattern of pain and spasm
- stretch out tight muscles, which will indirectly affect other tissues
- open out the plastic-wrap-like myofascial bag that encompasses your muscles
- stimulate the blood supply helping to remove debris and toxins
- up your body's release of powerful pain-killing endorphins
- affect the autonomic/automatic nervous system

What is a referred pain map?

When we're talking about trigger point referred pain, it's not the same as the referred shoulder pain you get from appendicitis, or, even the pain you get in your jaw or arm when having a heart attack. Instead, when you press on a trigger point for five or six seconds, it results in part, or all, of the pain map turning on, replicating your symptoms. Often, where the trigger point is, and where you feel the pain, are two entirely different places on your body.

Frequency of treatment

If you plan to treat yourself at home through self-help, hands-on treatments, you should schedule no more than one session a day, with a three or four day gap in-between. If you are using balls, rollers or hooks on the other hand, then these can be used more often; up to 10 minutes a session, up to six times a day.

If you're getting treatment through a therapist, then he/she will plan a suitable course for you.

Possible side effects

If you feel sore or bruised after treatment, don't worry. It's quite normal to feel this way for up to 36 hours afterwards. However, we don't know for certain yet whether this is a side effect, or a result of the treatment.

Cervical manipulation can result in some severe treatment reactions, which can be somewhat proportional to how effective the treatment was. These reactions can include: fatigue or "flu-like" symptoms, needing to urinate more often, feelings of sluggishness and increased sleepiness.

Our Autonomic Nervous System (ANS) deals with bodily functions like sweating, digesting, and breathing. During trigger point therapy, you might experience unaccountable ANS symptoms which include: sweating, redness, skin blanching, coldness, gooseflesh, excessive sweating, dysmenorrhea, toiletry dysfunction, earache, dizziness, stuffiness, and difficulty breathing.

Trigger Point Therapy - Frequently Asked Questions

How do I press/self-treat a trigger point?

For those of you who have worked with trigger points before, this concept will be very familiar. For the rest of you, there are two very simple, safe and effective techniques: (1) ischemic compression technique (ICT), and (2) deep stroking massage (DSM).

How much pressure do I use?

This is something that comes with experience, but as a rule of thumb the more painful the tissue, the slower and deeper the pressure. In all cases, the key words are "work slowly," "sensitively," and "thoroughly." Deep stroking massage should feel a bit like gently squeezing toothpaste out of a tube.

Which direction should the pressure/force be applied?

It is desirable to apply steady, deep, direct pressure to the nodule or pea-like trigger point. We have tried to represent this by the idea of a hot zone indicated within the images in the self help pages of this guide. The heart of the trigger point is located somewhere in this zone. You need to find the direction of pressure that, where possible, exactly reproduces the pain. It often amazes us that a slight change in the direction of the pressure can cause a totally different pain elsewhere. You will feel when you are "there."

How do I know when I have done enough pressing?

Hold the trigger point for 6 seconds:

If the pain diminishes rapidly, stay with it until the trigger point softens or evaporates beneath your pressure.

If the pain stays the same or gets worse, come away for 15 seconds and then try again.

Repeat 3 times if necessary.

If the trigger point still does not deactivate after the third repetition, note it down as it may be a secondary or satellite point.

What do I do after I have come away from the point?

Follow all deep work with a gentle generalized effleurage massage. The area where you did the deep work may still be tender, but do not avoid it. This will help to dispel pain-inducing toxins from the area and stimulate the repair of the fascia.

How often should I treat a trigger point with a massage tool?

This depends on how acute or chronic the problem is. For a chronic trigger point, you can work the area up to six times a day: persistence pays off. An acute problem may require less work than a chronic one. If you see an experienced practitioner, this will change. But note that the required frequency can vary from case to case because of a variety of factors.

Can I do any harm?

If you identify the correct point and deactivate it with care and love, the answer is—probably not. There may well be some soreness for up to 48 hours after treatment. If the soreness lasts or gets worse, please discontinue treatment immediately and seek a medical opinion.

Will bruising occur?

Bruising should not occur if you follow the instructions, but may occur if you are on blood-thinning medication. With time and experience, bruising becomes increasingly rare. We have found that it is not the depth of treatment (force) that will cause a bruise but usually the result of pressure being applied too quickly (velocity). Try to feel the muscles and tender nodules beneath the skin. Arnica creams and tablets have been suggested to reduce the incidence and severity of bruising. Unfortunately some people bruise more easily than others.

Will I be sore afterwards or experience side effects?

It is not uncommon to feel sore or bruised for 24–36 hours after treatment, but it is unclear whether these conditions are treatment effects or side effects. Treatment reactions are common and most severe following cervical manipulation; they are, somewhat controversially, proportionally related to treatment efficacy. Reactions may include other associated symptoms, such as fatigue or "flu-like" feelings, increased peeing, lethargy, and increased sleepiness. Copyright © Niel Asher Healthcare. All rights reserved.

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