

# [Massaging chronic spasm upper trapezius health and social care essay](https://assignbuster.com/massaging-chronic-spasm-upper-trapezius-health-and-social-care-essay/)

In our today's rushing society a lot of people complain about neck problems. This is the results of taking too less care for ourselves and of a general lack of body awereness. Bad postures and inappropriate working situations create muscular and structural unbalances in our body. Therefore a lot of people seek help from physiotherapists. In our case-study below we want to introduce a patient with chronic spasms of the upper trapezius muscle. We will focus on patient history, clinical findings and finally on treatment. But first we will give a short introduction about the affected area, application and benefits of the massages themselves . The trapezius muscle is divided in three parts – the pars ascendens, pars transversa and pars descendens. The upper trapezius muscle finds its origin at the occipital bone and the spinous processes of cervical spine and inserts at the lateral third of the clavicle. Its function is threefold: it elevates the clavicle, elevates and laterally rotates the scapula, and at the cranio-cervical level, it is responsible for extension, homolateral side bending, and contralateral rotation. Muscle spasm mostly occurs due to overuse or prolonged stressing. Because of inadequate circulation and electrolyte supply the muscle will react with powerful contractions, the so-called spasms. Chronic spasm can be described as a feeling of soreness. According to evidence-based practice, many effects attributed to massage still remain unproven. But all therapists agree on the relaxing and positive psychogenic effect of massage, whatever the technique. With massage, therapists activate hormones release, which either stimulate or calm. Relaxation is caused by a hormone called oxytocin . Massage also stimulates the somatic and autonomic components of the nervous system, normalizing and harmonizing their actions. For our case we consider three types of massages to be helpful. in the following abstracts we will give you a short explanation about them. Classical (Swedish) MassageThe Swedish massage is the most used form of massage in the Western world. It either works on relaxation, stress relief or as a post-exercise treatment. Massage therapists use different techniques like stroking, squeezing, friction and tapotement, to work toward the before mentioned goals. Thereby the superficial and deep muscles will be massaged with the Swedish technique, which according to Goats (1991) permits, " the alleviation of muscle spasm […] and local analgesia". This is one of the reasons why we want to include classical massage into the treatment for our patient. Connective Tissue Massage (CTM)CTM is by concept a reflex therapy. It focuses on cutaneovisceral autonomic reflexes which should focus on a balance between sympathetic and parasympathetic nervous system. It also causes vasodilation. According to Goats (1994) "[s]uch effects upon blood flow also suggest that massage should improve the performance of fatigued muscle. Massaged muscle fibres display less spasm[...]". The technique acts upon skin zones which are related to specific internal organs. Stimulating the skin and fascias will bring benefits to the associated organ. Hypersensitivity of the skin or increased muscle tone can be an indication of a dysfunction of internal organs. Trigger Point MassageTrigger points are painful spots within a muscle. They appear as interlocked sarcomeres which are prevented by chemicals to release from their state. This thereby stops blood flow in that specific area which in turn causes metabolites to stagnate and pain to occur. The practice of Trigger Point Massage consists in applying moderate pressure on the Trigger Point and holding it for a few seconds. Afterwards effleurage strokes and passive stretching can be used on the affected muscle. 2 Care question (rid of pain, regain fct. Abilities)

## 3 PT diagnose

a. ICF, especially impairment- and disability- assessment outcomes. Use RPS formatb. Short history and assessmentc. Provocation of the complaintsa) RPS Formb)

## History

A 35 year old female patient called Katie Holmes visits the physiotherapy clinic and complains about bilateral tense feeling and pain in the shoulder and neck region, the right side being worse than the left side. The onset was two (would prefer 3 because chronic signs are slow to develop and become visible…) months ago and was harmless at the beginning, but worsened gradually. There was no trauma causing the onset of the pain and the tense feeling. The patient is married and has two children. She works as a secretary and does the whole housework, which is a lot, as she lives in a big house. She describes the pain as being dull and aching as well as really disturbing during everyday activities. The condition of the patient slightly ameliorates at rest and lying supine. Moreover the patient suffers from considerable bilateral tension headache which she thinks comes from her stressful job and the immense amount of work to be accomplished at home everyday. She has pain when carrying her child, while working (as she sits the whole day on a desk which is too high), while doing sports like swimming and fitness. She also has trouble grabbing for things in the kitchen for instance, when going for a walk with her big dog which pulls a lot and is hard to keep under control. Her goal is to get rid of the muscle spasm and the pain in the shoulder and neck regions as well as to function again normally during daily (everyday) activities. If we have as a goal " Stimulation of dysfunctional internal organs" we should name a complaint as a prerequisite for this goal. For head dysfunction, headache is already mentioned but we may also add insomnia and/or migraine (was in Shivu ppt)

## Assessment

The physiotherapist observes that the muscle tone in the shoulder and neck region is increased (mention a few assessment techniques: palpation, stroking …)There is muscle spasm of the trapezius muscle on both sides, the right side being a little more stiff and tensed than the left side (which may be related to the woman being right-handed). The right shoulder is a little higher than the left shoulder and the physiotherapist discovers a trigger point in the right neck region. (perhaps you can find a picture showing which one) I have a picture which shows a trigger point. It is not possible to include it in this document. I uploaded it! Also say that we are sure it is a trigger point because:- sensitive spot in a palpable taut band of skeletal muscle fibers.- referred pain, elicited by mechanical stimulation (palpation)- local twitch response, elicited by mechanical stimulation (palpation)1. Would be necessary to invent angles for flexion, extension, and rotation (showing limitations, this way we have improvement tracks and can assess it again at the end of treatment) Name that she scored ….° of flex etc. using the Cervical Range-of-Motion Instrument. 2. Let’s say something about head area and between scapula area (corresponding to head organ): skin pale, hypersensitivity, moisty (over activity of sympathetic system) -> to justify CTM3. Please put a score for VAS scale as we have it as a measurement tool for the outcomes. Nicolas said that as a short time goal that VAS should decrease to <4 at least. 4. We need also a score for NDI and/or Bournemouth questionnaire outcomes. Maybe we canfill out the form and add it as an appendix. Just an idea.

## c) Provocation of the complaints

The complaints are provoked by doing movements like elevation and depression of the scapula, as well as rotation (which one?) of the scapula (would say more or also neck/head). Moreover, the problem is worst in the evening after a long working day because of sitting all the time in a bad posture at work due to a desk which is too high. Put maybe also VAS score here to indicate how it changes with activity.

## 4 PT strategy

a. Goals short term and long term (what first and why)Goals are formulated with the SMART method, to ensure their validity and clarity. S for Specific, M for Measurable, A for Achievable, R for Realistic, T for Time-based. Short Term Goals (4 weeks)Lessen acute symptoms to increase the patient well-being (release of pain, stress and muscle tone)

## Goal 1 - Pain Reduction

S= Reducing pain in the neckM= VAS (Visual Analog Scale)A= Using pain relief techniques and trigger point massageR= The above mentioned techniques have proved to reduce painT= " Worst experienced pain during the week" must be inferior to 4 on VAS at week 4

## Goal 2 - Muscle Tension Release

S= Reducing tension in muscular structures around the neck and upper thoracic spineM= Assessment techniques (observation and palpation)A= Using stretching and massage (Swedish, connective tissue and trigger point)R= The above mentioned techniques have proved to reduce muscle toneT= Normalized muscle tone at week 2Long Term Goals (4-10 weeks)Consolidate changes obtained on short term, promote full return to ADL, correct pain or tension triggers like incorrect posture

## Goal 3 - Functional Improvements (Cervical ROM)

S= Increasing ROM in cervical spine, especially rotationM= ROM measurementA= Using stretching, exercise and massage to bring the patient back to normative valuesR= Absence of structural deformities and efficiency of chosen techniquesT= Normal ROM expected after about 10 weeks

## Goal 4 - Correct Posture

S= Teaching the patient to seat and stand in an ergonomic wayM= No sensation of tension, no fatigue during and at the end of the day (reported by patient), correct posture (observation by PT during sessions)A= By educating the patient during sessionsR= Release of neck muscles tension, especially trapeziusT= After completion of the treatment (10 weeks) the patient should hold a correct posture withoutbeing reminded

## Goal 5 - Stimulation of dysfunctional internal organs

S= Bringing skin and muscle tone to a normal condition for the head reflex area (neck band andbetween scapula area)M= CTM assessment techniques (skin mobility, stroking...)A= Using CTM massageR= Skin and muscles tone back to a normal state (same as other healthy area)T= Significant improvement expected after 10 weeks of treatmentb. Treatment plan, short term and long term (describe the place and role of massage treatment within a physiotherapy program)Rationales for massage treatment are detailed further in §4. c (and are also partly mentioned in the introduction). Details about the home exercise program are given in §4. d. 1. Short term - acute pain phase (week 1)WeekTreatmentDurationFrequency1Trigger point massage (alleviate pain + release muscles tensions)1 mn per TGP\*3x per week1Swedish massage (alleviate pain + release muscles tensions)20 mn3x per week2. Short term - Week 2 to 4WeekTreatmentDurationFrequency2-4Trigger point massage (alleviate pain + release muscles tensions)1 mn per TGP\*1x per week2-4Connective Tissue massage (restore balance sympathetic/para-sympathetic, stimulate diseased organs)40 mn5x per week (daily)2-4Home exercises: stretching of upper trapezius6 times 10s3x per day2. Long term - Week 4 to 10WeekTreatmentDurationFrequency4-10Connective Tissue massage (restore balance sympathetic/para-sympathetic, stimulate diseased organs)40 mn3x per week (W4-6)2x per week (W6-10)4-10Reinforcement of correct posture (sitting, standing) during sessions + self correction correction at home2 mneach session4-10Home exercises: stretching of upper trapezius (hold-relax)6 times 10s2x per week3x per day4-10Home exercises: Strength/endurance of weakened deep neck flexors5 mnDaily4-10Home exercises: Mobility of cervical spine and upper thoracic spine10 minDailyc. Choice of massage technique with rational (with the general aims and effects of the various massage techniques you have chosen)Trigger pointMyofascial trigger points (MTP) constitute a widespread cause of musculo-skeletal dysfunction and pain in patients consulting physical therapists. They can be associated to most of the myofascial pain syndromes (Blanco et al. 2006). To deactivate trigger points, the therapist may use " trigger points pressure release" techniques, which aims at lengthening the sarcomeres at the site of the MTP and proves efficient to reduce muscle tension and thus to increase ranges of motion (Simons 2004). Different modalities exist for the application of the " trigger points pressure release". In the " barrier release concept", developped by Lewit in 1999, the therapist positions his thumbs at the MTP site, and progressively applies a downward pressure, until he meets a tissue resistance, called barrier. The location is generally painless although patients often mention tenderness. The therapist keeps up with the pressure until he feels under his palpating thumb a release in muscle tension (Simons et al. 1999). The release process normally lasts one minute (general indication) and is applied successively to all identified MTP. However, the treatment can be stopped as soon as the MTP is released or when the treatment reveals too uncomfortable for the patient. Connective tissue massageConnective tissue massages (CTM) presents a double advantage. First they induce all the recognized benefits of a traditional massage (Swedish or others), by promoting " local responses, which include the alleviation of muscle spasm, increased mobility of connective tissue, superficial hyperaemia and local analgesia" (Goats et al. 1991). It is even postulated that CTM produce a higher antalgic effect than classical massages. The vigorous activation of mechano-receptors induces a strong inhibition of the transmission of concurrent nociceptive signals (pain gate theory) and thus lessens the patient discomfort. Secondly CTM mediate interactions between the deep (organs) and superficial tissues, by means of neurological reflexes called cutaneo-visceral reflexes. These reflexes solicit both the somatic nervous system, through the numerous receptors present in the skin and the underlying tissues, and the autonomic nervous system. Empirical findings have revealed that the mechanical stimulation brought by CTM produces positive therapeutic results for a diseased organ innervated by the same dermatome (Goats et al. 1991). d. Short and long term homework programStretchingAccording to Grieve et al. (2011), passive stretching of muscles is a efficient complement to " trigger points pressure release" massage. The addition of stretching has proven to bring more benefits than MTP therapy solely. The patient will consequently be given stretching exercise with a focus on trapezius. Passive stretching and hold-relax techniques will be taught to the patient. Stretching will also reveal useful by itself to improve neck and head mobility, as upper trapezius is at the same time a neck extensor, a lateral flexor and a contralateral rotator. Exercise1) To restore and preserve head-neck mobilityEnd position will be kept for a few seconds for all exercises (most efficient way to maintain or increase movement).- Neck flexion: head forward with the chin against chest, face stares down at the floor.- Neck extension: head goes back until face points at ceiling- Neck rotation: turn head slowly to one side until end range, five times to one side then other side. 2) To restore upper cervical mobility and endurance of deep neck flexors- Neck retractionDuring retraction, keep your face straight during retraction, pulling head back and chin down.(Used to correct abnormal flexion posture of the lower neck, and abnormal extension posture of upper neck, namely our tendency to put the head forwards in a poor posture)- Upper neck noddingMove the upper cervical joints into flexion with nodding movement(Used to counteract bad postural habits: our chin tends to poke forward, which puts our upper neck joints into extension)

## 5 Evaluation (how to measure in between and final outcomes).

## Visual Analogue Scale (VAS)

VAS is a numeral scale in which the patient has to estimate their pain severity – 0 means no pain at all and 10 means worst pain that was ever experienced.

## Cervical Range-of-Motion Instrument (CROM)

This is a tool that offers precise measurements for the cervical range of motion.

## Neck Disability Index (NDI)/

## Bournemouth Questionnaire

These two questionnaires are tools to analyze the neck pain and limitations in patients everyday life.