



# QUICK GUIDE TRIGGER POINT SHOCK WAVE THERAPY TST®

W. Bauermeister MD PhD

1	Head – masseter .....	5
2	Neck .....	6
2.1	Neck – posterior .....	6
2.2	Neck – sub occipital .....	7
2.3	Neck – lateral, scalene .....	8
3	Shoulder .....	9
3.1	Shoulder – levator scapulae.....	9
3.2	Shoulder – supraspinatus.....	10
3.3	Shoulder – infraspinatus.....	11
3.4	Shoulder – teres major .....	12
3.5	Shoulder – deltoid .....	13
3.6	Shoulder – subscapularis .....	14
4	Pectorals.....	15
5	Serratus anterior.....	16
6	Arm and Hand .....	17
6.1	Upper Arm .....	17
6.1.1	Upper Arm – biceps brachii.....	17
6.1.2	Upper Arm – triceps brachii.....	18

6.2	Lower Arm .....	19
6.2.1	Lower Arm – flexors .....	19
6.2.2	Lower Arm – extensors .....	20
6.3	Hand – palmar .....	21
7	Abdomen .....	22
8	Back.....	23
8.1	Upper Back.....	23
8.1.1	Upper Back – trapezius, total .....	23
8.1.2	Upper Back – upper trapezius.....	24
8.1.3	Upper Back – T1 – T12 .....	25
8.2	Back – erector spinae.....	26
8.3	Lower Back.....	27
8.3.1	Lower Back – quadratus lumborum .....	27
8.3.2	Lower Back – sacrum .....	28
9	Hip .....	29
9.1	Hip – total .....	29
9.2	Hip – medial.....	30
9.3	Hip – lateral .....	31

9.4	Hip – sacrotuberous ligament.....	32
9.5	Hip – quadratus femoris .....	33
9.6	Hip – ischial tuberosity .....	34
10	Leg and Foot .....	35
10.1	Upper Leg.....	35
10.1.1	Upper Leg – quadriceps femoris .....	35
10.1.2	Upper Leg – vastus lateralis.....	36
10.1.3	Upper Leg – tensor fasciae latae .....	37
10.1.4	Upper Leg – hamstrings .....	38
10.1.5	Upper Leg – adductors.....	39
10.2	Lower Leg.....	40
10.2.1	Lower Leg – gastrocnemius .....	40
10.2.2	Lower Leg – peronei.....	41
10.2.3	Lower Leg – tibialis anterior .....	42
10.2.4	Lower Leg – achilles tendon.....	43
10.3	Foot – plantar fascia.....	44

## 1 Head – masseter

<b>Indication</b>	Pain in: toothache of unknown cause, inner and outer ear pain Temporomandibular joint (TMJ) problems and sensitivity to heat or cold of the teeth
<b>Patient position</b>	Sitting
<b>Energy Level</b>	2-10
<b>Impulses</b>	1000
<b>Most sensitive area</b>	Insertions
<b>Caveat:</b>	Use low energy level on the muscle insertions because of intense referred pain into the jaw. When the pain decreases the energy level can be increased.



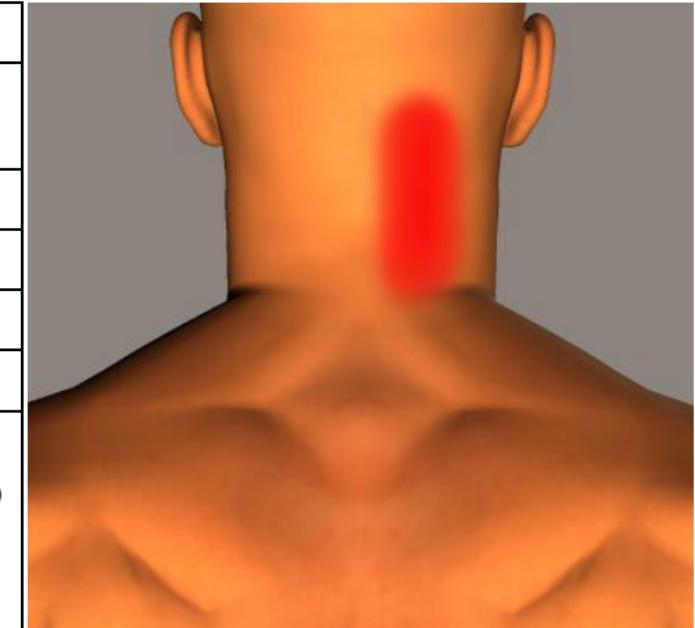
## **2      Neck**

### **2.1    Neck – posterior**

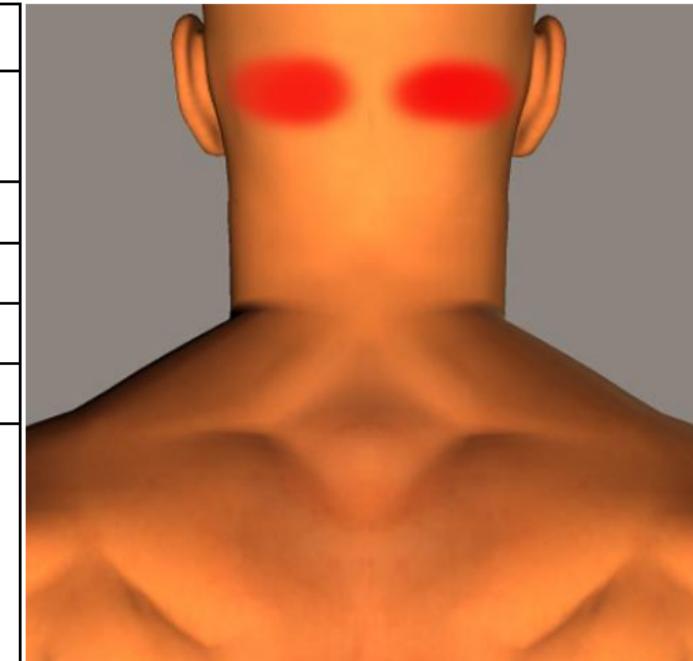
<b>Indication</b>	Pain in: neck, shoulder and headache Vertigo
<b>Patient position</b>	Sitting
<b>Energy level</b>	3-20
<b>Impulses</b>	1500
<b>Most sensitive area</b>	Sub occipital region

**Caveat:**

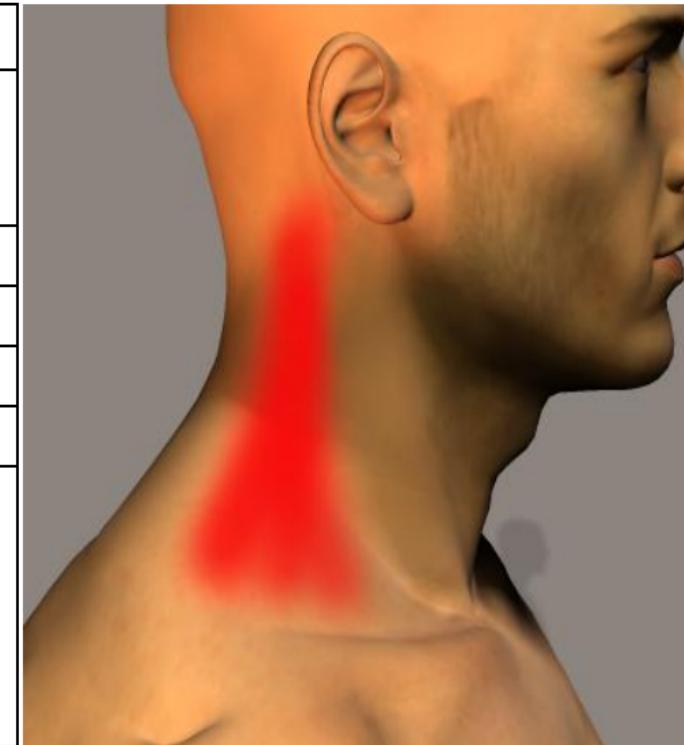
Coughing and tickling of the throat may occur. Reduce the energy level to make it more bearable for the patient.



<b>2.2 Neck – sub occipital</b>	
<b>Indication</b>	Pain in: neck, shoulder and headache Vertigo
<b>Patient position</b>	Sitting
<b>Energy level</b>	3-9
<b>Impulses</b>	1000
<b>Most sensitive area</b>	Near mastoid process
<b>Caveat:</b> Work with low energy level in patients with tinnitus when you treat near the mastoid process. Tinnitus may increase for a day or two, but reverts back to normal. Don't treat patients with a history of combined sudden hearing loss and tinnitus.	



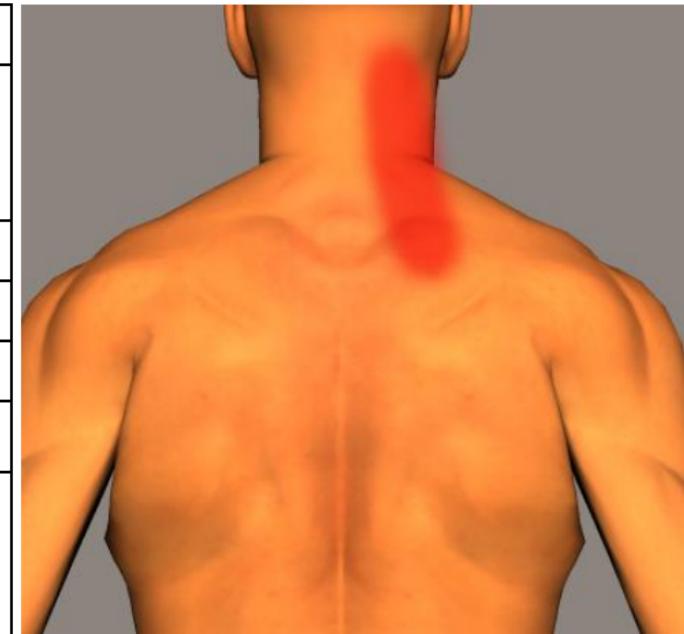
<b>2.3 Neck – lateral, scalene</b>	
<b>Indication</b>	Pain in: neck, shoulder, chest, upper extremity, mid thorax and headache Vertigo
<b>Patient position</b>	Sitting
<b>Energy level</b>	2-14
<b>Impulses</b>	1500
<b>Most sensitive area</b>	Near mastoid process
<b>Caveat:</b> Coughing and tickling of the throat may occur. Reduce the energy level to decrease and you can slowly increase the energy level. Work with low energy level in patients with tinnitus when you treat near the mastoid process. Tinnitus may increase for a day or two, but reverts back to normal. Don't treat patients with a history of combined sudden hearing loss and tinnitus.	



### 3      Shoulder

#### 3.1    Shoulder – levator scapulae

<b>Indication</b>	Pain in: neck, shoulder, chest, upper extremity, mid thorax, lower back and headache Vertigo
<b>Patient position</b>	Sitting
<b>Energy level</b>	4-15
<b>Impulses</b>	2000
<b>Most sensitive area</b>	Upper neck, insertion of levator scapulae.
<b>Caveat:</b>	Coughing and tickling of the throat may occur. Reduce the energy level to make it more bearable for the patient and slowly increase the energy level.



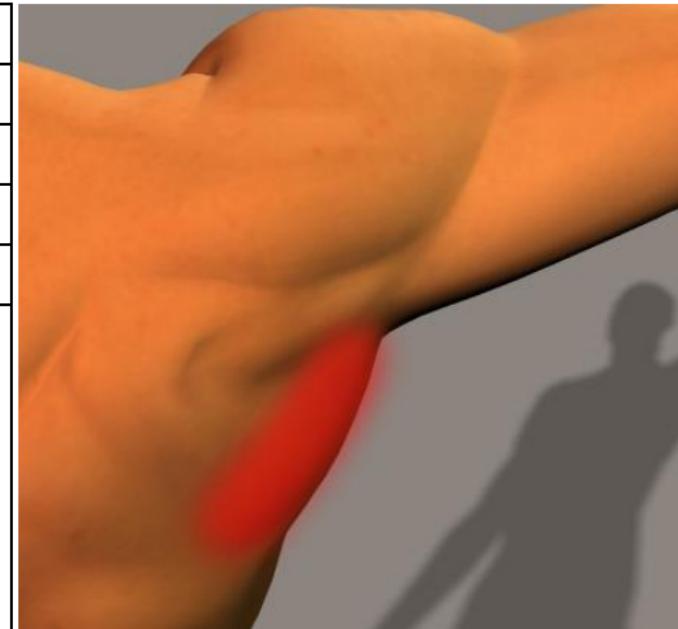
<b>3.2 Shoulder – supraspinatus</b>	
<b>Indication</b>	Pain in: neck, shoulder and arm
<b>Patient position</b>	Sitting
<b>Energy level</b>	4-9
<b>Impulses</b>	350
<b>Most sensitive area</b>	Lateral aspect



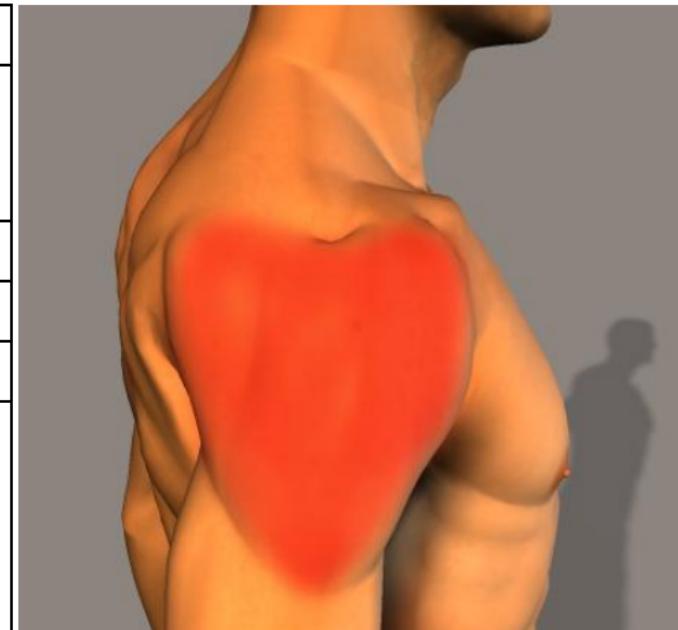
<b>3.3 Shoulder – infraspinatus</b>	
<b>Indication</b>	Pain in: neck, shoulder, arm, upper extremity, mid thorax and lateral chest
<b>Patient position</b>	Sitting or prone
<b>Energy level</b>	3-12
<b>Impulses</b>	1400
<b>Most sensitive area</b>	Posterior insertion of deltoid



<b>3.4 Shoulder – teres major</b>	
<b>Indication</b>	Pain in: shoulder, arm and lateral chest
<b>Patient position</b>	Sitting or prone
<b>Energy level</b>	4-7
<b>Impulses</b>	1000
<b>Most sensitive area</b>	None



<b>3.5 Shoulder – deltoid</b>	
<b>Indication</b>	Pain in: neck, shoulder, upper extremity and headache Lateral epicondylitis
<b>Patient position</b>	Sitting
<b>Energy level</b>	2-17
<b>Impulses</b>	1800
<b>Most sensitive area</b>	Insertion and attachments areas.



<b>3.6 Shoulder – subscapularis</b>	
<b>Indication</b>	Pain in: neck, shoulder, arm, mid thorax and chest
<b>Patient position</b>	Supine
<b>Energy level</b>	4-20
<b>Impulses</b>	1800
<b>Most sensitive area</b>	Upper medial and lateral insertion.



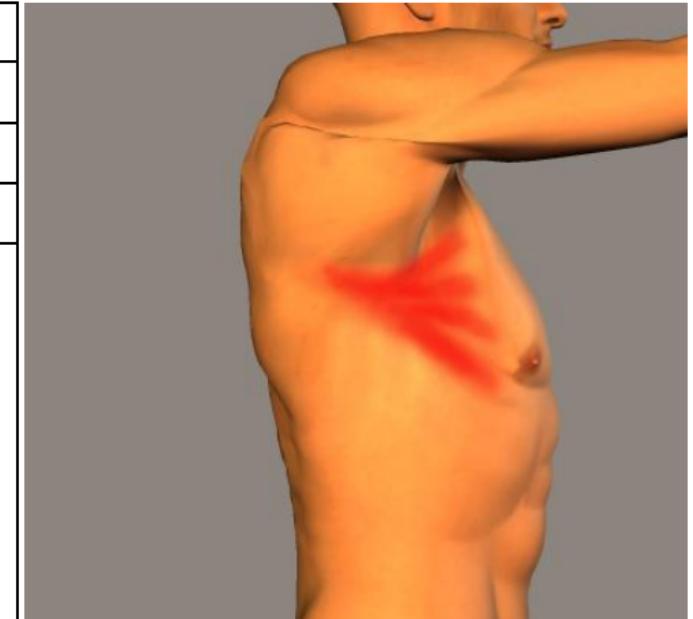
## **4 Pectorals**

<b>Indication</b>	Pain in: shoulder, arm and chest
<b>Patient position</b>	Supine
<b>Energy level</b>	3-20
<b>Impulses</b>	2100
<b>Most sensitive area</b>	Humerus area and lateral part at the rib insertion



## **5 Serratus anterior**

<b>Indication</b>	Mid the racket pain
<b>Patient position</b>	Side or sitting
<b>Energy level</b>	3-9
<b>Impulses</b>	1800
<b>Most sensitive area</b>	Tip of the scapula and the rib insertions



## 6      Arm and Hand

### 6.1    Upper Arm

#### 6.1.1    Upper Arm – biceps brachii

<b>Indication</b>	Pain in: shoulder, upper and lower arm
<b>Patient position</b>	Sitting or supine
<b>Energy level</b>	2-15
<b>Impulses</b>	1700
<b>Most sensitive area</b>	Insertion



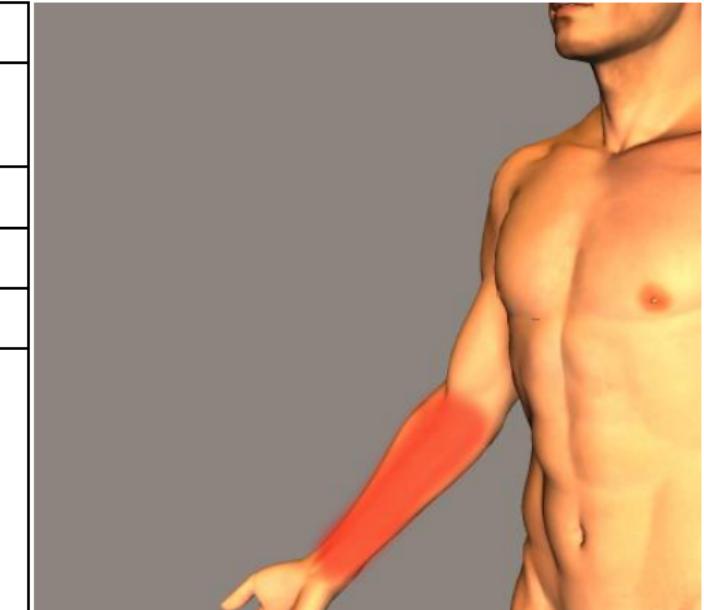
<b>6.1.2 Upper Arm – triceps brachii</b>	
<b>Indication</b>	Pain in: shoulder, upper and lower arm
<b>Patient position</b>	Sitting or prone
<b>Energy level</b>	3-20
<b>Impulses</b>	1800
<b>Most sensitive area</b>	Insertion



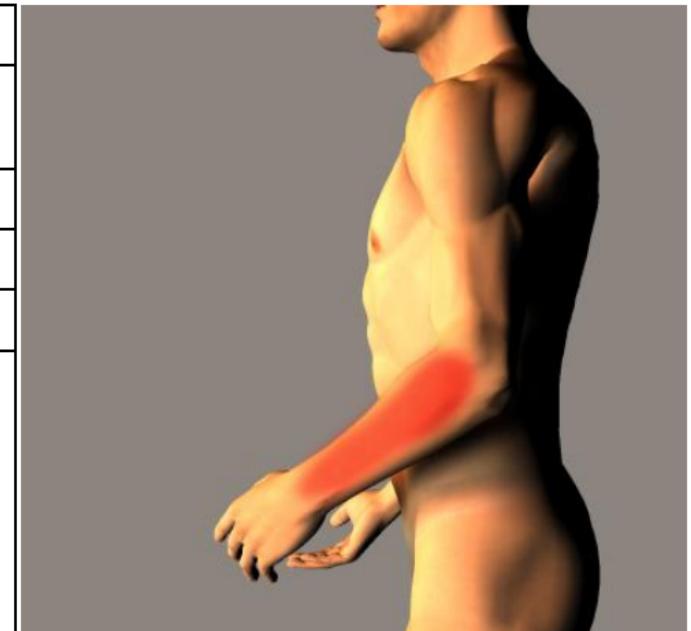
## 6.2 Lower Arm

### 6.2.1 Lower Arm – flexors

<b>Indication</b>	Pain in: shoulder, upper and lower arm, wrist, hand and finger
<b>Patient position</b>	Sitting or supine
<b>Energy level</b>	4-12
<b>Impulses</b>	1500
<b>Most sensitive area</b>	Insertion



<b>6.2.2 Lower Arm – extensors</b>	
<b>Indication</b>	Pain in: shoulder, upper and lower arm, wrist, hand and finger
<b>Patient position</b>	Sitting or prone
<b>Energy level</b>	4-12
<b>Impulses</b>	1500
<b>Most sensitive area</b>	Insertion



<b>6.3 Hand – palmar</b>	
<b>Indication</b>	Pain in: wrist, hand and finger
<b>Patient position</b>	Sitting or prone
<b>Energy level</b>	2-8
<b>Impulses</b>	1000
<b>Most sensitive area</b>	None



## 7 Abdomen

<b>Indication</b>	Pain in: abdomen and thorax Bowel dysfunction, bladder dysfunction, dysmenorrheal and chronic nonbacterial prostatitis
<b>Patient position</b>	Supine
<b>Energy level</b>	5-20
<b>Impulses</b>	1800
<b>Most sensitive area</b>	None
<b>Caveat:</b>	Include the origins of the abdominal muscles on the ribs.



## 8 Back

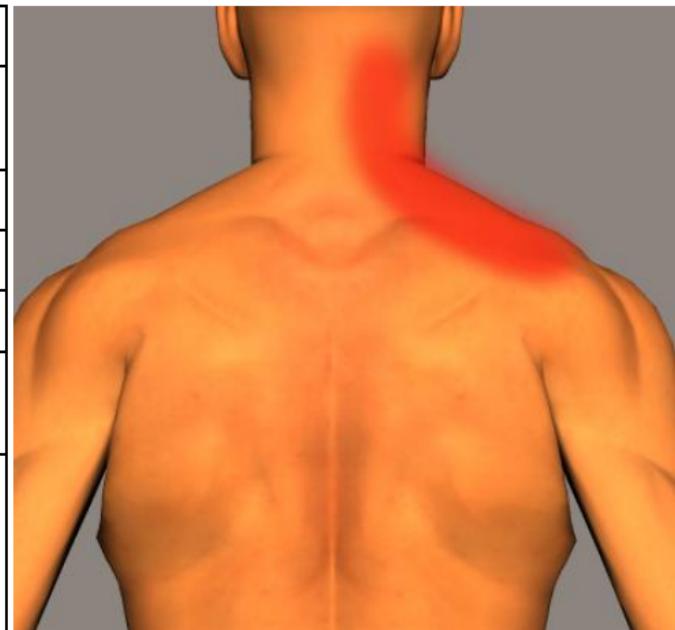
### 8.1 Upper Back

#### 8.1.1 Upper Back – trapezius, total

<b>Indication</b>	Pain in: neck, shoulder, arm, thorax, lower back, scapular and headache
<b>Patient position</b>	Sitting
<b>Energy level</b>	2-19
<b>Impulses</b>	1800
<b>Most sensitive area</b>	Sub occipital region, lateral supraspinatus region, medial boarder of scapula
<b>Caveat:</b>	Coughing and tickling of the throat may occur, especially when you work in the neck area. Reduce the energy level to make it more bearable for the patient and slowly increase the energy level.



<b>8.1.2 Upper Back – upper trapezius</b>	
<b>Indication</b>	Pain in: neck, shoulder, arm, thorax, lower back, scapular, anterior chest and headache
<b>Patient position</b>	Sitting
<b>Energy level</b>	2-18
<b>Impulses</b>	1200
<b>Most sensitive area</b>	Sub occipital region, insertion of levator scapulae, lateral supraspinatus area.
<b>Caveat:</b>	Coughing and tickling of the throat may occur. Reduce the energy level to make it more bearable for the patient and slowly increase the energy level.



<b>8.1.3 Upper Back – T1 – T12</b>	
<b>Indication</b>	Pain in: neck, shoulder, arm, mid-thorax, scapula, chest, lower back and headache Breathing difficulties exertional asthma and vertigo
<b>Patient position</b>	Sitting or supine
<b>Energy level</b>	2-20
<b>Impulses</b>	1400
<b>Most sensitive area</b>	Medial aspect of shoulder blade



<b>8.2 Back – erector spinae</b>	
<b>Indication</b>	Pain in: upper, middle and lower back, hip, knee, lower extremity, chest, abdomen, pelvis
<b>Patient position</b>	Sitting or supine
<b>Energy level</b>	3-20
<b>Impulses</b>	2500
<b>Most sensitive area</b>	Medial aspect of shoulder blade, lumbar area 1-3, sacral area



### 8.3 Lower Back

#### 8.3.1 Lower Back – quadratus lumborum

**Indication** Pain in: upper, middle and lower back, sacroiliac joint, hip, knee, lower extremity, abdomen, pelvis and sciatica

**Patient position** Sitting or supine

**Energy level** 2-20

**Impulses:** 1800

**Most sensitive area** None

**Caveat:**

The Quadratus lumborum area requires high energy level because trigger points can be located in the ventral psoas.



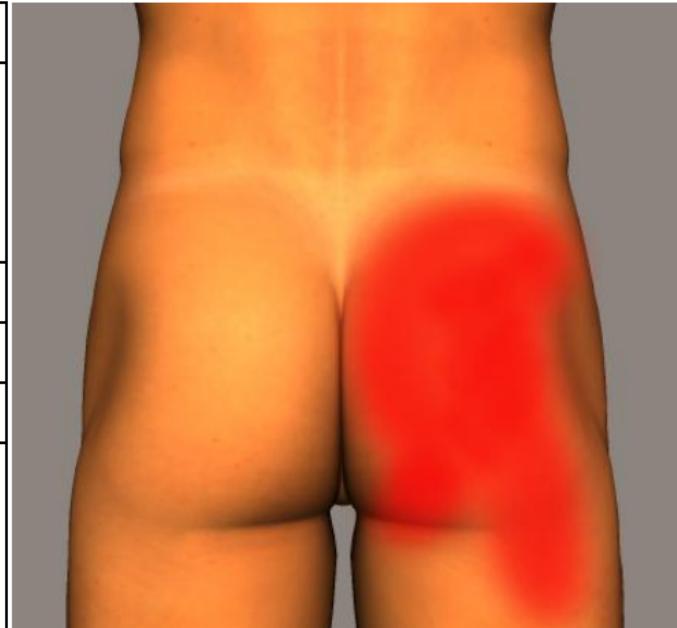
<b>8.3.2 Lower Back – sacrum</b>	
<b>Indication</b>	Pain in: lower back, iliac crest, hip, lower extremity, pelvic and sciatica
<b>Patient position</b>	Sitting or supine
<b>Energy level</b>	2-19
<b>Impulses</b>	1200
<b>Most sensitive area</b>	Above the sacroiliac joint area



## 9 Hip

### 9.1 Hip – total

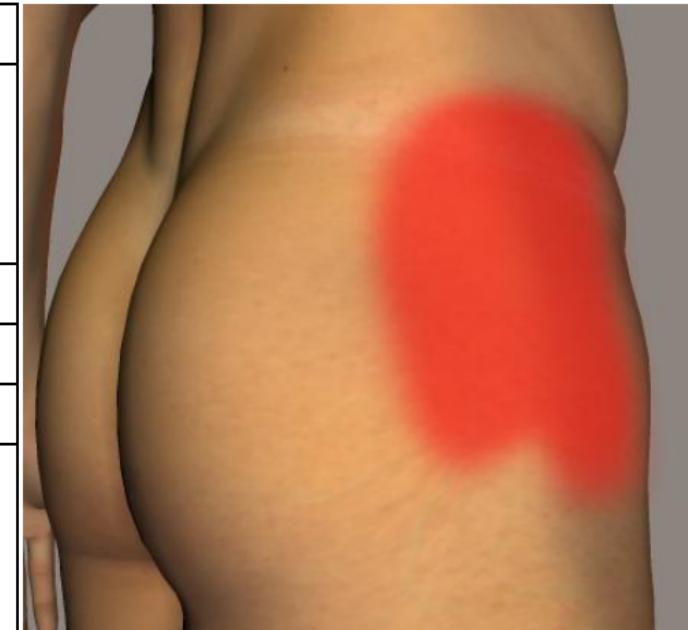
<b>Indication</b>	Pain in: lower back, sacroiliac joint, hip, trochanter, groin, knee, lower extremity, Achilles tendon, ankle, plantar fascia and sciatica Bursitis
<b>Patient position</b>	Supine
<b>Energy level</b>	1-20
<b>Impulses</b>	2000
<b>Most sensitive area</b>	Muscle insertions around the trochanter major, quadratus femoris area, lateral hip, sacrotuberous ligament area



<b>9.2 Hip – medial</b>	
<b>Indication</b>	Pain in: lower back, sacroiliac joint, hip, trochanter, groin, knee, lower extremity, Achilles tendon, ankle, plantar fascia and sciatica Bursitis
<b>Patient position</b>	Supine
<b>Energy level</b>	5-20
<b>Impulses</b>	1100
<b>Most sensitive area</b>	Muscle insertions around the trochanter major, quadratus femoris area, sacrotuberous ligament area



<b>9.3 Hip – lateral</b>	
<b>Indication</b>	Pain in: lower back, sacroiliac joint, hip, trochanter, groin, knee, lower extremity, Achilles tendon, ankle, plantar fascia and sciatica Bursitis
<b>Patient position</b>	Supine
<b>Energy level</b>	10-20
<b>Impulses</b>	1800
<b>Most sensitive area</b>	Upper Ilium, near the iliac crest, around the trochanter major



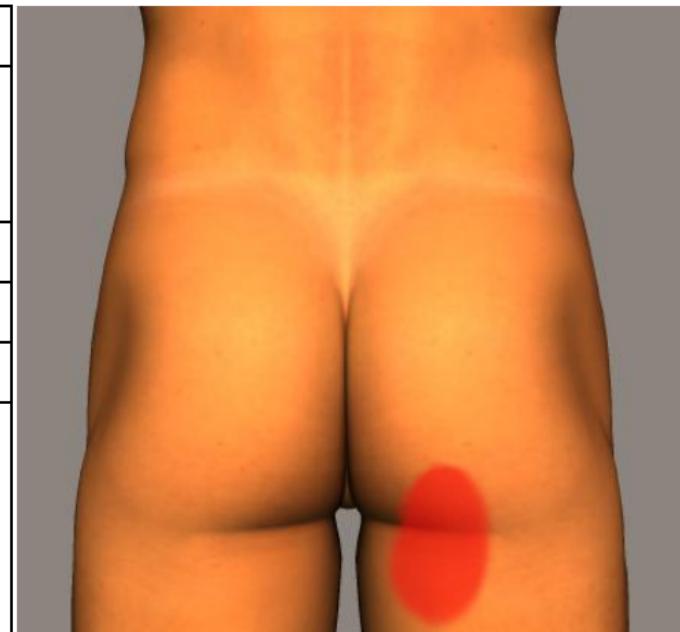
<b>9.4 Hip – sacrotuberous ligament</b>	
<b>Indication</b>	Pain in: pelvis, rectum, hip, groin and lower back Chronic abacterial prostatitis
<b>Patient position</b>	Supine
<b>Energy level</b>	4-17
<b>Impulses</b>	1200
<b>Most sensitive area</b>	None



<b>9.5 Hip – quadratus femoris</b>	
<b>Indication</b>	Pain in: hip, sciatica, knee and lower extremity
<b>Patient position</b>	Supine
<b>Energy level</b>	4-13
<b>Impulses</b>	1500
<b>Most sensitive area</b>	None
<b>Caveat:</b> The Quadratus femoris area is extremely sensitive and refers pain to the groin and down the leg into the foot	



<b>9.6 Hip – ischial tuberosity</b>	
<b>Indication</b>	Pain in: lower back while sitting, hip, knee, foot and sciatica Insertional tendinitis
<b>Patient position</b>	Prone
<b>Energy level</b>	4-10
<b>Impulses</b>	1400
<b>Most sensitive area</b>	None



## 10 Leg and Foot

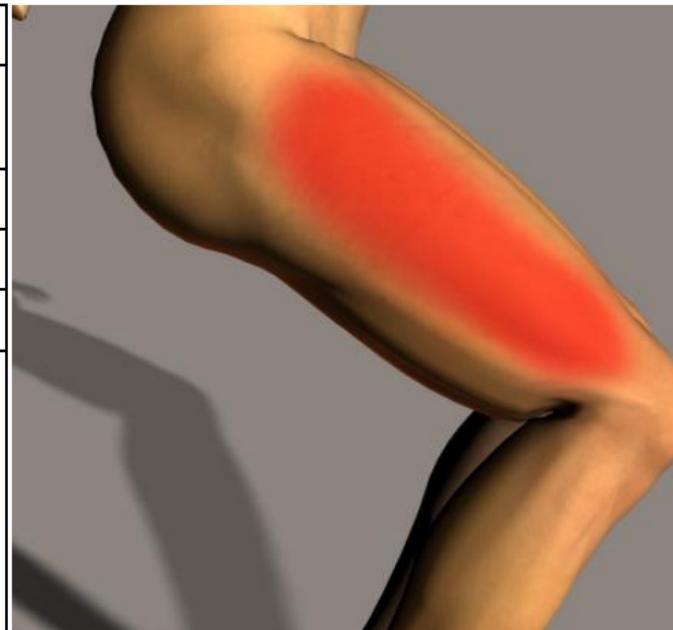
### 10.1 Upper Leg

#### 10.1.1 Upper Leg – quadriceps femoris

<b>Indication</b>	Pain in: knee, groin, Achilles tendon, plantar fascia, hip, lower back, upper back and cervical
<b>Patient position</b>	Supine
<b>Energy level</b>	2-20
<b>Impulses</b>	2300
<b>Most sensitive area</b>	Close to the anterior iliac spine, the lower 3rd of the quadriceps muscle, vastus lateralis



<b>10.1.2 Upper Leg – vastus lateralis</b>	
<b>Indication</b>	Pain in: trochanter, adductor, hip, knee and sciatica
<b>Patient position</b>	Supine or side
<b>Energy level</b>	2-18
<b>Impulses</b>	1900
<b>Most sensitive area</b>	Lower 3rd of the muscle, near and on the trochanter major, over the tensor fasciae latae



<b>10.1.3 Upper Leg – tensor fasciae latae</b>	
<b>Indication</b>	Pain in: hip, groin, trochanter, knee, abdomen and sciatica
<b>Patient position</b>	Supine or side
<b>Energy level</b>	1-16
<b>Impulses</b>	1600
<b>Most sensitive area</b>	None



<b>10.1.4 Upper Leg – hamstrings</b>	
<b>Indication</b>	Pain in: hip, knee, groin, lower back, upper back, cervical and sciatica
<b>Patient position</b>	Prone
<b>Energy level</b>	2-20
<b>Impulses</b>	2000
<b>Most sensitive area</b>	Ischial tuberosity, quadratus femoris area, lateral part of hamstrings, lower 3rd of the hamstrings



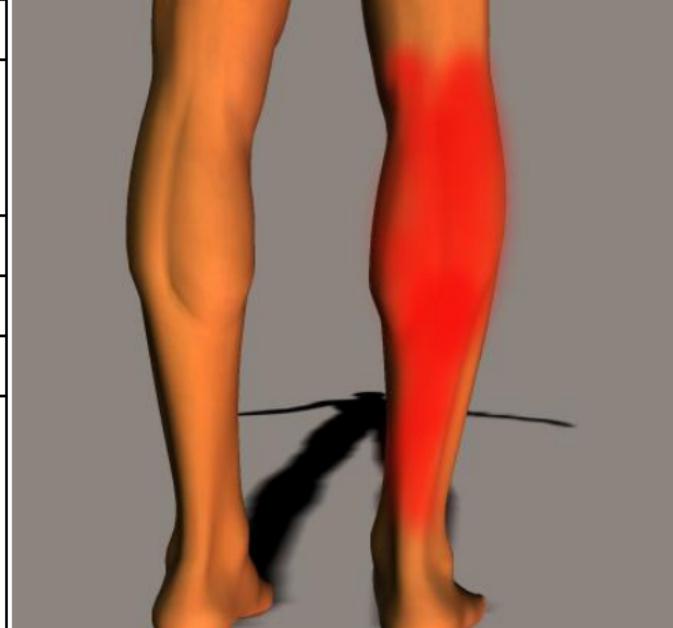
<b>10.1.5 Upper Leg – adductors</b>	
<b>Indication</b>	Pain in: hip, knee, groin, low back, upper back, cervical, abdomen, pelvic and rectum Abacterial prostatitis and interstitial cystitis
<b>Patient position</b>	Supine
<b>Energy level</b>	3-20
<b>Impulses</b>	2600
<b>Most sensitive area</b>	none
<b>Caveat:</b>	Look for strong muscle twitch reaction at the origin of the muscle near the pubic bone.



## 10.2 Lower Leg

### 10.2.1 Lower Leg – gastrocnemius

<b>Indication</b>	Pain in: knee, calf, ankle and medial tibia (shin splints) Achilles tendinitis and plantar fasciitis
<b>Patient position</b>	Prone
<b>Energy level</b>	3-18
<b>Impulses</b>	1700
<b>Most sensitive area</b>	Lateral part of gastrocnemius, medial and lateral origin at the knee joint, soleus and Achilles tendon



<b>10.2.2 Lower Leg – peronei</b>	
<b>Indication</b>	Pain in: knee, calf, medial tibia (shin splints) and ankle Achilles tendinitis and plantar fasciitis
<b>Patient position</b>	Supine
<b>Energy level</b>	4-12
<b>Impulses</b>	1200
<b>Most sensitive area</b>	At origin and insertion



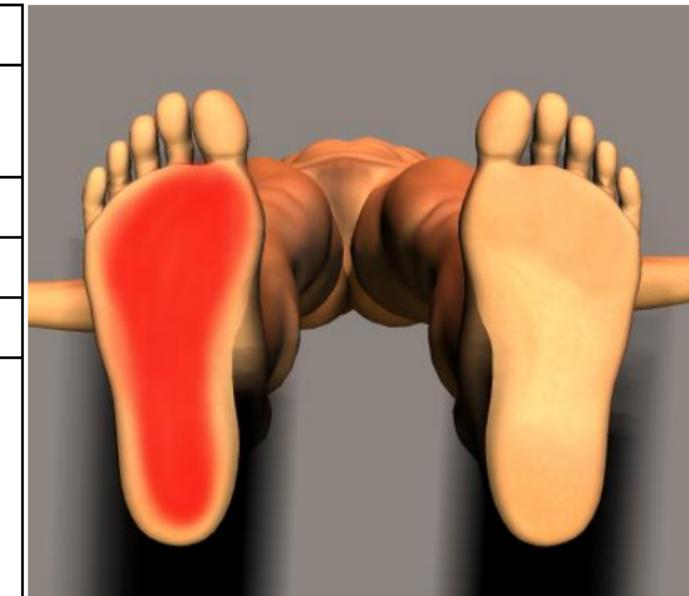
<b>10.2.3 Lower Leg – tibialis anterior</b>	
<b>Indication</b>	Pain in: medial tibia (shin splints), ankle and foot
<b>Patient position</b>	Supine
<b>Energy level</b>	4-16
<b>Impulses</b>	1200
<b>Most sensitive area</b>	None



<b>10.2.4 Lower Leg – achilles tendon</b>	
<b>Indication</b>	Pain in: calf, ankle and foot Retro calcaneal bursitis, plantar fasciitis and Achilles tendinitis
<b>Patient position</b>	Prone
<b>Energy level</b>	2–18
<b>Impulses</b>	2000
<b>Most sensitive area</b>	None



<b>10.3 Foot – plantar fascia</b>	
<b>Indication</b>	Pain in: dorsal and plantar foot and toe Plantar fasciitis and Morton's neuroma
<b>Patient position</b>	Supine or prone
<b>Energy level</b>	4-12
<b>Impulses</b>	1500
<b>Most sensitive area</b>	None



Author:

Dr. Wolfgang Bauermeister  
Toni-Schmid-Straße 45  
81825 München

<http://www.triggoan.eu>

Kindly supported by:



Dornier MedTech Europe GmbH  
Argelsrieder Feld 7  
82234 Wessling

<http://www.dornier.com>