



## ADVANCED STRETCHING FOR FOREARM, WRIST AND HAND PAIN

At Jing, we generally stretch the muscles towards the end of the session after treating fascial restrictions and trigger points (remember this is the 'S' in the HFMAS protocol). It is good practice to stretch every muscle you have treated for trigger points within the same session.

### REVIEW OF DIFFERENT TYPES OF STRETCHING

There are three main types of stretching that we find clinically useful in Jing.

#### 1. Static or Passive stretching

This is a form of static stretching used in treatment where the individual makes no contribution or active muscle contraction. Working with client communication, the therapist or trainer takes the muscle to be stretched to the end of its fullest range of motion and sustains this stretch for at least 15-30 seconds. This technique is often used and integrated into a massage session and is the basis for techniques such as Thai massage and Shiatsu.

Static stretching is also the most widely used individual form of self-stretching as used in yoga.

#### Principles of Passive Stretching

- Position the client (and yourself) so that you can comfortably stretch the muscle. Visualise the location of the muscle underneath your hands.
- Talk your client through what is going to happen and agree a signal to signify when they are at the end of their ROM.
- Client inhales.
- Client exhales on stretch.
- Take stretch slowly until you sense 'end feel' and client communicates that they feel the stretch. Use language like "tell me when you feel the stretch" rather than "tell me when you have reached your limit" (as people often don't like to feel they have reached their limit!)
- Hold for 15-30 seconds then deepen the stretch further if possible, working with client communication and your sense of listening touch. A static stretch held long enough (90-120 seconds) then becomes more of a myofascial stretch - a wonderful way of releasing long held fascial restrictions.

## 2. PNF/Proprioceptive Neuromuscular Facilitation (similar to MET: Muscle Energy Technique)

PNF uses a combination of passive stretch followed by active isometric muscle contraction of the same muscle to increase ROM. The steps in the process are as follows:

- The muscle in focus is elongated, just below the 'end feel'.
- When this position is reached, the client is encouraged to initiate an isometric contraction (i.e. a contraction where there is no movement and the muscle length remains unchanged), by resisting against the therapist's hand. This contraction is held for around 5 seconds. The muscle contraction should employ about 30% of the client's strength.
- The stretching muscle is then allowed to relax for 2 seconds and then stretched further passively (with aid of the therapist) and held in this new position for approximately 5 seconds. Staying at this new muscle length, the whole process is repeated again 3-5 times or until the maximum stretch has been reached.

Physical therapists, physiotherapists, athletic trainers and sports massage therapists often use this technique to obtain a measurable range of motion increase within a session.

More recent methods of PNF ask the client to actively take their body part to end range rather than the therapist doing this passively. This is also a viable option.

#### 3. Active Isolated Stretching

Aaron Mattes developed this technique; it uses active movement and the theory of reciprocal inhibition to achieve greater flexibility. The technique potentially has the three benefits of strengthening one set of muscles (through active ROM repetitions), stretching the opposing muscle and a certain element of a cardiac workout (especially if heavy body parts like the legs are being actively moved).

#### The steps in AIS are as follows:

- Isolate the muscle or muscle group to be stretched.
- Client contracts the antagonist or opposing muscle or muscle group, thereby actively lengthening the target muscle to its maximum stretch. Client exhales on the stretch.
- The stretch is then taken slightly further by assistance from either a therapist or an aid such as a rope or the client's own hand. Hold this position for 1.5 - 2 seconds then the client returns the limb to the starting position.

This sequence is repeated 8 - 10 times.

## STATIC STRETCHING

### Extensors of wrist and fingers (1)



- Client is supine.
- Work in kneeling Tai Chi stance.
- With the client's arm straight (the extensors cross the elbow as well as the wrist) and the forearm pronated (palm towards the floor), ask the client to take a breath in.
- On the exhale, gently take their wrist into flexion to stretch the wrist extensors.
- Work with client communication so you know when they start to feel the stretch.
- You can support their elbow with your other hand.
- As an added extra you can also curl their fingers over at the end to provide more stretch if appropriate.

### Flexors of wrist and fingers (2)



- Client supine.
- Work in kneeling Tai Chi stance.
- With the client's arm straight (the flexors cross the elbow as well as the wrist) and the forearm supinated (palm towards ceiling), mirror your outside hand with theirs (thumb to thumb, fingers to fingers). Anchor their elbow to the table with your inside hand.
- Ask the client to take a breath in.
- On the exhale, gently take their wrist into extension to stretch the wrist flexors.
- Work with client communication so you know when they start to feel the stretch.

### Scalene stretch (3A) and (3B)



- Client supine. Ensure you are in a grounded seated stance.
- Keep the client's nose pointing to ceiling, to avoid rotation of neck (you can remember this by thinking that the scalenes are "S" for "snobby" – the nose stays towards the ceiling in a snobby fashion!)
- To stretch the right scalenes, take the client's head into lateral flexion i.e. towards the left shoulder with the nose pointing towards the ceiling.
- Ask the client to take a breath in and on their out breath use one hand to move their head further to same shoulder, whilst keeping shoulder of side being treated stabilised with other hand.
- Hand positioning can be cross hands (right hand on head and left hand on shoulder as in **(3A)**) or open hands (left hand on head and right hand on shoulder as in **(3B)**). Experiment to see what works best for you and your client.

**PROPRIOCEPTIVE NEUROMUSCULAR FACILITATION  
STRETCHING (PNF)**

**Extensors of wrist and fingers (1)**



- Client is in a supine position.
- Take them into the passive stretch (as above).
- Ask your client to breathe in and then on their out breath ask them to press back into your hand (as if bringing the back of their hand up to the ceiling – wrist extension) using 30% of their strength. Meet your client's effort with resistance so their wrist doesn't move (this causes an isometric contraction of the wrist extensors).
- Hold for a count of 5 then ask the client to breathe in and on the out breath you will be able to take the stretch a little bit further.
- Repeat the whole process 3 times to ensure a maximal range of motion increase.

**Flexors of wrist and fingers (2)**



- Client is in a supine position.
- Take them into the passive stretch (as above).
- Ask your client to breathe in and then on their out breath ask them to press back into your hand (as if bringing their palm to the ceiling – wrist flexion) using 30% of their strength. Meet your client's effort with resistance so their wrist doesn't move (this causes an isometric contraction of the wrist flexors).

- Hold for a count of 5 then ask the client to breathe in and on their exhale, you will be able to take the stretch a little bit further.
- Repeat the whole process 3 times to ensure a maximal range of motion increase.

**Scalenes (3)**



- Client supine: Stretch client to ROM barrier as with passive stretch.
- Keeping the nose pointing to the ceiling, direct the client to slowly push back against both hands as if they are trying to bring the ear to the shoulder. Make sure they do not add rotation to the effort. Provide matching resistance to this isometric contraction making sure that the client is pushing equally from both ends and breathing normally throughout.
- Hold for a count of 5 then ask the client to breathe in and on the out breath you will be able to take the stretch a little bit further.
- Repeat the whole process 3 times to ensure a maximal range of motion increase.

## ACTIVE ISOLATED STRETCHING (AIS) FOR FOREARM, WRIST AND HAND PAIN

### Extensors of wrist and fingers (5A) and (5B)



- Client supine, with their arm straight and hand pronated (palm down).
- You are in kneeling Tai Chi stance. Support the arm at the elbow.
- Demonstrate the action you want them to do (palm to floor – wrist flexion).
- Ask client to take their wrist into flexion.
- Give a gentle assistance at the end of their active movement, to over stretch the muscles for 1.5 - 2 seconds. Make sure you only assist the movement when the client is fully at the end range.
- Release and client returns their wrist to neutral.
- Repeat 10 times.
- Do 2-3 sets.
- Remember you might need lots of cheerleading to encourage your client to keep working!

### Flexors of wrist and fingers (5A) and (5B)

- Client supine, with their arm straight and hand supinated (palm up).
- You are in kneeling Tai Chi stance. Support the arm at the elbow.
- Demonstrate the action you want them to do (back of hand to floor – wrist extension).
- Ask client to take their wrist into extension.



- Give a gentle assistance at the end of their active movement, to over stretch the muscles for 1.5 - 2 seconds. Make sure you only assist the movement when the client is fully at the end range.
- Release and client returns their wrist to neutral.
- Repeat 10 times.
- Do 2-3 sets.
- Remember the cheerleading - lots of verbal encouragement!

### Scalenes

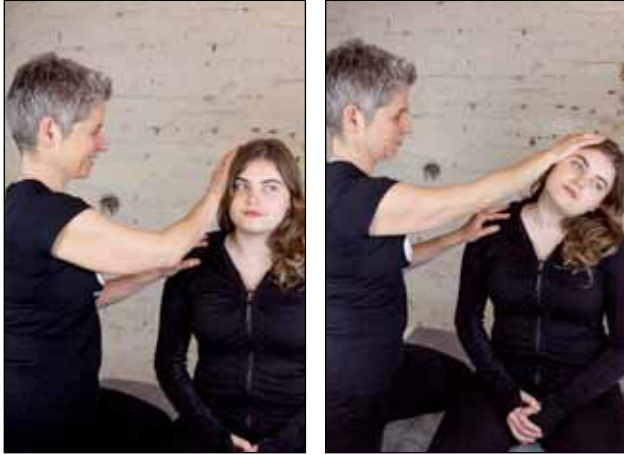
- Client seated.
- Demonstrate the action you want the client to do (ear to shoulder – lateral flexion).
- Ask client to take ear to same side shoulder.
- Stabilise opposite shoulder with soft forearm or hand to prevent trunk compensation.
- Give gentle assistance at end of stretch for 1.5 - 2 seconds.
- Release and repeat.
- Do 10 repetitions then a pause.
- Do 2-3 sets.
- Remember to give lots of cheerleading to encourage your client.



## THE JING METHOD FOREARM AND WRIST PAIN PROTOCOL

### Scalenes (6A)

### (6B)



- Client seated.
- Demonstrate the action you want the client to do (ear to shoulder – lateral flexion).
- Ask client to take ear to same side shoulder.
- Stabilise opposite shoulder with soft forearm or hand to prevent trunk compensation.
- Give gentle assistance at end of stretch for 1.5 - 2 seconds.
- Release and repeat.
- Do 10 repetitions then a pause.
- Do 2-3 sets.
- Remember to give lots of cheerleading to encourage your client.