

Physical Self Regulation (PSR)

Orofacial Pain Clinic
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I. PROPRIOCEPTIVE AWARENESS TRAINING (PAT)

Practice **PAT** in sequence for 2 to 3 minutes 6 times throughout the day.

1. SIT IN A RELAXED, POSTURALLY NEUTRAL POSITION

- a. Sit up straight with knees apart and stomach muscles relaxed.
- b. Arms should rest on thighs with hands open and fingers slightly curled.
- c. Head is up straight but not held tensely by neck muscles.
- d. Neck and shoulders are relaxed and even.

Note: Posturally neutral positions can be also practiced while standing, semi-reclined and reclined.

2. CHECK NONFUNCTIONAL TOOTH CONTACT, CLENCHING AND GRINDING

- a. Practice lips relaxed, tongue relaxed, teeth slightly apart for 30 seconds to 1 minute
 - Some people find it helpful to lightly lick their lips and swallow to find the relaxed position of the mandible. Others may find it helpful to say the letter “n” and note the relaxed position.
- b. Do not press your tongue between your teeth or to the roof of your mouth. That may induce fatigue.
- c. Functional tooth contact is less than 10 minutes/day if you eat for an hour/day.

Note: Teeth should only touch during chewing and swallowing or when slipping, falling or about to be hit.

3. GENTLE HEAD MOVEMENT: AVOID TILTING

- a. Close your eyes. If it feels uncomfortable and produces dizziness, leave eyes open.
- b. While practicing lips relaxed, tongue relaxed, teeth slightly apart; exhale while slowly bending head forward. Avoid any movement that causes discomfort, tightness or pain.
- c. Pause with head comfortably forward for about 3 seconds.
- d. Inhale with the diaphragm slowly expanding your relaxed stomach as you slowly bring your head upright to the neutral position.
- e. Pause 1 second before exhaling and bending the head forward again.
- f. Do steps a-e. 6 times per minute.

Note: If coordinating head movement with breathing is too difficult, then just concentrate on gentle, symmetrical head movements. Gentle symmetrical motion helps blood flow.

4. EASE UPPER BACK TIGHTNESS: STRAIGHTEN ROUNDED SHOULDERS

- a. While in a posturally relaxed, neutral position with lips relaxed, tongue relaxed, teeth slightly apart
 - Raise hands up as if conducting a choir, or if this is uncomfortable,
 - Raise arms slightly from rest position with hands open and fingers slightly curled
- b. Move arms and shoulders backwards and forwards without causing discomfort.
- c. Repeat arm motion slowly (once every 5 seconds). Do 6 movements, 6 times a day.

Note: Practicing posturally neutral positions and gentle arm movements will help you to relax painful areas and to recognize inappropriate postural habits such as head tilt, arm crossing, and rounding of the shoulders.

II. TAKE BRIEF RELAXATION BREAKS

- a. Let feet, legs, hands, arms, shoulders, head, eyelids, lips, teeth, and tongue rest in relaxed positions.
- b. Start with 5 minutes at a time and gradually increase relaxation time by 1 minute each session up to 20 to 25 minutes.
- c. Take at least 2 relaxation breaks each day during your initial training.

III. BEGIN SLEEP IN RELAXED POSITION: CONTROL NIGHTTIME ACTIVITY

- a. Lay on your back, practice slow breathing while keeping lips relaxed and teeth slightly apart.
- b. Then, say aloud 6 or 7 times "lips relaxed, tongue relaxed, sleep relaxed" while picturing yourself sleeping in a relaxed position.
- c. Start off sleeping on your back. Don't worry if you move.

IV. DIAPHRAGMATIC BREATHING: CONTROL IS VITAL TO HEALTH.

- a. While in a posturally relaxed, neutral position, breathe slowly and regularly with your diaphragm.
- b. As you inhale, the diaphragm gently raises the stomach and maximally inflates the lungs.
- c. When you exhale carbon dioxide, the stomach will fall as the diaphragm relaxes.
- d. Before inhaling again, pause comfortably for 3 to 4 seconds.
 - The pause is not holding your breath. The pause is a moment to be still and relax.
- e. If at any time you begin to feel lightheaded or dizzy, you are exchanging too much air. Either return to your normal breathing pattern, or better, wait longer between breaths and do not breathe as deeply.

Note: Slow diaphragmatic breathing should be very relaxing, but it may take time to relearn.

PSR Hints

PSR works best when you drink plenty of non-caffeine fluids, eat the right foods, and exercise without pain regularly. Practice.

MAKE DIAPHRAGMATIC BREATHING SECOND NATURE.

REMEMBER - BE PATIENT

PSR TAKES TIME TO REVERSE UNHEALTHY, FATIGUING HABITS

DO NO ACTIVITY THAT INCREASES PAIN

PSR Physiology

The goal of PSR is to produce physiologic changes that reduce pain, fatigue and misuse.

Posturally neutral positions are those in which the muscles are most relaxed and the body can distribute oxygen, glucose and heat with the least resistance. Symmetrical movement, performed without any discomfort, improves blood flow to sore muscles and increases diffusion of synovial fluid into joints. PAT and its gentle movements also help patients recognize and intercept parafunctional (inappropriate) jaw, neck and shoulder habits that torque and fatigue muscles.

The diaphragm is one of the most fatigue resistant and efficient muscles in the body. Diaphragmatic breathing reduces the release of stress hormones, promotes muscle relaxation, encourages sleep, and enhances the distribution of oxygen and glucose throughout the body. The optimum delivery of oxygen and glucose depends on effective diaphragmatic breathing.

Pain patients often forget to breathe diaphragmatically. Instead they tend to breathe more rapidly, using primarily neck and chest muscles. Under such conditions, patients exhale carbon dioxide too quickly and achieve a carbon dioxide deficit (hypocapnia). Hypocapnia is to be avoided as it increases stress hormone levels, decreases the availability oxygen to tissues, tightens muscles, and in extreme cases, alters blood chemistry. Unless you are participating in strenuous exercise, breathe using your diaphragm.