
OVERCOMING
TMJ
There is hope!
By Lauren Andrew Hebert, PT, OCS

OVERCOMING TMJ

There is Hope!

by
Lauren Andrew Hebert, PT, OCS

Published by
IMPACC USA
One Washington Street
Greenville, ME 04441
(207) 695-3354
800-762-7720
http://www.impaccusa.com
Images provided by PhotoDisc© 1994

TABLE OF CONTENTS

Chapter 1

Introduction to TMJ Problems

You wake up nearly every morning with a headache, face pain, earache, or a sore jaw. Chewing solid food hurts. Your jaw sometimes snaps. You suffer severe headaches or migraines several times per week, perhaps everyday. Your ears often ache or feel plugged. You suffer chronic pain in your neck, shoulders or upper back. The doctors cannot give you a specific diagnosis. Are you going crazy? Or do you have a TMJ problem??

The temporo-mandibular joint (TMJ) is the attachment of the jaw to the skull. It is a pair of joints, left and right. The TMJ is perhaps the most sensitive and active joint in the body. It apparently takes very little irritation of the TMJ to produce lots of problems. TMJ problems can be painful and frustrating. Many medical professionals understand very little about this problem, leaving many TMJ sufferers out in the cold!

TMJ dysfunction can be difficult to accurately diagnose. Doctors commonly overlook it as a source of a wide variety of symptoms. TMJ pain is sometimes very obvious. Other symptoms coming from the TMJ, however, can be quite confusing. Various types of headaches, face pain, neck or shoulder pains, ear symptoms, eye symptoms, sinus or throat complaints can also come from TMJ problems.

Treatment can also be frustrating. Many doctors simply prescribe tranquilizers. Dentists apply braces or mouth splints. Some oral surgeons may suggest surgery. Physical therapists offer exercises and pain control modalities. Treatment that helps one patient may make another patient worse. The best treatment is often a combination of methods, especially when the dentist and physical therapist work together to correct position, posture and movement. This book offers a wide range of advice and self-care information. Follow our suggestions only under the guidance of your treating medical professional!

The overall strategy of this book is to teach you, the patient, to become an expert on your own problem. Patient education is the most valuable treatment approach for many medical problems, especially this one. We will try to explain your symptoms. We will describe how your TMJ works, how it develops problems, and all the things you may do to control pain and (more importantly) correct TMJ function.

Chapter 2

Please Explain My Symptoms!

A TMJ dysfunction can create a wide variety of uncomfortable and often strange symptoms. The patient and the medical professional will often not relate many of the complaints to a TMJ problem. Many people suffer for years without understanding what is causing their symptoms.

The TMJ is very sensitive, filled with delicate nerve endings that communicate with other nerves throughout the entire upper body. Pain may be felt in the jaw, face, head and neck. Pain may also be referred to the upper back or shoulders. Chronic headaches are very common with TMJ dysfunction.

Various ear-nose-throat symptoms are also common. There can be tinnitus (ringing in the ears). Some patients often complain of plugged ears, and many complain of dizziness. Chronic sinus irritation or sore throat can accompany a TMJ dysfunction, as can various eye symptoms. These are all caused by the many nerve connections among all of these related structures.

The jaw is closely related to the neck. TMJ problems often develop following a neck injury such as a "whiplash" injury. The onset of symptoms may be delayed for weeks following such a neck injury. A neck problem can create or worsen an existing TMJ problem, and a TMJ problem can create or worsen a neck condition. They are very closely related.

EMOTIONAL AND FAMILY STRESS OF CHRONIC PAIN

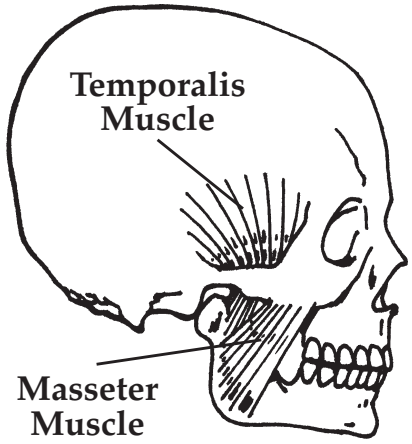
The wide range of TMJ symptoms can be very upsetting, especially when the cause has not been identified. Some people fear they are going crazy before they are finally diagnosed with TMJ dysfunction. Many patient complaints are not taken seriously by the doctor, or even by family members who also are frustrated. This can lead to serious emotional stress. Anger, fear and depression can surface as a result of chronic symptoms. Family relationships may be strained. A terrible cycle of emotional stress may be created, greatly increasing the suffering! This stress, in turn, can irritate the TMJ further due to an increase in muscle tension...caused by the stress.

Months or years of pain, especially without a clear diagnosis, creates great stress. Everyone around you worries and wonders why you feel such pain. You fear that those around you will think you may be making it up or that you are crazy. You may feel angry and betrayed. Chronic pain may also cause chemical changes in the brain that can increase depression and anger. Loss of sleep makes it all much worse.

Daily pain can greatly upset your life and that of your loved ones. You may need to seek emotional help for you and your family. That does NOT mean you are making it up or crazy. It means you are strong enough and care enough to protect your family relationships and happiness. You and they are worthy of this.

Chapter 3

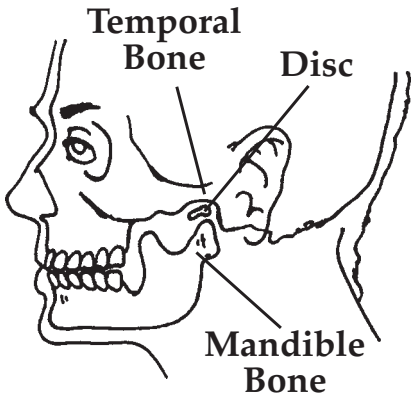
The Temporo-Mandibular Joint



The temporo-mandibular joint is the attachment of the jaw (the mandible) to the skull at the temporal bone, thus the term "Temporo-Mandibular Joint" or TMJ. But the TMJ is much more than bones! It is a complex joint much like other joints in your skeleton.

The TMJ is a highly mobile, very sensitive and complex joint structure. The bones are held together with ligaments. These ligaments completely surround the TMJ forming the joint capsule. The TMJ is filled with joint fluid which provides lubrication and nutrition to the joint structures.

The mandible, or jaw part of the TMJ is called the condyle. It is covered with a layer of articular cartilage. The part of the temporal bone in the TMJ is called the temporal fossa. It is also lined with articular cartilage. There is also a floating disc separating the condyle from the temporal fossa. This disc helps to control the movements between the jaw and the skull.



Strong muscles control the movement of the jaw and the TMJ. The temporalis muscle which attaches to the temporal bone elevates the mandible. The masseter muscle closes the mouth and is the main muscle used in mastication (chewing).

There are actually several muscles that open the jaw. Other muscles close the jaw. Some muscles help control the disc, tongue and throat movements. The actions include opening and closing the jaw, jaw posture, chewing, talking, swallowing and breathing. The TMJ works very hard!

A hard-working structure like the TMJ needs a good blood supply. Highly coordinated movement and delicate posture require many very sensitive nerves that communicate with many other nerves to and from the head, neck, shoulders and upper back structures.

The TMJ is very involved with your posture. Some muscles move the jaw. Some muscles work very hard to maintain correct posture of the jaw to the head and neck. The teeth and tongue also participate in this posture work. Nerve endings in the TMJ help to guide head and neck posture and level vision. This is a delicate and sensitive process.

Chapter 4

Specific TMJ Problems

There are three parts to most TMJ dysfunctions: pain, posture, movement. The patient wants relief from pain. This is important. But posture and movement must also be corrected, or the pain will return.

POSTURE (EXCESSIVE COMPRESSION)

Posture problems can be incorrect positioning or excessive compression or both. Excessive compression is often caused by a habit of clenching the teeth. This may come from clenching during sleep, clenching during work tasks, oral habits such as pencil chewing or "doodling" the teeth (as in tapping them to music).

The muscle tension of clenching can push the condyle up against the disc and temporal bone, which squeezes on cartilage, blood vessels and nerve endings, causing pain and other symptoms. The teeth should not be closed together except during chewing. The jaw normally rests with the tongue flat against the roof of the mouth and the teeth slightly apart.

POSTURE (INCORRECT POSITION)

TMJ posture problems may find your jaw in a stressed position. Improper fit between your upper teeth and lower teeth may position your jaw too far forward or backward or to one side. Missing teeth can cause your jaw to close too far, compressing the TMJ. Dentists can treat many of these problems effectively. Sometimes dentists use splints or braces to place or move the jaw into a better position for less stress.

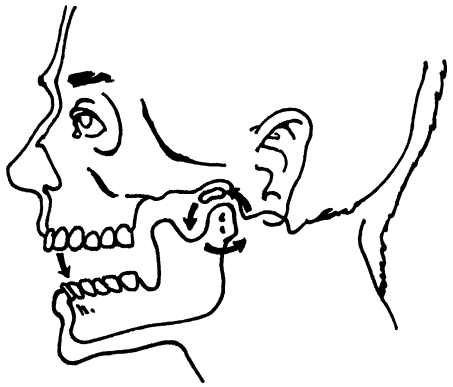
Jaw posture problems may also be caused by abnormal head, neck or upper back posture. A forward head posture is a major risk factor for TMJ problems. This is a round shoulders slouching posture of the upper back and neck. In normal posture your head is carried directly above the spine. Forward head posture, however, finds your head held forward ahead of the spine. This can cause many neck, back and jaw problems.

Forward head posture causes the muscles of the tongue and throat to pull down and back on the jaw. This causes the muscles that close the jaw to work harder to hold the jaw closed. This can cause muscle pain problems and compression in the TMJ.

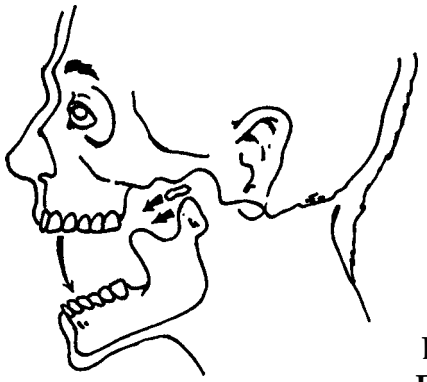
MOVEMENT STRESS

Your jaw opens with two movements: first, the jaw rotates down like a hinge as the condyle rolls on the disc. Then, the jaw and disc slide forward together in the joint.

TMJ dysfunction often causes the jaw to rotate too little and, instead, slide forward too much, irritating the disc and other soft tissues in your TMJ. This movement problem is a loss of coordination among the muscles that open the jaw, and is often easily corrected with a simple exercise.



Normal movement:
First half of jaw opening:
Jaw rotates on disc



Second half of jaw opening:
Jaw and disc move forward together

Abnormal movement:
Disc and jaw do not move together.
Disc stays forward, causing a "click"

SWALLOWING AND BREATHING

Normal swallowing (which occurs very frequently all day) brings the tongue up against the roof of the mouth so that the muscles of the throat can lift the throat to swallow. Abnormal swallowing, however, brings the tongue forward against the front teeth to lift the throat. This can push the jaw back in the TMJ, causing irritation. This "tongue-thrust" swallow may be a habit developed in early childhood due to excessive thumb-sucking or it may be a part of a forward head posture habit.

People who breathe through their nose usually have a good upright head posture and breathe with the help of their lower abdominal muscles. People who breathe abnormally through their mouth (often due to allergies or sinus problems) tend to have a forward head posture and breathe with the help of their neck muscles. This often causes neck and jaw tension and posture problems that may stress the TMJ.

ABNORMAL STRUCTURE AND DEVELOPMENT

Sometimes the jaw or skull or teeth are shaped in a way that pre-disposes people to TMJ problems. Poorly fitting teeth or missing teeth can cause the jaw to fit poorly to the skull at the TMJ. Some may have shapes to their skull that stress the TMJ, such as a very high palate (roof of the mouth), perhaps due to prolonged thumb-sucking as a child. This can alter the fit of the TMJ and encourage abnormal movements, swallowing patterns or breathing patterns.

NECK PROBLEMS

A neck injury such as "whiplash" or a chronic neck problem can add to or cause a TMJ problem. A "whiplash" injury where the head is "whipped" by a sudden force (as in an auto accident) can sprain the TMJ. This often goes unnoticed due to the neck injury. The pain following a "whiplash" injury or any chronic neck condition can cause forward head posture, abnormal jaw movements and clenching of the teeth. These add more stress to the TMJ.

On the other hand, the pain of a TMJ dysfunction can itself cause forward head posture, which then stresses the neck. One problem quickly leads to another. The neck and jaw should be evaluated and treated together as one unit. Problems at one part may prevent recovery at the other.

Chapter 5

Treatment for TMJ Dysfunction

There are many ways to treat a TMJ dysfunction. However, successful treatment is often hard to find. We must treat more than the pain. We must correct posture, movement and stress in the jaw, head and neck, treating them as one working unit.

MOUTH (OCCLUSION) SPLINTS

The dentist will often make a splint, made of plastic or other material, to place on the teeth to control the position of the jaw. This is especially important at night when many people tend to clench their teeth. The purpose is to correct the position of the jaw and to prevent it from closing too far during clenching.

MANIPULATION

Mechanical dysfunction such as stiffness or improper posture at the upper neck can add to TMJ problems. Chiropractors, osteopaths and specially trained physical therapists may manipulate the neck trying to improve posture and movement.

BIOFEEDBACK

Biofeedback is the use of an electrical device (E. M. G.) that measures muscle tension. The patient watches the device measure this tension while trying to relax various jaw muscles to reduce TMJ pressure. Biofeedback teaches the patient the skill of relaxation, especially at the jaw and neck.

MEDICATIONS

Anti-inflammatory medications can reduce inflammation in the TMJ. Muscle relaxants can reduce jaw and neck muscle tension to ease TMJ pressure. Tranquilizers are occasionally prescribed to reduce anxiety and muscle tension at the jaw. These must be prescribed and supervised with great caution.

ELECTRIC STIMULATION

Several methods of electric stimulation are available to reduce pain and inflammation and muscle tension. One method is transcutaneous nerve stimulation, or TENS, where the patient uses a small pocket device for electric stimulation to the area to reduce pain sensitivity. Other methods of electric stimulation include interferential and micro-current stimulation. Each of these reduces pain using various nerve responses to stimulation.

ACUPUNCTURE

Acupuncture stimulation has been shown to be very effective for some people for various pain problems, including TMJ pain. Acupuncture stimulation may be provided with needles, electric stimulation of acupuncture points, pressure point stimulation or rubbing an ice cube on acupuncture points. The Chinese have used acupuncture effectively for thousands of years.

EXERCISE AND POSTURE CORRECTION

This is one of the most important parts of TMJ recovery!

People with TMJ dysfunction usually have abnormal postures and/or movements. Postures and movements must be corrected to gain full recovery. Proper postures must be restored in the jaw, skull, neck and upper back. Tongue posture and swallowing patterns must also be restored.

Proper movement patterns and coordination must be restored. Muscles must contract in proper sequence and be able to relax properly. The position of the head-on-the-neck must be corrected and mobility must be restored. Coordination of jaw opening and closing must be corrected. Neck, upper back and shoulder posture, mobility and strength should all be correct. We will discuss some specific stretching exercises that address these in detail in a later chapter.

SURGERY

Surgery is a last resort that should be carefully evaluated by the patient. The typical surgery procedure removes the disc to replace it with artificial material. Patients should get several opinions to confirm the safety and need for surgery before proceeding.

WHAT WORKS?

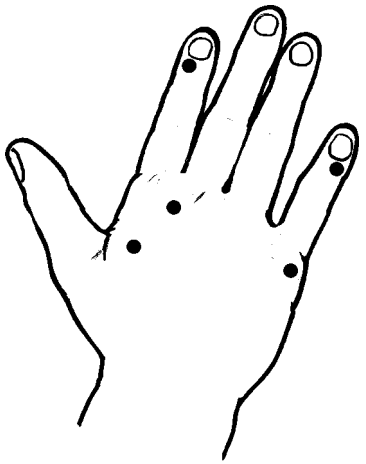
A bite splint alone, medications alone, manipulation alone, and other single treatment methods are usually not very effective by themselves. A collection of several treatment procedures is needed to reduce pain, correct posture and restore normal movement. This assures the best chance for recovery and prevention of a recurrence of the problems.

You must learn a collection of personal pain control, posture correction and movement pattern exercises to find recovery and gain control over your TMJ problem. That is the subject of the next chapters, so let's get started.

Chapter 6

Personal Pain Control Techniques

ICE ON ACUPUNCTURE POINTS



Holding an ice cube on several acupuncture points can be very effective at reducing head and neck pain. Refer to the accompanying diagram for the position of acupuncture points that we use for TMJ pain. The acupuncture points may be found on either hand. Simply rub an ice cube on each spot for one minute. (See photo below) This may seem odd and a bit uncomfortable, but it works for most people.

HEAT OR ICE TO THE TMJ

Ice massage (rubbing an ice cube directly on the skin) for 2 to 3 minutes directly over the TMJ, located just ahead of the ear, can be uncomfortable to do but it can greatly reduce pain. The stimulation of the temperature nerves in the skin tends to turn off the pain nerves from the same area.

Applying moist heat to this area also stimulates temperature nerves to turn off the pain nerves. A moist towel warmed in the microwave or with very warm tap water may be placed directly over the TMJ for 10 to 15 minutes. Be very careful to avoid burns!

AVOID CLENCHING YOUR TEETH!!

Constantly remind yourself to avoid clenching your teeth! Post a note in your work area that tells you, "Don't clench!". Set a digital watch to chime every hour to remind you to check on clenching.

Clenching your teeth at night while asleep is a common problem. SLEEP SUGGESTION may work for you. Just before you fall asleep at the point when you are very tired, tell yourself "I will not clench my teeth during sleep. If I do, I will awaken." This is similar to hypnosis. Your mind is very suggestible just before you fall asleep. You may be surprised to find yourself waking up just as you start to clench. This may sound strange, but it does work for many people.

POSTURE AND PAIN CONTROL EXERCISES

The next chapter describes exercises for TMJ recovery. These exercises will help to reduce posture stress and restore proper jaw movement patterns. The exercises then progress to correcting posture and movement throughout the neck and upper body. Relaxation exercises are also described.

Chapter 7

TMJ Recovery Exercises

We will now describe a series of exercises designed to reduce TMJ stress and restore posture and movement patterns. Your doctor or therapist should approve or modify these exercises to fit your problem. Then it is up to you to do the exercises as prescribed! These exercises should be done gently. They should not hurt. Stop any exercise that causes pain and report it to your treating medical professional. These exercises are arranged in three stages of recovery, plus a set of Relaxation Exercises.

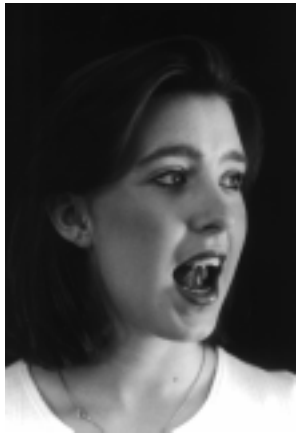
STAGE ONE EXERCISES (usually done every 1-2 hours all day)

NODDING

Correct your forward head posture. Keep your head level and bring your head back and up. Make yourself an inch taller; a position of "military attention." Keep your tongue on the roof of your mouth and your teeth not touching. Keep your head tall as you nod your head up and down rhythmically and gently ten times, (as in nodding "yes") moving your head but not your neck. Then try to keep this tall-head, relaxed-jaw posture as a constant habit.

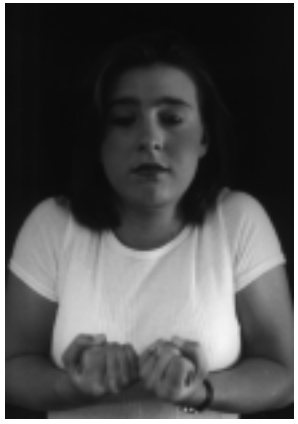
SWALLOWING RE-EDUCATION

TMJ sufferers often swallow incorrectly, stressing the TMJ all day. We swallow every 30-60 seconds. The proper swallow pattern is: tongue goes flat to the roof of the mouth; teeth stay slightly apart as we swallow. Practice one or two swallows this way before or after these exercises, to restore the proper muscle sequence.



TONGUE-ON-ROOF

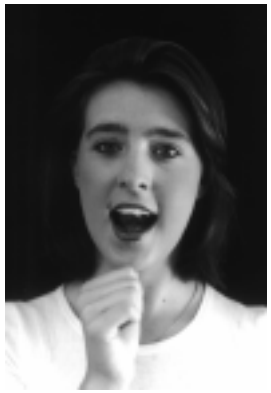
This can reduce TMJ stress and restore proper movement patterns. Hold your head tall as in the previous exercise. Place your tongue on the roof of your mouth, back away from the teeth. Hold the tongue at the roof of the mouth as you open the jaw. Keep the tongue at the roof of the mouth as you open and close the jaw ten times. You may need to do this in front of a mirror to make sure your jaw moves straight. Do this exercise often all day, especially when you find yourself clenching your teeth.



UPPER BODY RELAXATION

Clench your fists and shrug your shoulders as you inhale for three seconds (do not clench your teeth). Then relax your shoulders and hands completely as you exhale for five seconds. Do this twice. This produces relaxation in the upper body to help you reduce TMJ stress.

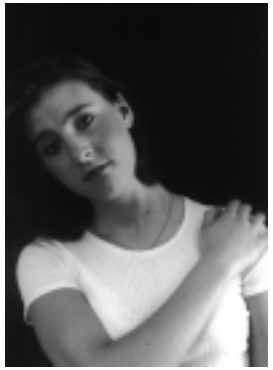
STAGE TWO EXERCISES (usually done three times per day)



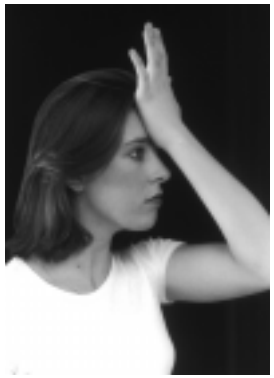
RESISTED JAW OPENING

This is the same as the tongue-on-roof exercise, except with slight resistance to opening applied under your chin. Place your tongue on the roof of your mouth. Place a thumb under your chin. Keep your tongue on the roof of your mouth as you open your jaw ten times. Your thumb should gently resist your effort to open your jaw.

NECK STRETCH



Place one hand on top of the opposite shoulder. Hold that shoulder down. Tip your head away from that shoulder gently. Keep your face facing forward as you stretch 5 seconds, gently! Repeat for the other side. This relaxes the lateral neck muscles which allows you to maintain a better head-neck posture.



NECK STABILITY

Hold your head upright. Place one hand on the side of your head. Push your head and hand together firmly for 3 seconds without actually moving your head. Relax and do the same on the other side of your head. Do each side 3 times.

Repeat this front to back. Place a hand on your forehead. Push your head and hand together firmly for 3 seconds. Then relax. Place a hand at the back of your head. Push your head and hand together three seconds. Relax. Repeat both ways 3 times.

NECK ROTATION

This stretch is designed to increase your rotational ability. Turn your head fully to the left. Hold that position as you place one hand against the side of your face that is turned toward the front. Press your head and hand together 3 seconds without moving your head. Relax, then turn your head a little more to the left, repeating the stretch. Do this 3 times on one side, then turn your face to the right and repeat the process for this side. Do not force beyond the limits of comfort.

STANDING BACK-BENDS

Stand, feet apart at shoulder width. Place your hands on your lower back. Lean backwards at your lower back gently, only as far as comfortable. Do not tip your head back; keep your chin down. Stretch gently three seconds. Do this twice. This encourages your lower back to maintain better posture, which in turn helps your neck and jaw to have better posture.

STAGE THREE (usually done three times per day)

JAW STABILITY

With the tip of your tongue at the roof of your mouth, open your jaw part way. Hold your jaw steady as you try to push your jaw with your fingertips to the left, to the right, open, and closed directions. Push each way 3 seconds, gently but firmly. Do not force or cause pain.

JAW STRETCHING

This is for a stiff TMJ. Open your jaw as far as it will go. Place your thumb under your chin and push up, keeping your jaw working to stay open against your thumb's push. Push 3 seconds without letting your jaw close. Relax and open your jaw further. Then place the finger on your lower teeth and pull down gently, keeping your jaw working to hold its position for 3 seconds. Then relax and open more. Repeat this sequence 3 times, opening your jaw a little further each time but only as comfort allows.

BACK STRENGTHENING

By strengthening your upper and lower back, you will find good neck and head posture easier to maintain. Get on your hands and knees on a padded surface. Reach straight ahead with your left arm. At the same time reach your right leg straight back. Hold this balanced for 3 seconds. Then switch to reach with the right arm and left leg for 3 seconds. Repeat each way 10 times.

RELAXATION EXERCISE

Lie on your back in a quiet setting. Place one or two pillows under your legs. Extend your toes and feet backward as you inhale for 3 seconds. Relax your feet as you exhale for 5 seconds. Repeat 3 times gently. (You need not tighten any of these muscles very hard for the relaxation response to be effective.) Next, tighten your thighs as you inhale for 3 seconds. Relax your thighs for 5 seconds. Repeat 3 times gently. Then tighten your buttocks as you inhale for 3 seconds. Relax and exhale for 5 seconds. Repeat 3 times. Tighten your belly and inhale for 3 seconds. Relax and exhale for 5 seconds. Repeat 3 times. Clench your fists, shrug your shoulders and inhale for 3 seconds. Relax and exhale for 5 seconds. Repeat 3 times. Tighten your face as you inhale for 3 seconds. (Do not clench your teeth!) Relax and exhale for 5 seconds. Repeat 3 times. Then quietly tell yourself you are very relaxed at your feet, your legs, your back, your arms and your face. Consciously feel the relaxation.

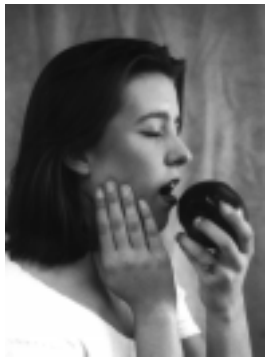
Chapter 8

Daily Living and Working

As you go about your daily activities, we have some suggestions for you to consider. Wear a digital watch that you can program to chime every hour, reminding you to check your posture and do your exercises. This is a simple trick that can make the most difference to your recovery!

NIGHT CLENCHING

As explained on page 19, try the "sleep suggestion" trick. Just before falling asleep tell yourself you will not clench while asleep, and if you do clench you will awaken. Obtaining a night splint from your dentist may also help.



CHEWING CAUTIONS

Avoid chewing hard, fibery or tough to chew foods such as steak, candy or granola. Avoid wide open bites when eating fruit, corn on the cob or other such food.

JAW HABITS

Pay close attention to your jaw habits. If you catch yourself clenching, tooth doodling, chewing on pencils, or simply holding your jaw with your teeth touching, you must work to avoid these habits.

SITTING/STANDING POSTURES

At work, prolonged sitting or standing on certain jobs can encourage forward head posture. This can be helped by constantly reminding yourself to sit or stand tall, without slouching. Your chair should be properly designed to provide a well-supported arched lower back, footrest, and proper height. Placing a wedged-shaped cushion on the seat to tilt the seat surface forward is a new method of improving back and neck posture. This forward tilt to the seat surface causes you to sit with better spinal curves.

If you work at a standing job you should have a tall stool to allow frequent switching from standing to sitting or leaning, and have anti-fatigue floor mats or cushioned insoles in your shoes. A footrest can also help provide for comfort. Having some posture variety is very important if you have a neck, TMJ or back pain problem.

TMJ and neck problems are common on several types of jobs. These are typically jobs with sustained sitting or standing to perform assembly work or to operate a computer. Ergonomics is the science of properly setting up a work station. Ergonomics seeks to provide good sitting or standing posture, as we just described, work task variety and avoiding forceful efforts or awkward positions or frequently repeated motions. Refer to the suggested references at the back of this book for some effective ergonomics manuals.

OVERCOMING TMJ

Computer work is a fast growing job category. It can be described as a highly sustained posture stress of the low back, shoulders, and neck with highly repetitive motions of the wrist and hand. This is a very stressful combination of posture and repetitive motion work that can lead to fatigue, pain and injury. These problems are easily prevented by improving the required posture of your job and by improving your posture habits. As we have learned all of these can complicate or worsen a TMJ problem.

Correct work chair design is important. The height of the chair must be adjustable to allow your feet to rest fully on the floor without reaching. If the chair cannot go that low, a footrest may be used. The seat should also tilt forward slightly, allowing a more upright posture. The tilt may be built into the chair or provided by a wedge shaped cushion on the seat. The chair back should fit the arched curve of your lower back. A perfect chair is not as important as your sitting posture habits. Use good upright posture and frequently change your position. Even perfect posture is bad for you, if you do not change your position.

The computer monitor should be positioned directly in front of you to keep your head and neck up and straight. The monitor should be at a height that keeps your eyes moving from level to angled slightly down. Papers used while working on the computer should be positioned upright in a document holder placed near the front, not off to one side. Do not wear bifocals to work on a computer, due to the bad neck postures required. The keyboard should provide a padded wrist rest to help ease the shoulder and neck work of holding the arms. Most importantly, stop to stand and stretch for one minute every hour.

TMJ SELF-CARE SUMMARY

1. Hold your head tall; avoid slumping into forward head posture.

2. Frequently do this exercise: place your tongue at the roof of your mouth, open and close your jaw 10 times.

3. Position your mouth with your tongue flat at the roof and your teeth not touching. Frequently swallow with your mouth in this posture.

4. Do the relaxation exercise often: shrug/tense and inhale for three seconds, followed by relax and exhale for five seconds. You will feel much better.

5. Keep your neck flexible so that you can easily and comfortably rotate to each side, side-bend to each side, and retract your head into a chin-tuck position.

6. Avoid TMJ stress habits such as clenching, tooth-doodling, chewing on pencils, eating hard or wide- bite foods.

7. Ice your acupuncture points for headache and other pain symptoms.

NOTES:

SUGGESTED READINGS

published by IMPACC USA

1. An advanced handbook on lower back care.
   YOUR BACK FOR LIFE! by Lauren Hebert, PT, OCS

2. An employers' handbook on upper extremity and neck work problems.
   THE NECK-ARM HAND BOOK by Lauren Hebert, PT, OCS

3. A special book on restoring comfortable sex lost to back pain.
   SEX AND BACK PAIN by Lauren Hebert, PT, OCS

4. A patient handbook on recovering from tendinitis and carpal tunnel syndrome.
   LIVING WITH C.T.D. by Lauren Hebert, PT, OCS

5. A workers' manual for prevention of work pain problems.
   WORKSMART: THE INDUSTRIAL ATHLETE by Lauren Hebert, PT, OCS

ABOUT THE AUTHOR

Lauren Andrew Hebert, PT, OCS, is a professional physical therapist specializing in the care and prevention of work related musculoskeletal problems such as back injury, neck pain, tendinitis and carpal tunnel syndrome. He writes to teach workers how to avoid these common work disorders and to teach patients how to take care of themselves. Hebert is president of IMPACC, a work injury prevention consulting firm providing prevention programs to hundreds of workplaces throughout North America, and is clinic director of the SmartCare Physical Therapy Center.

Selected Bibliography

1. Rocabado, M. and Iglarsh, Z.: **Musculoskeletal Approach to Maxillofacial Pain**, Lippincott, 1991.

2. Richardson, J. and Iglarsh, Z.: **Clinical Orthopaedic Physical Therapy**, Saunders, 1994.

3. Porterfield, J and Iglarsh, Z.: **Mechanical Neck Pain**, Saunders, 1995.

4. Calliet, R.: **Head and Face Pain Syndromes**, F.A. Davis, 1992.

5. Hertling, D. and Kessler, R.: **Management of Common Musculoskeletal Disorders**, Lippincott, 1990.

6. Hebert, L.: **WORKSMART: The Industrial Athlete**, IMPACC USA, 1996.