

## ... and it's meaning for you, your dogs & horses.

By Rowan Emrys, CNMT, CST

Got . . .

- Headaches?
- Stiff neck?
- Depression?
- Sore shoulders?
- Inability to bend head forward?
- Earache or ear itch?
- Ringing in ears?
- Jaw popping or clicking?
- Chewing difficulty?
- Sluggish digestion?
- Tongue thrusting between back teeth?

These are all signs of TMD or Temporomandibular Dysfuntion.

We each have a Temporal Mandibular Joint or TMJ. The TMJ is a non-load bearing joint just in front of the ears. It attaches the *mandible*, or lower jaw, to the *maxilla*, or upper jaw. We use it hundreds, if not thousands, of time per day; without it we could not chew our food. It is as important in our animals as it is in us. In fact in horses, with their more complex TMJ anatomy, TMD can be the cause of improper gaits, anxiety, colics and "attitudes" while in dogs, it can lead to constant ear scratching, digestive problems or aggressiveness.

The pain experienced by those suffering with TMD can be sharp and searing, occurring each time one swallows, yawns, talks, or chews, or it can be dull and constant. It can hurt right over the joint in front of the ears or it can radiate into the neck and the shoulder joints. It can also cause spasms in the adjacent muscles that are attached to the bones of the skull, face, and jaws causing pain in the temples, cheeks, lower jaw and teeth. Sometimes it can affect the eyes and vision and sometimes it centers

in the ear causing *tinnitus* or noises in the ear. In other words, TMD manifests in numerous ways.

## **CAUSES**

Generally TMD pain is a result of displacement of the cartilage disc which then causes pressure and stretching of the associated ligaments and attendant sensory nerves. The popping or clicking occurs when the disk snaps into place when the jaw moves. In addition, the chewing muscles, such as the *masseter*, *temporalis* and *pterygoid* plus the *SCM* (*sternocleidomastoid*), may spasm or not function efficiently, causing pain and tenderness and the inability to flex the neck forward (or flex at the poll in horses).

Clenching teeth or overuse (as in human gum-chewing) can definitely contribute. Dentists will say to their human patients: "Lips together, teeth apart." Stress can cause some to clench their jaws together or even grind their teeth furthering TMJ cartilage wear. Horses that crib are sometimes trying to relieve TMD pain if they're not trying to relieve ulcer pain.

Misalignment of the jaws is another major contributor. This is easily seen by looking at the midline where the front teeth of the top and bottom jaws come together. If the midlines are offset to one side or the other, you can be sure that pain is either present. Misalignment of the teeth themselves create improper wear patterns that also contribute to extra wear on the TMJ cartilage. Additionally, arthritis and trauma to the jaw can both be involved.

From a different perspective, poor bodily alignment in general can be another factor affecting the muscles of the neck and head thus causing, or contributing to, TMD symptoms. In humans, head thrusting and rounded shoulders are an almost sure-fire way of producing jaw pain as are a tipped pelvis or uneven legs. Sometimes overuse of one arm during sports or work can also cause bodily imbalance. In horses, improper bitting or saddle fit, a sloppy rider, tie-downs, poor hoof trimming let alone poorly fitting shoes, and even the use of high hay racks and pulling back when tied can all contribute to bodily stress and misalignment which can cause TMD as can just plain stress. In canines it's usually more a result of congenital jaw misalignment, trauma or stress.

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Trauma to the jaw and cervical spine can be a significant contributor to TMD. In humans think whiplash or getting hit in the jaw by a fist or a baseball. In horses, yanking on lead ropes, improper lunging techniques, getting the head caught between fence rails or getting kicked by another horse are common TMD factors. With dogs, it's leash yanking, getting hit by something and again, getting the head caught.

An often overlooked cause can be dental work itself. When the mouth is held open for any length of time, which is what dental work demands whether for human, horse or dog, it can cause the muscles to spasm even if anesthesia is given or bite blocks or speculums or used.

Other contributors can include junk food diets, lack of proper minerals, insufficient water intake, and the weather. Once any joint is damaged, barometric pressure will often increase pain symptoms.

## **TREATMENT**

Sometimes a soft food diet is temporarily recommended as are hot moist packs on the jaw for half an hour or so twice a day. If joint injury has occurred, ice packs are preferable in order to reduce swelling. In severe cases occlusal (chewing surface) bite splints may be necessary to reeducate the muscles. Newly available for humans are splints which cover just the front teeth leaving the back teeth totally free of contact with each other, thus avoiding any possibility at all of clenching or *bruxing* (grinding).

Therapies such as deep NeuroMuscular Massage and non-invasive CranioSacral Therapy can usually be of immense help for any species. Of course spraying copiously and frequently with **Release** can help relieve muscle spasms and for animals, ingested **Relax** and/or **Tranquil** can aid in relieving contributing stress factors.

Various meditation, breathing and relaxing techniques can help humans relieve stress while yoga, Tai chi or other martial arts and Pilates can stretch and tone the body. Animals will perhaps require separating aggressive or dominant animals from others or adjust various living conditions to make them more species suitable. Horses definitely require much "at free" time as the actual act of grazing will help to redistribute physical stressors while normal play and movement help in realigning the body more naturally. Dogs, while lying on the floor or on your lap, are easily massaged in "T-Touch" circles and good long, brisk walks can be beneficial for both dogs and owners. Adding special, appropriate stretching and exercise techniques for both horses and dogs can also help to rebalance bodies.

Diets should be as species natural as possible with abundant organic foods and an elimination of most processed and chemicalized versions. Since appropriate nutrients are rarely found in sufficient supply even in organic foods today, basic supplementation is essential.

- For humans that would include Elixir (or Izmine), Plus or Regular and TriMins Plus.
- For horses that would be the 4 free choicers of Izmine, NTM Salt (the refined version is also good for humans!), and One-to-One and Two-to-One, DynaPro, and a supplement of either TNT, Dynamite Regular, or Dynamite Plus.
- Dogs would ideally be eating a raw food or home-cooked diet or partaking of the incredible new corn-free Dog
  Diet, and, if growing, gestating, lactating or working, the addition of the appropriate Showdown formula.

To help in avoiding skeletal misalignment in future generations, all breeding age females, including humans, should be on the most optimum diet and supplementation possible for a *minimum* of one year prior to conception. This gives the body time to balance out before the demands of pregnancy begin so the mother can supply the baby with an equally optimum nutritional supply.

Specific TMJ supplements could include:

MSM—helps to alleviate swelling

Free & Easy—can aid in rebuilding joints, cartilage and even ligaments and tendons

**PMS**—magnesium is essential to both proper muscular release and in the body's production of hyaluronic acid ... (horses would have **Easy Boy**)

Of course appropriate dental care is also vital for all. Definitely choose someone *very* conversant with the whole body approach to TMD rather than just looking in the mouth. In extreme situations, some TMJ specialists will suggest surgery. Whether or not it is actually appropriate in any one particular situation is cause for serious contemplation and perhaps a second opinion. It may truly be the appropriate answer but only if all the non-invasive measures have been given enough of a chance. Remember that while it takes blood only 4 months to replace all cells, it takes bone a full 18 months to do the same.

## CONCLUSION

While success with these suggestions will most certainly depend on just how severely damaged the TMJ is, the prognosis can be very good. At the very least, perhaps some long-term behavioral and attitudinal challenges may be eliminated. As frequently happens, answers tend to come down to optimum species-specific nutrition along with a healthy dose of common sense!

Colorado Gold Director Rowan Emrys has spent almost 45 years breeding AQHA horses, about 10 years breeding GSD's (German Shepherd dogs), spent 23 yrs. in the dental field and the next 20 years as a Certified NeuroMuscular Massage Therapist and CranioSacral Therapist. She also experienced first hand the trials and tribulations of TMD wearing a "bite plate" for a couple of years in her twenties, thus eliminating her migraine headaches.