Dental/Neck and Shoulder Pain Connection

TMJ stands for temporomandibular joint “is a small joint in front of the ear where the skull and the lower jaw meet. This joint allows the lower jaw (mandible) to move and function, and is the most constantly used joint in the body.” In other words this little, yet resilient joint really gets a workout mostly during normal everyday events, such as eating, yawning, singing, shouting and talking. The teeth themselves are also important for proper TMJ functioning, because if they don’t fit together properly, stresses can be generated that can displace the condyle and damage the disc, ligaments and muscles. There are many studies, websites which link dysfunction of the TMJ, TMD or craniocervical mandibular disorders [CMD] to multiple symptoms, including but not limited to tinnitus, Meniere’s disease, decreased hearing, aural fullness, headaches, dizziness, difficulty balancing, difficulty swallowing, neck and shoulder soreness, cracking & clicking sounds in the jaw joints, limited mouth opening, visual disturbances and in some cases neurological diseases. Many of these sources also cite cervical spine dysfunction [CSD] as being a contributing and correlating factor in TMD. The issue to be investigated is whether TMD a result of CSD or vice versa?

The answer is probably both, in that there are faults in the TMJ system that can induce problems in the cervical spine, and CSD does create problems with the TMJ. There are people of course, who have no cervical spine symptoms and exhibit TMD. The connection is may be fairly obvious when viewing radiological images of people with atlas subluxations. It becomes patently obvious that the lower jaw (mandible) and hence the TMJ are out of alignment. The crooked or tilted head (X-ray opposite) that sits on top of the cervical spine results in non-alignment or disarticulation of the TMJ in the cranial fossa (recess). The joints do not work properly during opening and/or closing, and the neck and shoulder muscles go into painful spasm during the normal process of eating. There are some 163 or more muscles and ligaments in the head and neck area which are used in the process of eating.

The most painful part may have nothing to do with my joints themselves, but may be due to muscular spasm in the trapezius and lower scalenes. The pain can be excruciating and the symptoms vary. The neck, which is considered as the conduit to and from the body, is rich in many nerves and blood vessels. Spasms of the scalene and trapezius muscles will cause compression of these nerves and blood vessels which lay near the brachial plexus of nerves at the base of the neck, that when compressed are implicated in Thoracic Outlet Syndrome [TOS] which can cause tingling or numbness in the hands and fingers.
The close relationship of TMD to CSD warrants close scrutiny and certainly collaboration between both chiropractors experienced in upper cervical analysis and adjustment and dentists experienced in TMD. That is why I suggest both these steps are included in any therapy to correct both apparent problems.

Neck pain is one of the most frequent causes of visits to health care providers. Most commonly neck pain results from an acute trauma or chronic stress placed upon the muscles within the neck. Less frequently neck pain results from impingement of the nerves, which exit out of the spine. Anyone experiencing numbness, tingling, nausea, dizziness or changes in vision associated with their neck pain should be thoroughly evaluated to rule out cervical impingement of the nerves or blood vessels within the neck.

The most common cause of neck pain results from weakened muscles and poor posture. A forward head posture results in strain of the posterior muscles of the neck. This is commonly observed while driving, working on a computer, talking on a telephone or sitting at a desk. Having improper pillow support can also be a cause of neck pain. The pain is felt as a tight aching pain felt in the back of the neck and shoulders. Commonly this pain is felt as facial pain or a headache that comes up the back of the head in and around the eyes. What is not frequently realized is that many of the muscles of the anterior neck control the jaw and tongue. Pain in these muscles can refer pain into the face; teeth and can feel like swollen glands or a lump in the throat. This can give the voice hoarseness and cause difficulty in swallowing. Additionally, the nerve that innervates the jaw muscles and TMJ also commingles with the nerves of the neck. Therefore dysfunction within the neck structures commonly leads to problems within the jaw and vice versa.

Most treatments are aimed at encouraging the normal range of motion of the joints and muscles within the neck and decreasing the aggravating factors. Surgery is only indicated where there is clear evidence that a disc or vertebrae is out of place and causing the pain and dysfunction. Even then more conservative treatments should be attempted initially.