# Case Study 1

**ABSTRACT:** A case study of a 66 y.o. male with jaw pain and crepitation with jaw motion and a feeling of "fluid" in the ear. He most significantly had a reduction in his ability to hear as documented in a recent hearing test. He had a long standing history of hearing loss, but this recent diagnostic was demonstrably worse. Symptoms resolved with neural manipulation treatment.

Key Words: Neural Manipulation

**DATE:** 06/08/18

**DIAGNOSIS:** Pain and pressure in Lt. ear with some TMJ crepitation and pain.

**HISTORY:** Patient presented with a known hearing loss for several years but with an increase in pressure in the ear with a concomitant decrease in hearing established by a hearing test. Pain and pressure were sufficient that the patient was scheduled for a surgery if his symptoms did not remit. Medical history was noncontributory except for Diabetes which was controlled with meds.

## Patient problems:

- 1. Limitations self-care with sleep disturbance due to pain/pressure in ear/jaw.
- 2. Hearing loss Lt. ear and ear pain
- 3. Mild jaw crepitation and pain with chewing
- 4. Mild stiffness in cervical spine with pain

### **OBJECTIVE ASSESSMENT:**

Posture: Patient stands with a forward head/rounded shoulder posture with the cranium posteriorly rotated on C1 with suboccipital myofascial tightness. Jaw positioning of mandible was into the external auditory meatus with active trigger points into the muscles of mastication.

Jaw ROM: Jaw opening was to 30 mm and Rt. Lateral deviation was to 7 mm and left to 8 mm.

Sub-cranial ROM was 0 degrees for forward nod; 10 degrees for backward nod.

Side-bend Rt. and Lt: 5 degrees each

### **Active cervical ROM:**

Forward Bending: 3 fingers from chest

Backward bending: 1/3 range

Rotation Rt. and Lt.: 20 degrees each

Strength: Weakness noted in deep neck flexors at 3+/5

**Palpation:** Patient had active trigger points in upper traps, lev. Scap, Omohyoid, Scalenes, SCM's muscles of mastication and into cranial soft tissues. Neural tension present in braches of Facial, Trigeminal and occipital nerves as well as dural tension at RCPM on listening Lt. Tentorium was (+) for tension on listening at vertex.

**TREATMENT**: Patient was seen for initial evaluation and treatment for 60 minutes with one follow up treatment two weeks later of 60 minutes. Treatment included release of Tentorium, Neural manipulation of branches of Vagus, Facial (auricular, post auricular and Temporal branches) and Trigeminal (Mandibular, Auriculotemporal) nerves as well as occipital nerves. Rocabado 6X6 ex were instructed as well as lateral diaphragmatic breathing.

**Reassessment:** Between first and second treatment sessions, the patient had another hearing test and at that time he was told the fluid in his ear was decreased and that the hearing loss returned to the previous level of hearing loss before this acute flare up so he was no longer a surgery candidate. Patient cancelled his last two appts and reported by phone that he had no pain and pressure and his hearing level had returned to his normal and so he saw no reason to return to PT.

**Conclusion and Recommendations**: Neural manipulation of cranial nerves and cervical nerves can greatly assist in treatment of jaw pain and ear pain/pressure. The areas of treatment were guided by the Listening techniques at vertex and listening at the RCPM.

Treating Therapist: Linda Keahey- Oberdorfer, PT

#### References:

- 1. Barral Institute Neural Manipulation Course Workbooks from NM1-4, 2006-2016
- 2. Barral & Croibier. Manual therapy for Cranial Nerves. Palm Beach Gardens FI: Barral Productions; 2013
- 3. Barral & Croibier. Manual Therapy for the Peripheral Nerves. Palm Beach Gardens FI: Barral productions: 2013
- 4. Barral & Croibier. Trauma an Osteopathic Approach. Seattle Wa: Eastland Press Inc. 1999