
The Federation of International Federation for Manual/ Musculoskeletal Medicine meeting in October 2019 highlighted the Arlen technique.

This Atlas therapy was developed in France and is a method of treating the first cervical vertebrae resulting in central nervous system changes & reportedly improving vertebra basilar artery function.

There are many cranio- cervical manual therapies that decrease the hypertonicity or somatic dysfunction (asymlocation) in a number of painful conditions or neurological diseases. These therapies can be very effective the treatment of vertigo , dizziness , headaches and superior cervical pain..



Arlen's atlas (first cervical vertebrae) therapy is gentle. There are **no treatment-typical risks** involved in atlas therapy due to the fact that it does not require traction, rotation or backward tilt of the cervical spine.

The cranio- cervical junction has a rich supply of sensory receptors for vibration and deep pressure (ie Pacinian corpuscles) that are essential for proprioception and control the position of the body in space. They assist in regulating the degree of tension in the myofascial skeletal system. Balance, gross and fine motor skills and pain signals are greatly affected by this area. The superior cervical myofascial structures, tendons and nerves are a sensory organ, which transmits information to the brain where it is processed into appropriate reactions. Excess tension, asymlocation and false locomotor information can send false information.

For instance I believe that the Dix Hall-Pike manoeuvre has little to do with the inner ears and much more to do with mobilizing the cranio- cervical junction and superior cervical spine. This is what decreases the dizziness / vertigo that is arising from dysfunction in the superior cervical spine.

It is reported that atlas therapy cannot restore damaged structures, but it can improve the functioning of intact structures.

The Arlen technique is described where the patient sits in an upright position; the treating practitioner analyzes the position of the atlas on the transverse process and short selective impulses are given to the side of the dysfunctional atlas body with the middle finger. The impulse has to be short enough for no protective reflex to be initiated, i.e. it should be completely painless.

The length of the impulse is about 12-15ms, which is just about a blink of the eye. The intensity of the impulse has to be variable and completely reproducible at will.

Syndromes treated:

1. Neural and muscle disorders with hypertonicity including muscular dystrophy and MS
2. Scoliosis
3. Post polio
4. Dizziness, vertigo, hearing and speech disorders, Superior cervical pain syndromes and headache.

CASE HISTORY:

1.

S: 46 year old male- employed as a chartered accountant who developed extreme recurrent vertigo over 1-2 weeks- severe bouts where he would have to lie down and not move for hours- He was unable to eat when symptomatic - no MVA- no high speed trauma- athletic- sat at his desk with a computer screen throughout the day

O: 6 feet 4 inches- 210 lbs- mild head forward posture- slight loss to full cervical ROM- ++ triggers – tightness/dysfunction right > left cranio- cervical junction- inferior positioned occiput by palpation- ++ pain palpating the transverse process of C1- neuro- normal

A: 1. cervicogenic vertigo- right > left cranio- cervical dysfunction
2. Query Postural and Use Syndrome

P: manual therapy-

1. Indirect techniques- neuro- modulatory technique whereby the right hand 2nd or 3rd finger pushes gently on the dysfunctional right cranio- cervical myofascial structures in a shortened position until the tissues relax
2. Right occiput gentle release
3. Right rotation gentle C0-1 end range mobilization and manipulation.
- 4 Arlen technique was NOT utilized.

This normalized the cranio- cervical junction joint position and myofascial structures and the patient described feeling better movement with no vertigo or cervical pain.

After this, he utilized a proper cervical position at his computer so that he would not look up with the head in a slightly extended position

OUTCOME: after 2 treatment sessions, this resolved - he would feel it coming on slightly if he went into a head forward posture or slight extension when sitting at his computer

2. 28 year old female sent to me for a medico-legal opinion by a law firm in another city. She was complaining of severe cervical thoracic pain and headaches after a motor vehicle accident.

O: 60% loss in active cervical ROM.

By palpation. No cervical trigger points. Passively side bending, rotating and extending each cervical segment revealed no somatic dysfunction and no myofascial dysfunction. Passive cervical range of motion was full.

A: cervical pain- somato- psychic etiology

P: I very kindly showed her that she had full cervical range of motion and that I could not find any musculoskeletal abnormality in her cervical spine. I told her that I did not know why she had these symptoms. She immediately burst into tears informing me that her boyfriend was repeatedly abusing her. THIS IS ILLUSTRATIVE OF THE GREAT VALUE IN UTILIZING PASSIVE ASSESSMENTS OF THE JOINTS AND MYOFASCIAL AREAS OF THE BODY.

SUMMARY:

I have pondered the best way to teach manual techniques. Some of the manual therapy teaching is too complicated and takes too long for most MD's to use in their medical practices. These techniques are exceptionally useful with all athletes and in particular elite athletes.

I learned early in my medical career to "joint play" all the joints in the body. One seasoned MD manual therapist encouraged me to properly "love with your hands."

My advice to those who are wanting to learn better manual techniques in the cervical spine is to “joint play all the cervical segments”. Passively mobilize the cranio-cervical junction. Put your second or third finger on the transverse process of C1 sidebending and rotating. Feel for asymmetry in joint motion. Simply leaving your second or third finger on the dysfunctional myo- fascial structures or joint will result in improved joint and myo-fascial kinematics. This is an indirect technique that can be easily learned and used quickly in a busy medical practice. Cranio- cervicval junction manipulation should be done with a very short thrust at end range only when “all the myofascial slack” is picked up. There is a probable 1 in 3 to 5 million probability of vertebra basilar damage or strokes. You can utilize gentle techniques with no thrust involved that will deal with most cranio- cervical dysfunction pain syndromes.

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