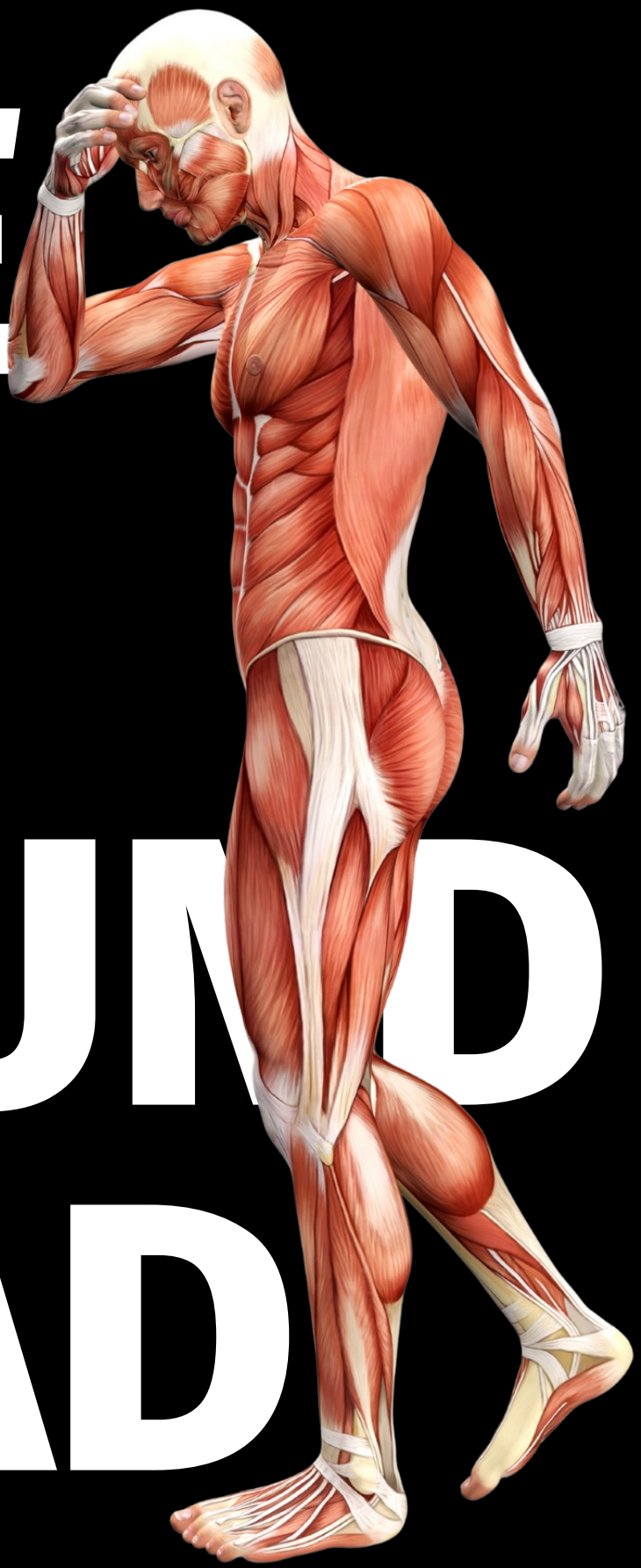
A THERAPIST'S GUIDE TO

THE 42-POUND HEAD



By Erik Dalton

Forward head posture is one of the most common postural deviations observed in clinical bodywork practice, particularly among clients who spend prolonged periods working at computers, using handheld devices, or driving. Forward head posture causes head and neck pain as well as a variety of other health issues. Developing the knowledge and skills to treat forward head posture effectively is one of the most significant ways you can support your clients.

WHAT IS A 42-POUND HEAD?

Osteopaths refer to it as the "42-pound head" phenomenon because each inch of anterior head displacement increases the mechanical load on the cervical spine by approximately 10 pounds. While the human head weighs 10–12 pounds in neutral alignment, a three-inch forward displacement effectively transforms it into a 42-pound burden that the cervical spine and surrounding soft tissues must constantly support. The consequence is not only localized neck and upper back pain, but also widespread dysfunction involving the musculoskeletal, respiratory, and even gastrointestinal systems.

THE BIOMECHANICS OF FORWARD HEAD POSTURE

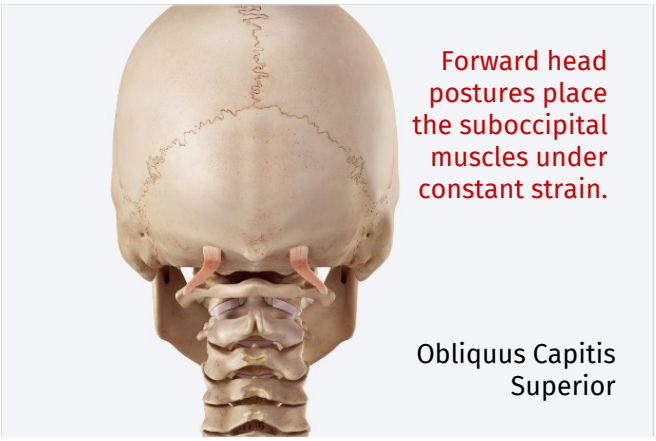
The cervical spine is designed to support the weight of the head in a balanced, upright position, with the ear canal aligned over the acromion of the shoulder. In this orientation, the cervical spine's natural lordotic curve

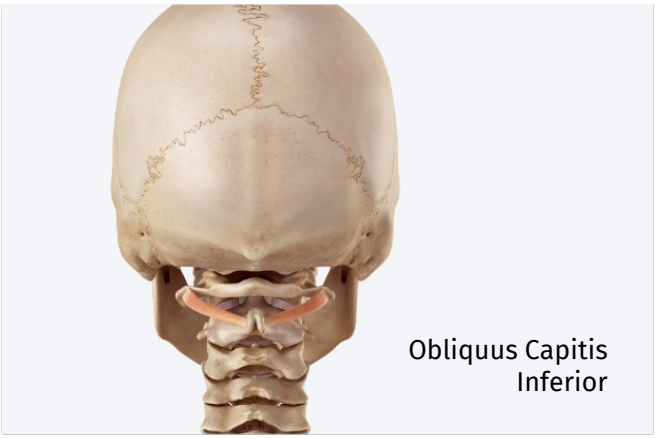
helps distribute the head's weight efficiently through the vertebral column. When the head migrates anteriorly relative to the thorax, this efficient system collapses. Instead of a balanced load, the cervical and thoracic musculature must generate continuous isometric contraction to counter gravity's torque. The greater the displacement, the greater the muscular load.

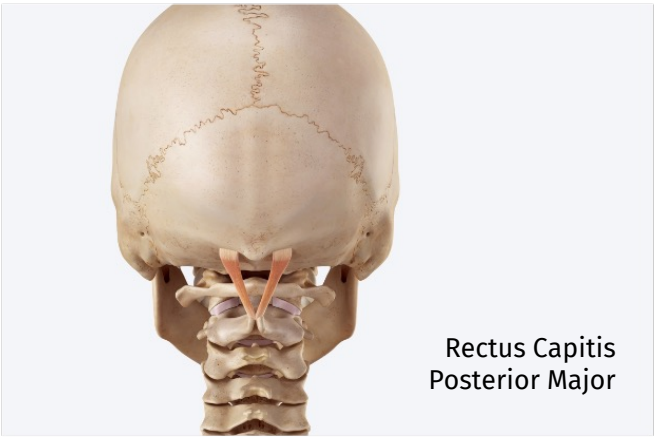
For example, if the head is displaced 2 inches anterior to the vertical axis, the cervical extensors must generate 20 extra pounds of counterforce to maintain head position. This sustained muscular effort causes some muscles to become hypertonic, while others become weak and inhibited, triggering a cascade of compensatory adaptations.

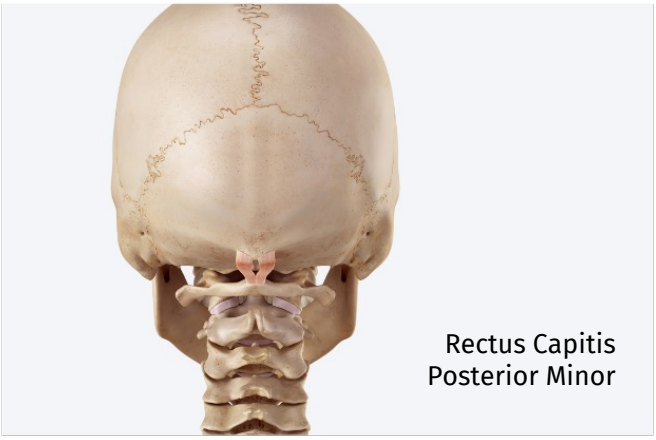
Forward head posture alters the natural spinal curves, often flattening or reversing cervical lordosis and producing a compensatory increase in thoracic kyphosis. To maintain visual orientation with the horizon, the cervical extensors contract and pull the occiput into extension at the atlantooccipital joint. This constant muscular activity stresses the suboccipital muscles and the upper cervical joints.

At the same time, the anterior cervical stabilizers, such as longus colli, longus capitis, and the suprahyoid muscles, are chronically lengthened and inhibited. These shifts in muscle length and joint loading contribute not only to neck pain but also to functional impairments such as reduced respiratory capacity, impaired swallowing, temporomandibular dysfunction, and postural balance deficits.









Muscles that are Tight and Overactive are:

- Upper trapezius
- Levator scapulae
- Suboccipital muscles
- Sternocleidomastoid (SCM)
- Pectoralis major and minor

Muscles that are Weak and Inhibited are:

- Deep cervical flexors
- Lower trapezius
- Rhomboids
- Serratus anterior

VLADIMIR JANDA AND UPPER CROSSED SYNDROME

Vladimir Janda, a Czech neurologist and rehabilitation specialist, was among the first to recognize predictable patterns of muscle imbalance associated with chronic postural dysfunction. His model of the Upper Crossed Syndrome provides a framework for understanding forward head posture.

The “cross” refers to a pattern of muscular tightness and weakness that intersects at the cervical spine and shoulder girdle. An upper-crossed pattern creates a cycle of dysfunction. Tight anterior muscles draw the head and shoulders forward, while weak posterior stabilizers fail to counter the pull. The result is an elevated and protracted shoulder girdle, thoracic kyphosis, and anterior head carriage. Clients report:

- Neck pain and stiffness
- Tension headaches or migraines
- Shoulder pain and impingement syndromes
- Decreased cervical mobility
- Temporomandibular joint pain
- Numbness or tingling in the arms due to brachial plexus compression
- Fatigue, poor concentration, and sleep disturbances

Over time, the dysfunctional pattern becomes self-reinforcing. The nervous system adapts to chronic postures through altered proprioception and motor programming. The faulty alignment starts to feel normal to the client. MAT interventions help to reset both the biomechanical and neurological patterns.

THE CONSEQUENCES OF CHRONIC FORWARD HEAD POSTURE

When forward head posture persists for years, its effects extend beyond local pain. Research has linked chronic forward head posture to a wide range of systemic problems:

- Degenerative Joint Disease: Continuous compression of cervical intervertebral discs and facet joints accelerates degenerative changes, leading to osteoarthritis, disc herniation, and intervertebral foraminal stenosis.
- Respiratory Dysfunction: Anterior head carriage reduces thoracic expansion, resulting in a diminished vital lung capacity of up to 30% in severe cases. This compromises oxygenation and can exacerbate fatigue and cardiovascular stress.
- Neurological Impact: Suboccipital compression can irritate the greater occipital nerve, triggering cervicogenic headaches. Significant chronic cervical flexion may also compromise vertebral artery circulation, potentially affecting balance and cognition.
- Gastrointestinal Disruption: Altered diaphragmatic mechanics and intra-abdominal pressure can impair digestion and elimination.
- Psychological and Emotional Effects: Poor posture is associated with depressive symptoms, reduced self-esteem, and impaired body image. Clients may report increased stress, anxiety, or emotional flatness.

In elderly populations, chronic forward head posture is particularly concerning because it is strongly associated with balance impairment and fall risk, partly due to altered vestibular input and diminished cervical proprioception. For therapists, the stakes are high because a failure to address forward head posture early can mean a lifetime of escalating dysfunction for the client.

> “Most attempts to correct posture are directed toward the spine, shoulders and pelvis. All are important, but head position takes precedence over all others. The body follows the head. Therefore, the entire body is best aligned by first restoring proper functional alignment to the head”.
>
> DR RENE CAILLIET, M.D., DIRECTOR OF THE DEPARTMENT OF PHYSICAL MEDICINE AND REHABILITATION AT THE UNIVERSITY OF SOUTHERN CALIFORNIA

THE MAT APPROACH TO FORWARD HEAD POSTURE

Erik Dalton's Myoskeletal Alignment Techniques® (MAT) offers a comprehensive system for correcting forward head posture and Upper Crossed Syndrome. The guiding principle is simple but powerful: level the head and tail. MAT training equips therapists to:

ASSESS WITH PRECISION

- Identify dysfunctional posture patterns.
- Recognize thoracic and cervical joint restrictions.
- Detect muscular hypertonicity and inhibition patterns.

RELEASE HYPERTONIC TISSUES

- Use specialized soft-tissue approaches for the pectorals, SCM, upper trapezius, and suboccipitals.
- Apply joint mobilization strategies that decompress the cervical and thoracic spine.

ACTIVATE INHIBITED MUSCLES

- Utilize evidence-based activation methods for the deep cervical flexors, lower trapezius, rhomboids, and serratus anterior.
- Choose MAT techniques that restore balanced head and shoulder mechanics.

REPROGRAM THE NERVOUS SYSTEM

- Blend manual release with corrective movement to disrupt faulty nervous system patterns.
- Train proprioceptive pathways so the nervous system encodes new postural habits.

EDUCATE AND EMPOWER CLIENTS

- Teach simple corrective exercises for home care.
- Provide ergonomic coaching for work and daily life integration.
- Support long-term posture correction and pain reduction.

By combining precision assessment, manual therapy, and neurological retraining, MAT

delivers results that go beyond symptom relief to correct the root cause of dysfunction and build loyal clients.

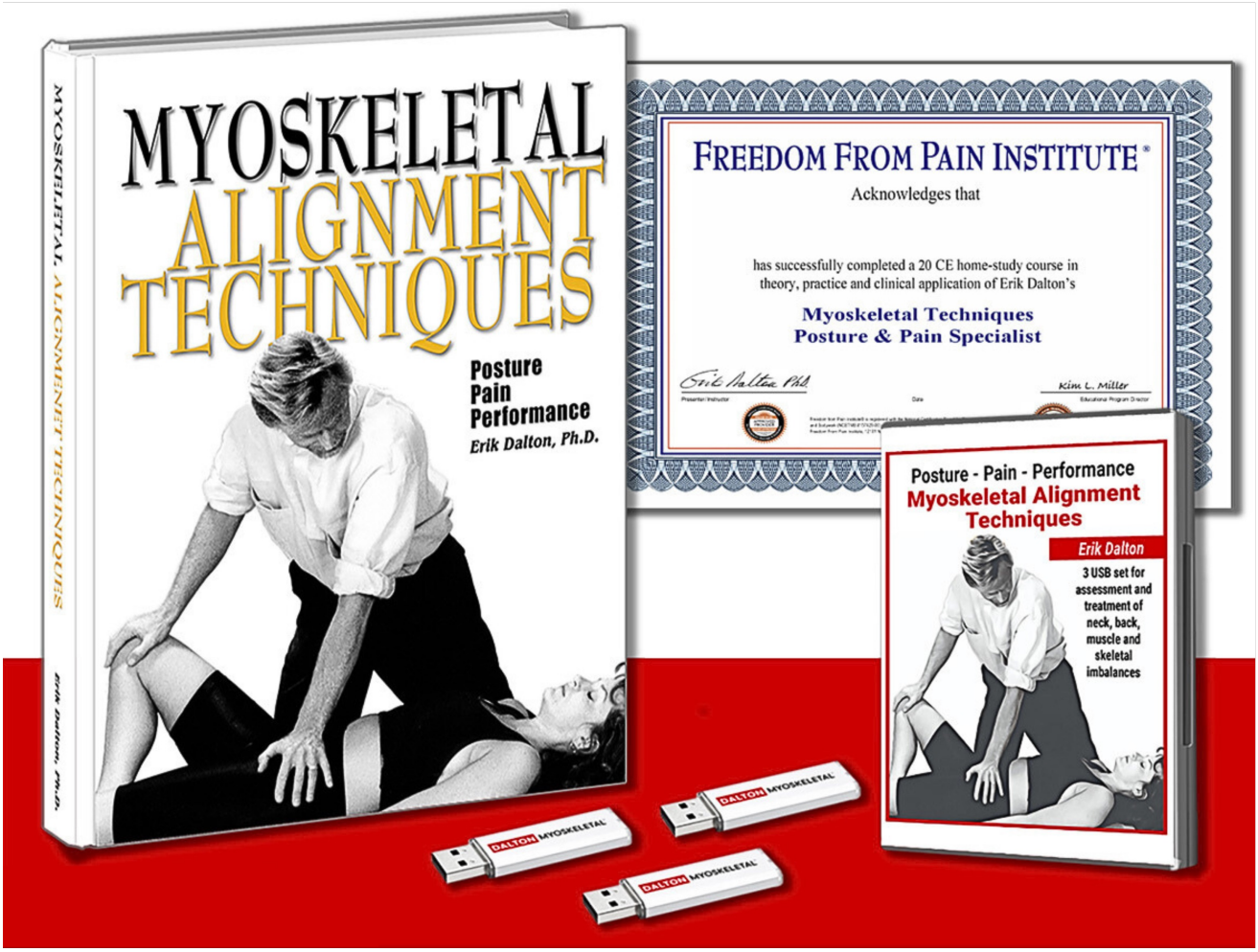
For therapists, addressing forward head posture is both a challenge and an opportunity. By applying the principles of Myoskeletal Alignment Techniques, massage therapists and bodyworkers relieve client pain while profoundly influencing their quality of life, posture, and long-term wellbeing.

NEXT STEPS

Correcting forward head posture and Upper Crossed Syndrome requires more than a few isolated techniques. Instead, therapists require a systematic and comprehensive approach. If you're ready to build deeper expertise, Erik Dalton's Posture, Pain, Performance home study course provides a solid foundation in Myoskeletal Alignment Techniques® and equips practitioners to deliver consistent, lasting results.

This guided program earns you 20 NCBTMB-approved CE hours and includes:

- Textbook: Myoskeletal Alignment Techniques: Posture, Pain, Performance.
- Video Instruction: A three-part systemized protocol demonstrating MAT applications available online or via USB drives.



- **Professional Community:** Access to the Dalton Myoskeletal Facebook group for peer discussion and mentorship.
- **A Frame-Worthy Certificate:** A certificate of completion you can proudly display in your clinic, reinforcing your credibility with clients and colleagues.
- **Hours Toward Your MMT Certification:** Earn 20 hours towards Erik's prestigious Master Myoskeletal Therapist® certification.

By completing the course, you not only gain advanced clinical skills but also establish yourself as a therapist who can resolve complex postural dysfunctions. This expertise strengthens client loyalty, encourages referrals, and positions you as an authority in posture correction and pain management.

If you are committed to helping clients stand taller, move more effectively, and experience less pain, this course is your next step.

WORKS CONSULTED

- Alpayci M, Ilter S, Yumusakhuylu Y, et al. Decreased neck muscle strength in patients with forward head posture. Clin Biomech (Bristol, Avon). 2016;33:98-103. doi:10.1016/j.clinbiomech.2016.02.005
- Cailliet R. Rejuvenation Strategy. New York, NY: Doubleday; 1987.
- Czaprowski D, Stoliński Ł, Tyrakowski M, Kozinoga M, Kotwicki T. Non-structural misalignments of body posture in the sagittal plane. Scoliosis. 2018;13(1):6. doi:10.1186/s13013-018-0150-8
- Falla D, Jull G, Russell T, Vicenzino B, Hodges P. Effect of neck exercise on sitting posture in patients with chronic neck pain. Phys Ther. 2007;87(4):408-417. doi:10.2522/ptj.20060009
- Kang JH, Park RY, Lee SJ, Kim JY, Yoon SR, Jung KI. The effect of the forward head posture on postural balance in long time computer-based worker. Ann Rehabil Med. 2012;36(1):98-104. doi:10.5535/arm.2012.36.1.98
- Kapreli E, Vourazanis E, Strimpakos N. Neck pain causes respiratory dysfunction. Med Hypotheses. 2008;70(5):1009-1013. doi:10.1016/j.mehy.2007.07.046
- Kim SY, Kim NS, Oh DW. Effect of forward head posture on thoracic shape and respiratory function. J Phys Ther Sci. 2018;30(1):110-114. doi:10.1589/jpts.30.110
- Lau KT, Cheung KY, Chan KB, Chan MH, Lo KY, Chiu TT. Relationships between sagittal postural alignment and muscle performance in subjects with and without chronic neck pain. Man Ther. 2010;15(5):457-462. doi:10.1016/j.math.2010.03.009
- Ruivo RM, Pezarat-Correia P, Carita AI. Cervical and shoulder postural assessment of adolescents between 15 and 17 years old and association with upper quadrant pain. Braz J Phys Ther. 2014;18(4):364-371. doi:10.1590/bjpt-rbf.2014.0049
- Salahzadeh Z, Maroufi N, Ahmadi A, et al. Assessment of forward head posture in females: observational and photogrammetry methods. J Back Musculoskelet Rehabil. 2014;27(2):131-139. doi:10.3233/BMR-130426
- Shaghayegh Fard B, Ahmadi A, Maroufi N, Sarrafzadeh J. Evaluation of forward head posturein sitting and standing positions. Eur Spine J. 2016;25(11):3577-3582. doi:10.1007/s00586-015-4254-x
- Subbarayalu AV, Ameer MA. Effectiveness of deep cervical flexor muscle training on forward head posture, pain, neck disability, and muscle endurance in school teachers: a randomized controlled trial. Int J Prev Med. 2017;8:54. doi:10.4103/ijpvm.IJPVM_142_17
- Yoon TH, Moon HJ, Lee SY, et al. Relationship between forward head posture and respiratory function in adolescents. J Phys Ther Sci. 2016;28(1):112-115. doi:10.1589/jpts.28.112

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A TEACHER'S GUIDE TO THE 42-POUND HEAD BY ERIK DALTON

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