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Autism: Treatment using diagnostic Manual Muscle Testing & Professional Applied Kinesiology

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Narrative: The author discusses an AK viewpoint for injury prevention, treatment, and human performance in the athletic patient. A review of Professional Applied Kinesiology (PAK) aspects of diagnosis and treatment is presented and expanded based on the author's clinical experience. Correlations to typical Professional Applied Kinesiology (PAK) findings and structural factors are clarified. Specific PAK diagnostic and treatment protocols are recommended.

For examination purposes the author divides Manual Muscle Testing (MMT) into Core and Extremity muscles. Core muscles and the stomatognathic system should always be examined no matter the patient's presenting complaint. This is a delineation between the symptom-oriented vision of other disciplines and PAK. The PAK doctor must keep in mind the "global" picture while addressing the local or regional complaints.

The normal motion of the stomatognathic structures (pelvis, spine, TMJ, and cranium) and dura mater is of primary structural importance in core function, health, and athletic performance. Too often these pivotal components of healthy body movement are ignored and unaccounted in other physical medicine disciplines.

We have seen core and extremity muscle function, Stomatognathic system, and other biomechanical factors effect power, accuracy, timing, speed, comfort, injury, prevention, and general human performance in athletes from little league to professional levels of sport.

Thus, in addition to thorough AK muscle examination and treatment, we suggest testing and treating for the numerous related or stand-alone functional tests and novel treatments that Goodheart and others developed, as part of our simultaneous global and local mindset when addressing patient complaints. In fact, this clinical frame of mind is an essential part of the DNA of any skilled PAK practitioner.

Indexing terms: Professional Applied Kinesiology; Sports Medicine; Athlete; Sports Injuries; Goodheart; Dural Torque; Sensory; Motor Function; Stomatognathic System; Gait; Muscle Testing.

Introduction

Athletes, from junior high to professional levels, are vulnerable to abnormal stress from trauma, overtraining, genetic factors, and much more. The well trained and thorough AK practitioner is uniquely positioned to intercept and treat these clinical phenomena at every stage of an athletic career.

In the authors experience using PAK methods over several decades, an

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athlete evaluation that prioritises core body function will yield optimum outcomes. Thorough treatment of any area of complaint, whether in the core or extremities, will be more successful when the core structures are addressed. The feet, dura mater, and breathing/ribcage function are often the most important underlying structural factors effecting core and extremity health and performance in athletes.

The ingenious work of Dr Goodheart and other dedicated AK innovators is a powerful toolset that is entirely unique to AK. Thus, the AK practitioner is an irreplaceable resource in the career of any athlete.

Discussion

Abnormal biomechanics in the stomatognathic system and/or extremities is a constant finding in most athletes. This creates a disturbed sensory barrage to brain resulting in a motor pattern that is suboptimal in quality and specification. The athlete is then predisposed to repetitive stress and/or traumatic injury. AK treatments are irreplaceable in reducing nervous system static that corrupts the sensory quality from extremities and core structures. For example, Dural Torque corrections are a regular and primary opportunity to help prevent stress, strain, injury, and improve human performance. When these factors are addressed, the AK patient can focus their volitional intent for efficient motor function, personal achievement, and sustained training and improvement.

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Core Examination

- Gait movement
- Bony landmarks – anterior/posterior views
  - relative levels of ASIS, PSIS, Sacral base and apex, shoulders, occiput, lateralisation of coccyx, spinal curves
  - in lateral views note relative positions of ear, glenohumeral joint, hip joint, pelvic tilt and anterior to posterior or lateral sway
- Stomatognathic System contributions to Dural Torque and tension (1, 2, 3, 7)
  - Pelvic Categories (PAK or SOT protocols)
    - ✓ Cat I, II, III
  - Ilio-lumbar ligament
  - Spinal subluxation and fixations (TS line, Upper Trapezius line), disc syndromes
  - Ribcage subluxation/fixation, Breathing
    - ✓ Esp. inferior right upper ribcage and left ribcage extension misalignment (3)
  - Cranial Faults
  - Dural traction adjustment (3)
  - Temporomandibular Joints

- MMT (1, 2)
  - *Psoas*, *Quadratus lumborum*, *Multifidus*, *Iliocostalis*, *Gluteus maximus*, *Piriformis*, *Trapezius* – upper/middle/lower, *Rhomboids*, levator scapularis, *Suboccipitals*, *Abdominals*, *Diaphragm*, SCM, *scalenes*, deep neck flexors, Neck extensors
- Brain-based Neurological tests - help indicate cerebellar and cerebral effects on core muscle tone (3, 8)
  - Romberg and sharpened Romberg - ipsi Postero-lateral sensory columns and cerebellum indicator
  - Visual Convergence test – medial rectus weakness indicates relative weakness of opposite cerebral cortex
  - Uvula/soft palate - lower on side of weaker cerebral cortex

Regional/extremity exam

  - MT – test all local AK and Beardall muscle tests (1,2)
  - Pincer palpation for entire length of fascial trains which cross problematic area (1, 4, 5)
    - ✓ Ex: for pelvic bowl muscle inhibition also use pincer palpation along entirety of the Front Functional Line of fascia for additional treatment areas
  - Directional challenges for local skin (1)
  - Ligament Interlink (1,2)
  - Ligament Receptor/Stretch technique (1)
    - ✓ Type 1 treat with B&E point
    - ✓ Type 2 can indicate need for Choline
    - ✓ Type 3 can indicate Vit B9 or GABA
  - Local spinal and/or peripheral nerve entrapment related muscles (1)
  - Palpate muscles and fascia for tension and trigger points
  - ROM, pain, position of injury (BID, EID), scars in area (1, 2)

Empirical AK Examination testing

- Diaphragm (8)
- Aerobic / Anaerobic testing (6, 9)
- Nasal Ionization (1, 2)
- Retro / Anterograde Lymphatic challenges (1, 2)
- Primary Atlas (1, 2)
- Rib Pump / ribcage function (1, 2, 3)
- Pelvic Floor (shortcut: myofascial release of Adductors and Front Functional Line of fascia) (1, 2, 3, 4)
- Functional Hallicus Limitus (1, 2)
- Gait muscle testing (1, 2)
  - ✓ Ex: Psoas Major and Pec Major muscle simultaneous inhibition: treat K1 and pincer palpate for additional treatment areas along the Front and Spiral Lines of fascia
- Psychological Reversal (1,2,3)
  - ✓ Have athlete write challenge sentences to help engage cerebral motor cortices

- Beginning and Ending technique, (1,2)
  - ✓ B & E acupoints on the face can be used anytime they give a strengthening response
- PRYT: helps reveal areas contributing to Dural Torque and Stomatognathic dysfunction (1, 2)

Conclusion

We have seen core and extremity muscle function, Stomatognathic system, and other biomechanical factors effect power, accuracy, timing, speed, comfort, injury, prevention, and general human performance in athletes from little league to professional levels of sport.

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