



Second postural mechanics seminar

[Podiatry Now](#), [July, 2008](#) by [Peter Graham](#) Podiatry Services Manager - Merton and Sutton Community NHS Trust

1 2 [Next »](#)

The second postural mechanics seminar was held in London in April. This international two-day multidisciplinary event brought together podiatrists, orthotists, chiropractors and remedial therapists, to hear Prof. Brian Rothbart's theories on the involvement of abnormal foot motion in chronic pain patterns.

Admitting to not fully understanding the theory, I signed up for the introductory seminar.

It was interesting to note that one third of the delegates had attended the first seminar, and were back to learn more.

Since 2005, this academic's theories have sparked controversy within the musculoskeletal fraternity, as evidenced by the lively debates engendered by any website posting at the mentioning of his theories and treatment modality.

Put simply, Professor Rothbart states that during embryological development, the neck of the talus in a percentage of the population fails to de-rotate fully, leading to an elevated and rotated first ray (primus metatarsus supinatus).

During gait, this leads to hyperpronation, as the first ray is forced downwards due to gravity. This in turn leads to inward rotation of the lower extremities, an anterior rotation of the pelvis, followed by an anterior shift in the body's centre of gravity, and head forward position (the so-called 'bio implosion' posture.)

This 'imploded' posture sets off muscular trigger points, misaligns the pelvis and spine, compromises nerve function, and sets up chronic pain and stress patterns throughout the body. This hyperpronation of the foot sends a 'skewed' proprioceptive signal to the brain, which the brain accepts as being the 'normal' state of affairs.

Prof Rothbart's solution to this problem is to alter the proprioceptive signal coming from the foot. This in effect resets ('engramms') the brain, causing a lessening of the hyperpronation and a global postural change, instigated by the body itself. A lot to take in all at once!

This engramming is brought about by the use of ultra thin insoles. The height of the wedge determines the strength of the signal transmitted to the brain.

The devices look deceptively simple, but on looking at the 'before' and 'after' postural photographic evidence from some of the delegates, the alteration in posture was remarkable. Highly relevant if poor posture generates chronic pain.

A new concept introduced to most of the podiatrists at the seminar was 'ascending and descending' chronic pain patterns.

Ascending patterns are caused by abnormal foot motion (affecting the hips and acetabulum), and, in Prof Rothbart's model, descending patterns are caused by cranial lesions and occlusion problems (affecting the sacrum).

An interesting interlude was supplied by the organisers in the appearance of John Bryant--author, Olympic coach and one of the founding fathers of the London Marathon--who told of his long rehabilitation period following an accident.

This involved many failed orthotic interventions--all superseded by the Rothbart device.

