

## **If you cannot reproduce the patient's signs and symptoms should you treat them anyway?**

### WHAT DO YOU DO IN YOUR OFFICE?

Is the simple inversion sprain a simple inversion sprain? Or is it a cause of the development of a subluxation complex in a patient? During the first week of January 1994, a university track coach brought to my office a female high jumper with a two year history of chronic bilateral shin splints. Originally the massage therapist tried to fix the problem but this did not work. The patient was next seen by a sports doctor who made her some orthotics. She became worse with the orthotics. The medical profession was next, the general practitioner, medication, the physical therapist, the physiatrist, bone scans, orthopedic surgeon, more x-rays and CT scan, and then more medication. All this time the patient was unable to train due to the pain that would come after just a few strides.

After one full year with no improvement, needless to say, the patient was a little disgruntled with the results. The patient was next sent to another city for a second orthopedic evaluation and this wizard stated that the problem was one of misdiagnosis and that the patient needed an anterior compartment fasciotomy. Eight months later, after the surgery and six months of physical therapy, the patient was pronounced well and told to resume training. Within two days all the pains came back, enter now the track coach.

One point that I would like to emphasize is that only one doctor looked at the patient's feet, and then only because orthotics can make you a lot of money. Not one of these doctors examined the feet or inquired into her past injuries relative to her particular sport. The obvious question: What was being treated? No one reproduced the patient's pain!

Examination of the patient was, to say the least, a little tough and why not, as so many previous times she had been through this same scenario. During the case history, which was centered around her sport and any injuries she had encountered, it was noted that inversion ankle sprains were extremely common; these were never treated for joint dysfunction. There was tenderness bilaterally along the peroneus longus muscle above the lateral malleoli. The TCN (talocalcaneonavicular joint) joint play (dorsolateral in direction) in a closed kinetic chain position instantly reproduced her anterior shin pain. (Note that this was not so in an open kinetic chain).

The calcaneocubiodonavicular joint complex (CCN) was fixed from dorsal to plantar, plantar to dorsal and lateral to medial. So what do you treat, the TCN, the CCN, or the peroneus longus? Well, here is what we did: Obviously the pain generator was the TCN, however, was it the primary cause or a compensatory fixation? We choose to think of the TCN as a compensation secondary to the cuboid which we felt was the actual cause. However, it too, in the genesis of the condition, would have been caused by the inversion sprains on a time continuum.

The consequences of "the simple inversion sprain" with respect to the cuboid and its associated articulations is that the cuboid itself is tractioned downward and rotated inward on its axis of rotation relative to the calcaneus. Apart from causing the TCN fixation and, in this case the resultant anterior compartment pain, the cuboid, when traction as noted above will encroach its

tuberosity on the trunk of the lateral plantar nerve and must be considered an etiological factor in many cases of plantar neuritis.

The treatment: Joint manipulation/adjustment was of course the treatment of choice. The first adjustment was directed to the correction of the cuboid function around a long axis, corresponding to the shaft of the fifth metatarsal; this movement tends to separate the outer arch from the inner arch at the neutral cleft, between the third and fourth ray segments. The second adjustment (same day) was to the TCN using a Thuli Toggle Board. The TCN was adjusted from the plantar surface in a dorsal lateral direction with the subtalar joint in the closed kinetic chain position. The patient was instructed to ice and to do plantar/dorsi flexion ROM exercises in an open kinetic chain position. She was treated three days in a row and after one week was asymptomatic and running daily. Follow-up revealed nothing and the patient was discharged from foot and ankle care.

Over the years, it has been my hypothesis that inversion sprains are taken far too lightly by the examining doctor and the treating doctor alike. Dr. Janda in his writings mentions contralateral shoulder joint and or supraspinatus tendinitis as a possible consequence of not understanding the complexity or even examining the "simple inversion sprain."

The foot is obviously an extremely complex structure and has a huge impact on sacroiliac, lumbosacral junction, and lumbar spine function through the gait cycle. In the tradition of MPI's keeping with the times and presenting new updated material to the profession, the E1 Lower Extremity course will soon become two separate courses. This will allow the doctors and students of chiropractic to better understand the lower extremity and its impact on axial skeletal function.

*Keith Innes, DC  
Scarborough, Ontario  
Canada*

Editor's Note: Dr. Innes will be conducting his next Lower Extremities (E1) seminar March 26-27 in Chicago, Illinois and his next Spine 1 (S1) seminar April 16-17 in Davenport, Iowa. To register, call 1-800-359-2289.

MARCH 1994