## Reversible Pes Cavus Due to Achilles Tendinitis: A Rare Occupational Condition in a Cooker SS Onat, N Özgirgin

The Editor,

Sir,

A 23-year-old man was seen due to right ankle and foot pain (worse with weight-bearing activities) for the last three months. He declared that he had been working as a cooker and had to stand for long time periods during the work. Visual analog scale (VAS) pain score was 6. Physical examination revealed pain with the palpation of Achilles tendon and dorsiflexion of the right ankle, and pes cavus (PC) deformity. Laboratory tests including acute phase reactants were all within normal limits. Lateral foot radiograph yielded PC deformity and magnetic resonance imaging was consistent with Achilles tendinitis (Fig. 1).



Figure: Lateral foot radiograph designates the talocalcaneal angle (TCA) as  $70^{\circ}$  degrees, talohorizontal angle (THA) as  $30^{\circ}$  degrees, calcaneal inclination angle (CIA) as  $55^{\circ}$  degrees (**A**). Magnetic resonance images illustrate increased signal intensity of Achilles tendon on axial (**B**) and sagittal (**C**) short T1 inversion recovery (STIR) views, and edema in talonavicular joint on axial STIR view (**D**).

West Indian Med J

DOI: 10.7727/wimj.2015.543

## Letters

Overall, the patient was diagnosed with PC due to the Achilles tendinitis. The pain and PC deformity did improve with physical therapy agents (hot pack, transcutaneous electrical stimulation, friction massage and ultrasonography) (15-sessions of rehabilitation program), rest, arch support, and a non-steroidal anti-inflammatory drug. In order to prevent recurrence, behavioral changes in the activities of daily living were also recommended.

Pes cavus (PC) is a foot deformity characterized by high arch of the foot during weight-bearing. PC is usually seen due to muscle imbalance and neuromuscular disorders. PC deformity can be asymptomatic, it can present with foot pain, particulary metatarsalgia due to metatarsal compression. In addition, it presents with plantar fasciitis, achilles tendinitis, ankle instability, gait disorders, even stress fractures (1). Previous studies have also suggested that achilles tendinopathy was related to PC deformity (2). On the other hand; calcaneal inclination angle of the patients with achilles tendinosis was found to be significantly higher than those of without tendinosis (3). Accordingly, this paper suggests that PC can ensue due to Achilles tendinitis. In addition, PC can be reversible if the Achilles tendinitis is diagnosed and treated promptly. Likewise, in our patient, we put forward that PC deformity developed to provide a compensation for reducing loading of achilles tendon. However, to the best of our notice, PC due to achilles tendinitis has not been reported yet. Therefore, we herein present a case with reversible pes cavus due to achilles tendinitis. Herewith presenting the unusual case of ours is two-fold. First, we would like to draw attention to the fact that not only Achilles tendinitis can develop due to PC but also PC can ensue due to Achilles tendinitis. Second, we would like to highlight that PC can be reversible if the causative factors are eliminated in time. Therefore, prompt diagnosis and treatment of the Achilles tendinitis including vocational rehabilitation are of paramount importance.

## Letters

Funding: None

Conflict of interest: All authors have reported no conflict of interest

Keywords:

ŞŞ Onat, N Özgirgin

Ankara Physical Medicine and Rehabilitation Training and Research Hospital, Department of Physical Medicine and Rehabilitation, Ankara, Turkey.

Correspondence: Dr ŞŞ Onat, Ankara Fizik Tedavi Rehabilitasyon Egitim ve Araştırma Hastanesi, Türkocagi sok. No:3 Sıhhiye 06230 Ankara, Turkey. Fax: +90 312 310 4242,e-mail:sahinsulester@gmail.com

## REFERENCES

- 1. Rosenbaum AJ, Lisella J, Patel N, Phillips N. The cavus foot. Med Clin North Am 2014; **98:** 301–12.
- 2. Irwin TA. Current concepts review: insertional achilles tendinopathy. Foot Ankle Int 2010: **31:** 933–9.
- 3. Shibuya N, Thorud JC, Agarwal MR, et al. Is calcaneal inclination higher in patients with insertional Achilles tendinosis? A case-controlled, cross-sectional study. J Foot Ankle Surg 2012; **51**:757–61