

# Phonophoresis of 4% Acetic acid on Haglund's Deformity- A case report of retrocalcaneal bursitis

Vengata Subramani Manoharan<sup>1</sup>, Ramani Subramaniam<sup>2</sup>, Kotteeswaran K<sup>3</sup>

<sup>1</sup>Physiotherapy, Faculty of Pharmacy & Health Sciences, Royal College of Medicine Perak, Universiti Kuala Lumpur, Ipoh, Malaysia, <sup>2</sup>Radiology, Faculty of Medicine, Royal College of Medicine Perak, Universiti Kuala Lumpur, 30450 Ipoh, Malaysia, <sup>3</sup>Saveetha College of Physiotherapy, Saveetha Institute of Medical and Technical Sciences (SIMATS), Chennai

## ABSTRACT

**Introduction:** Haglund's deformity is a symptomatic osseous prominence of the posterolateral corner of the calcaneus resulting in retrocalcaneal bursitis, inflammation of the bursa between the calcaneus and the anterior surface of Achilles tendon. Posterior heel pain, morning stiffness, and swelling around the insertion of the Achilles tendon are the common clinical features of retrocalcaneal bursitis. It occurs commonly in both athletes and the general population. **Case Report:** Here, we report a case of a 55-year-old male who presented with prominence of the posterolateral corner of the calcaneus with pain even at rest for the past 6 months. The diagnosis was confirmed by an x-ray of the foot. The patient had difficulty in standing and walking for prolonged period due to pain. The patient also complained of early morning stiffness that may reduce his range of motion in the ankle. Prior to the treatment, his level of pain was assessed using a VAS scale and the range of ankle dorsiflexion and plantarflexion were assessed using a goniometer. He was treated with ultrasound therapy with 4% acetic acid being used as a coupling medium instead of ultrasound gel. Following the 10th session of phonophoresis, the prominence, early morning stiffness, pain in his posterolateral part of the calcaneus were reduced and range of motion was increased. This case report describes the process of physical therapy management in a patient with retrocalcaneal pain with an enlarged prominence of calcaneus by phonophoresis.

**Keywords:** Retrocalcaneal bursitis, phonophoresis