Dear Editor,

Foot pain is one of the problems of the musculoskeletal system that are encountered more frequently in women compared to men and is generally associated with the use of inappropriate shoes (1). Chronic foot/ankle pain may occur secondary to excess use, repetitive stress and minor traumas (1). Evaluation of foot pain as anterior, intermediate and posterior foot pain facilitates the diagnosis/differential diagnosis. Heel pain is evaluated under the heading of posterior foot pain and is one of the most common causes of foot pain. Haglund disease, also known as Haglund syndrome that is first described by Haglund (2) is characterized by deformity of the posterior-superior corner of calcaneus and is a rare clinical condition causing posterior heel pain. Although chronic mechanical stress has an important role in the etiology, it may occur secondary to many causes including the infectious and inflammatory pathologies such as osteomyelitis and gout and spondylarthritides.

A 43 year-old lady is presented to the outpatient clinic with left posterior heel pain, which was present for 2 months. Patient pointed the posterosuperior part of her left calcaneus and the distal Achilles tendon as the localization of the pain and stated that her complaints were most prominent in the mornings. She had no previous history of systemic diseases, back/gluteal pain, arthritis/enthesitis or trauma. No changes occurred in her shoes or her daily activities in the period prior to the start of her complaints. Her physical examination was unremarkable including the examinations of her back, hip, sacroiliac joint and knees except mild tenderness at the insertion of the left Achilles tendon to calcaneus. All blood tests of her including renal and liver function tests, Brucella tests and levels of rheumatoid factor, blood uric acid, thyroid stimulating hormone, erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP) were in the normal ranges. A prominence was found in the bone that is at the posterior superior part of the calcaneus on direct X-ray (Figure 1A).

A rare cause of foot pain: haglund disease
Ayak ağrısının nadir bir nedeni: haglund hastalığı

Alparslan Yetisgin¹, Ahmet Boyaci¹, Ahmet Tutoglu¹, Dilek Sen Dokumaci²
¹Harran University Faculty of Medicine, Department of Physical Medicine and Rehabilitation, Sanlıurfa, Turkey
²Harran University Faculty of Medicine, Department of Radiology, Sanlıurfa, Turkey.

A 43 year-old lady is presented to the outpatient clinic with left posterior heel pain, which was present for 2 months. Patient pointed the posterosuperior part of her left calcaneus and the distal Achilles tendon as the localization of the pain and stated that her complaints were most prominent in the mornings. She had no previous history of systemic diseases, back/gluteal pain, arthritis/enthesitis or trauma. No changes occurred in her shoes or her daily activities in the period prior to the start of her complaints. Her physical examination was unremarkable including the examinations of her back, hip, sacroiliac joint and knees except mild tenderness at the insertion of the left Achilles tendon to calcaneus. All blood tests of her including renal and liver function tests, Brucella tests and levels of rheumatoid factor, blood uric acid, thyroid stimulating hormone, erythrocyte sedimentation rate (ESR) and C-reactive protein (CRP) were in the normal ranges. A prominence was found in the bone that is at the posterior superior part of the calcaneus on direct X-ray (Figure 1A).

Figure 1A. Prominence in the bone at the posterior upper part of calcaneus at direct X-ray (black arrow). Figure 1B. Magnetic resonance imaging (T2 sagittal section) demonstrates prominence in the bone at superoposterior calcaneus (black arrow), signal increase in the Achilles tendon compatible with fluid (white arrow heads) and hyper intensity in the kager fat pads (white arrow).
Magnetic resonance imaging (MRI) revealed a signal increase compatible with fluid and hyper intensity in the kager fat pad, although the diameter of the Achilles tendon was in normal ranges (Figure 1 B). She was included in a physical therapy program and non-steroidal anti-inflammatory drugs, silicon heel cup and comfortable shoes with open posterior parts or made from soft material were recommended. The patient reported a marked decrease in her complaints after the physical therapy program including TENS, hot packs, ultrasound and Achilles tendon stretching/strengthening exercises. She was recommended that she should continue the exercises and come back for a follow-up examination.

Heel pain is one of the frequent causes of musculoskeletal system complaints and maybe secondary to many diseases with the most common cause as mechanical problems and mainly spondylarthritis. Since no history of back/hip pain, arthritis/enthesitis and uveitis was present in this case presented here and her back and sacroiliac joint examinations were normal, spondylarthritis was excluded as the diagnosis and no further tests directed to this diagnosis were ordered. Also, since no swelling or redness was present in the painful area and levels of acute phase reactants such as ESH and CRP were normal, inflammatory and infectious pathologies were excluded.

The diagnosis of Haglund disease is performed by evaluation of both radiological and clinical findings. Obtaining lateral foot X-rays should be the first diagnostic method to be performed and is the most valuable method (3, 4).

Although the diagnosis is possible with direct X-rays, MRI may be helpful in detecting the local pathologies that might cause pain and swelling at the posterior part of the heel and in detecting additional conditions in the soft tissues that might accompany the disease (3). Considering the continuation of the complaints of the patient for the last 2 months and her present physical examination findings, the physical therapy program she was put on was remarkably beneficial.

During the organization of a physical therapy program for a patient, the diagnosis of the patient, physical examination findings and whether additional pathologies are accompanying the condition should all be considered. Modifications in daily activities such as use of shoes with comfortable posterior parts and heightened heels in addition to exercise are important in patients with the diagnosis of Haglund disease. Although first-line treatment is conservative, surgical excision of the craniolateral part of the calcaneus that extends up to the insertion of the Achilles tendon is also an option when adequate response is not obtained to conservative measures. Sammarco et al (5) reported that they performed surgical treatment with inadequate results in only 3% of the patients in 53 patients with Haglund disease unresponsive to conservative treatment.

REFERENCES