

Planter Fasciitis (PF) A Rare Presentation of Covid 19 (A Case Report)

Nibras salim M.B.Ch.B, *HD ORTHO, Alkarama teaching hospital.*

Raad mubark M.B.Ch.B, *FIBMS ORTHO, Alkarama teaching hospital.*

Mahmood abdulrazaq M.B.Ch.B, *HD ortho, ALKARAMA teaching hosp.*

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I. Introduction:

plantar fasciitis (PF) common cause of heel pain in adults, affecting both young active patients and older more sedentary individuals.

Planter fascia its band of fibrous connective tissue originated from the posteromedial aspect of calcaneus tuberosity to the bases of the proximal phalanges spanning the longitudinal arch of the foot[1].

Histologically, like both tendon and ligament with a relatively inelastic extracellular matrix composed of collagen fibers in a wavy or crimped pattern, produced by elongated fibrocytes embedded in longitudinal rows[2].

Risk Factors:

Body mass index more than 27 kg /m², Excessive running , Intrinsic foot and calf muscle tightness , Leg length discrepancy , Occupations requiring prolonged standing or walking , Pes cavus (high arch) , Pes planus (excessive foot pronation) , Reduced ankle dorsiflexion ,Sedentary lifestyle.[3,4].

Diagnosis:

The patient will have sharp pain in the anteromedial aspect of the heel[5], Pain after a period of rest , especially the first step of the morning, then will improve or resolve as the activity progresses. However, the pain will return at the end of the day, Paresthesia is uncommon[6].

A positive result is heel pain reproduced by forced dorsiflexion of the toes at the metatarsophalangeal joints with the ankle stabilized[7], PF more often affects only one foot, although approximately 30% of patients have bilateral symptoms[8].

Weight-bearing radiographs of the foot are often obtained at presentation to evaluate foot alignment, exclude bony lesions, and determine the presence of a plantar heel spur.

Ultrasound of plantar fascia thickness >4.5 mm and the presence of hypoechoic areas are specific for CPF[9].

MRI characteristic findings of increased signal intensity and proximal plantar fascia thickening, its useful to excluding the presence of other causes of heel pain such as calcaneus stress fracture, Baxter neuritis, tarsal tunnel syndrome, and insertional Achilles tendinopathy[10].

Electromyography (EMG) can be used to evaluate suspected neurologic causes of heel pain in patients presenting with sensory disturbances or proximal or distal radiation[11].

Laboratory evaluation may be used to exclude the inflammatory arthropathies in patients presenting with systemic symptoms, bilateral involvement, multiple joint involvement (especially small joints), and/or morning stiffness greater than 30 minutes. This is include a complete blood count with differential, renal and hepatic function tests, serum testing for rheumatoid factor RF, anti-citrullinated peptide antibodies CCP, C-reactive protein CRP, and erythrocyte sedimentation rate ESR.

case presentation:

A 46 years man presented to us with foot pain complaining .He is employee in sedentary life style not heavily manual works, no previous medical history of chronic illness and surgical operation.

He had covid 19 vaccination two doses in three weeks apart one month ago , his family get covid 19 infection few days previous to his presentation, his mother was severely respiratory infected with continuous O2

therapy and anticorona regime was used, the others were mildly respiratory infected, all of them swab test for corona virus were positive.

He started illness course with mild raise in body temperature and myalgia , and in the 3rd day he was unable to raise up from bed and difficulties in walking after rest, no previous history of planter fasciitis.

On examination he had tender posteromedial aspect of the heel with swelling over whole aspect of both planter fascia , redness , positive stretching test of the toes.

Radiological examination to exclude other bony lesion and no bony spur.

Laboratory tests was CRP +ve , normal ESR, -ve RF, -ve CCP.

Medical treatment of rest , NASID, massage and heat therapy was started and the condition resolve in the 4th day.

In the 6th day of the fever onset two days after the planter fasciitis subsided, swelling, redness and tender over the metacarpophalangeal joints of the right hand started to be subsided next day spontaneously.

Conclusion:

Our patient had no history of recent trauma, running, changing body weight , changing in habits behavior, and no changing a new shoe.

His vaccination date was one month ago.

Most probably the enthesopathic changes in both feet and right hand due corona virus infection and not because of the vaccine or other usual causes and risk factors.

Few weak point in our case report that investigation like ultrasound and histopatholgical study not done because of the his family condition , we consider our case as covid 19which may be a risk factor of PF.





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