Corresponding Author: Dr Raj D Parmar (MS Orthopaedic, SMIMER Hospital, Surat,Gujarat, India)

Author: Dr Nrutik Patel (MS Orthopaedic, Fellowship in Foot & Ankle Surgery- OLWEN Hospital, Ahmedabad, Gujarat, India)

Mail Address- vishveshraj@gmail.com

Abstract

Background: Clinical Applicability of any classification system is helpful in conservative as well as operative management of flatfoot deformity. Many classification system had been given till the date. Consensus Group of American Orthopaedic Foot and Ankle society given classification system on Progressive Collapsing Foot Deformity(PCFD). Study and results on the association between clinical criteria and radiological measurement based on classification yet to be come. We studied and evaluated the clinical criteria and the radiological measurement of the patients of flatfoot deformity especially of Indian Population.

Methods

This was a single centered, prospective study conducted from April 2021 to March 2022 at Mumbai Knee Foot Ankle clinic, Mumbai, India. Patients with PCFD evaluated between this period both clinically and radiologically, consisting of 50 feet in 38 Patients. Frequencies of each class and subclass were assessed in accordance to PCFD classification given by consensus group in Indian population. Inclusion and Exclusion criteria were defined prior to this study. Exclusion criteria were underage patients (age < 17 years) , History of any hindfoot or midfoot surgery, H/O Neuromuscular diseases and Peripheral Neuropathy.

Results:

Mean Sample age was 57.9. 32% were male and 68% were female.12 Patients had Bilateral deformity. The most common subclass was 1ABC (46%) followed by 1AC (24%) and 1ABCD (18%).Few patients had isolated deformity.Most Common class was A(92%) followed by Class C(80%). 1 Patient with flatfeet has class C deformity with Hindfoot varus which didn't match in this classification system.

Conclusion:

Most of the patients had deformity of Hindfoot valgus (A) with different combination of Midfoot (B) and Forefoot(C) deformity. Subtalar Joint involvement(D) and Ankle Joint involvement were there but in lesser proportion.The new system of classification may cover the all possible combination of deformity but deformity like Hindfoot varus had not been mentioned in this classification and there should be some scope of change of this classification to apply on most of the population.