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A STUDY ON THE CORRELATION BETWEEN FLATFOOT AND ANKLE INSTABILITY IN COLLEGE STUDENT.

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Background: Flat foot (pes planus) is a common postural deformity characterized by the lowering or absence of medial longitudinal arch of the foot. It can alter lower limb biomechanics, leading to altered gait and postural control. Ankle instability, particularly functional ankle instability, is a frequent complaint among young adults and may be influenced by abnormal foot alignment. College students due to prolonged standing, walking and sports participation are particularly at risk.

Purpose: To assess the prevalence of flat foot among college student using foot print analysis. To measure the level of ankle instability using standardized (CAIT) questionnaire. To analyze the statical correlation between flat foot and ankle instability. To evaluate the presence and degree of ankle instability.

Methods and Materials: A descriptive correlation study was conducted among 85 college students aged 18–25 years. The medial longitudinal arch was evaluated using the Sztriter-Godunow Index, while ankle instability was assessed using the Cumberland Ankle Instability Tool (CAIT) questionnaire. Data were analyzed statistically using Pearson's correlation coefficient to determine the relationship between flat foot and ankle instability. Mean, standard deviation (SD), and total were also calculated.

Result: This study revealed a weak and negative correlation between the Sztriter-Godunow Index and the Cumberland Ankle Instability Tool (CAIT) questionnaire scores among the college students. The calculated Pearson's correlation coefficient (r value) was –0.2465, indicating Sztriter-Godunow Index value increases (suggesting a flatter medial longitudinal arch), CAIT score tends to decrease, reflecting greater ankle instability. Although the relationship was weak, negative correlation suggests that students with lower arch heights were more likely to experience mild symptoms of ankle instability.

Conclusion: This study revealed the correlation between flat foot and ankle instability among college student this is a weak negative relationship between flat foot and ankle instability and calculated r value -0.2465.

Key Words: Flatfoot, Sztriter-Godunow Index, Ankle Instability, Cumberland Ankle Instability, Medial Longitudinal Arch.