

## PEDOBAROGRAPHIC CHARACTERISTICS OF YOUNG SOCCER PLAYERS

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### Introduction

Static and dynamic computerized analysis of the walk enables us to show much better representation of the most common types of the foot deformations, as well as the abnormalities which appear during the walk.

### Aims and objectives

To compare the results based on the computerized analysis of the walk between the 60 young soccer players and the population of the city of Zagreb.

### Method

Using the Emed platforms for investigations of the patients walk patterns, we investigated 30 young soccer players ages 11-14, as well as the same number of the active soccer players ages 16-19, and the obtained results were compared to the results gotten by up to date analysis of the foot deformations in kids, young youth and grown population of the city of Zagreb.

### Results

Results were divided into two groups of soccer players:

1) younger age group - data shows characteristic *varus position of the forefoot* in soccer players, which occurs in the 60 % of the subjects. Tested subjects had frequent diagnosis of *calcanei valgii* found in 73 % of the same population. Between 30 young soccer players, we've found *pedes plani* in 30 % of the subjects. In this group of investigated players, we have also observed several foot deformities : *Morbus Sever* occurred in 10 % of young soccer players, as well as *Haglund heel* - 10 % of the subjects.

2) older age group - in this group of soccer players, the results have shown greater number of foot injuries and syndromes of overuse; medical findings *varus position of the forefoot* exists in 73 % of the subjects. Concerning the foot deformation of *calcanei valgii*, it have been found in 50 % of the same population. On

the other hand, a diagnosis of *pedes plani* exists in 36 % of the cases. There is also a significant finding of the *hallux valgus* deformation in 16 % of the subjects in this older age group of the soccer players.

### Discussion

When we compare the findings concerning the pathology of the longitudinal arch of the foot, in the younger age group of the soccer players (60%), as well as in the older age group (73%), with the results of the same pathology in the population without sport activity (91%), it becomes clear that well balanced sport activity is recommended.

### Conclusion

It has been proven that the preventive examinations of the athletes is a necessity. Also the correction of the statics of the foot via orthopedic insoles in young athletes is a way of preventing some injuries and syndromes of overuse, as well as the permanent deformation of the foot.

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Acknowledgement: we are grateful to the personnel of the soccer centre Maksimir, Zagreb.