

Abstract

Title: Effects of the therapeutic physical education program on young people with orthopaedic foot defects

Objectives: This undergraduate thesis is aimed to test the effect of exercise mainly on hallux valgus and hammertoes of young people with such defects.

Methods: It is a qualitative study using the research method of a case study. The effect of the 4-week therapeutic physical education program was tested on 3 people with orthopaedic foot defects. There were 1 male and 2 female probands aged between 17 and 24 years with orthopaedic foot defects (hallux valgus, hammertoes, high arch). In all three cases, the trouble started approximately at the age of 10. The therapeutic physical education program lasted 28 days for 15 minutes a day and included sensory and motorial exercises. The methods of data collection in the entry and exit examinations were assessment of aspection and palpation, functional tests, and examination on podoscope, which was repeated 2 months after finishing the therapeutic physical education program. Continuous changes were recorded by probands in the diary, including the Visual Analog Scale (VAS).

Results: After 28-days of intervention, monitoring by the podoscope showed that the pressure on the front of the foot has been reduced in case of 2 out of the 3 probands. Weight distribution across the sole has been improved. 2 months after the intervention, the state deteriorated again. According to the diary records, the therapeutic physical education program affected the perception of pain in VAS. The pain reduced in 2 out of the 3 cases.

Keywords: hallux valgus, hammertoes, high arch, exercise, rehabilitation