Recreational Sport Activity after Subtalar Arthroereisis for Pediatric Flatfoot

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Summary:
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Methods:
For this purpose we reviewed 122 feet of 61 patients (26 females; 35 males) affected by symptomatic flatfoot with a mean age at the time of surgery of 10.9 years (range: 7.5-14 years). After determining the preoperative sporting profiles for each patient, including the type of activities performed, the number of sessions per week, the time dedicated to each session and the level achieved, each patient was followed up at 1, 6, 12 months after surgery and at the time of last follow up at 4.9 years postoperatively (range: 2.08-5.91). The Child Health Questionnaire CHQ-CF87/ CHQ-PF50 and the Oxford Ankle Foot Questionnaire for Children were used to assess quality of life and clinical results.

Results:
In the year before the operation 93.4% of the patients were involved in sport activities, the most practiced being swimming (16 patients), soccer (14 patients), ballet (9 patients), volleyball (6 patients) and martial arts (4 patients). A total of 91.8% of children were practicing sport at the time of the last follow up with the most practiced being swimming (17 patients), soccer (9 patients), volleyball (6 patients), martial arts (6 patients), and ballet (4 patients). The largest decline was in high-impact sports including soccer and ballet. 5 children did not return to sport practice with 3 unwilling to do so and 2 because of their subtalar arthroereisis (pain at the surgical site during sport). Despite this no implant was removed during the follow up time. The timing of sport reprisal differed from sport to sport with swimming being the fastest (within 4 months) and soccer the slowest (within 8 months). 70.6% of the patients maintained their preoperative level of practice, 19.6% showed an improvement and 9.8% had a worsening of their activity level.

Conclusion:
We can conclude that subtalar arthroereisis has, despite frequent concerns, a low impact on the patients’ participation in sports. High impact activities might be more endangered by this intervention.