Abstract citation ID: keac496.014

18 DOES OVERWEIGHT ENHANCE FOOT DISORDERS IN PATIENTS WITH JUVENILE IDIOPATHIC ARTHRITIS?

H. Ferjani Dghaies, M. Moalla, D. Ben Nessib, W. Triki, K. Maatallah, Dh. Kaffel and W. Hamdi
Kassab Institute of Orthopaedics, Tunisia

Background
Juvenile idiopathic arthritis (JIA) is chronic inflammatory arthritis of childhood that may result in persistent and disabling foot impairments. Foot disorders are common in JIA with a prevalence estimated at over 90%. Many factors can worsen foot disorders in these patients. The influence of weight on foot disorders is poorly studied.
Objectives
To examine associations between weight and foot disorders in patients with JIA.
Methods
Patients with a diagnosis of JIA, based on the International League of Associations for Rheumatology (ILAR) criteria were included. Age, gender, weight, characteristics of the disease and of foot pain were noted. A specialized podiatric examination was performed.
Results
Thirty-two patients were included. The mean age was 12.2 ± 2.9 [5–18]. Forty-three percent of the patients were boys ($n = 14$). The mean age of disease onset was 8.5 ± 3.9 [3–15]. Only one patient had a triggering factor (elbow fracture). The most common type of JIA was oligoarthritis in 12 cases, then enthesitis-related in 8 cases, polyarthritis without rheumatoid factor in 3 cases, polyarthritis with positive rheumatoid factor in 1 case, psoriatic arthritis in 3 cases, systemic arthritis in 1 case and undifferentiated arthritis in 4 cases.
The mean weight was 43.5 kg [17–98]. Only 28% ($n = 9$) of the children had a normal weight for their age, 41% ($n = 13$) of them had a low weight for their age and 31% ($n = 10$) of them had overweight. Ten patients had foot pain: hindfoot pain in 5 patients, midfoot pain in 3 patients, and forefoot pain in 2 patients. Foot deformities were found in

78.1% of the patients ($n = 27$): flat foot in 39% ($n = 13$) of the patients and pes cavus in 39% ($n = 13$).
There was no association between overweight and foot pain ($p = 0,14$) or hindfoot pain ($p = 0.08$). However, overweight was associated with a forefoot ($p = 0.01$) and midfoot ($p = 0.01$) pain. Overweight was not associated with foot deformities ($p = 0.1$).

Conclusion

This study showed that weight is associated with foot pain especially forefoot and midfoot pain. A healthy lifestyle and a normal weight are fundamental to preventing foot pain at an early age in patients with JIA and improving their quality of life.