

## **Abstract**

**Introduction:** Question of femoroacetabular impingement is very actual. This young concept brings mechanism which leads to early degenerative changes of the hip joint of young and active individuals (athletes).

**Objectives:** To review influence of sport activity on condition of the hip joint of young athletes (players of table tennis) and to determine incidence of femoroacetabular impingement and its clinical significance.

**Methods:** We performed ultrasound and clinical examination and questionnaire with 22 individuals from 2 training groups. Groups vary in age, height, weight, volume of sport activity and how long they do sports. We found out incidence of cam-type impingement and evaluated pain of anterior impingement test, ranges of motions of the hip joint and deep squat.

**Results:** Cam impingement was found in 27 hip joints, 16 in older group, 11 in younger one. In older group there were 12 from 16 impingements painful during anterior impingement test, 4 from 11 in younger one. In older group there were 4 symptomatic individuals, none in younger one. Older group has lower ranges of motion of flexion and internal rotation. 4 individuals did not perform deep squat, all of them with bilateral cam-type impingement.

**Conclusion:** Femoroacetabular impingement is frequent among young athletes. It causes restriction of range of motion of the hip joint (flexion and internal rotation). It begins to be symptomatic in young individuals at the second decade of life. Ultrasound can serve as screening tool for determining of presence of cam-type impingement.

**Keywords:** Femoroacetabular impingement, table tennis, hip joint, osteoarthritis