

## **11. SUMMARY**

**OBJECTIVE:** In this study we aimed to evaluate the fall risk in patients with primary knee osteoarthritis and to investigate the effectiveness of proprioception exercises on a fall risk.

**MATERIALS AND METHODS:** Fifty patients with primary knee osteoarthritis and fifty healthy participant were included in this study. Patients aged 40-80 years with primary knee osteoarthritis according to the ACR criteria included to the study. Age, gender, height, body mass index, social guaranty, adress and telephone numbers were recorded.

All of the patients had two sided (AP and lateral), weight bearing knee radiography. Patients with stage 2-3 according to Kellgren-Lawrence index of knee osteoarthritis were included in this study. We also excluded those with secondary knee osteoarthritis and patients who had any diseases causing proprioception impairment of the lower limb.

We evaluated fall risk in eight different position for both patient and control group. Patient with knee osteoarthritis performed the proprioception exercises under supervision of physiotherapist during the first 10 days and then they had given home exercises program. Fall risk was measured on the following 15. days, 1. 3. and 6. month. We used Lequesne index in order to evaluate the functional status and Visuel Analog Scale (VAS) to measure the severity of pain.

**RESULTS:** This study showed us that fall risk of the patients with primary knee osteoarthritis is significantly higher than the healthy participants. VAS, Lequesne and fall risk scores were found significant lower after the proprioception exercises application when compared to the initial data.

**CONCLUSION:** The study results made us to think proprioception exercises should contribute to treatment of knee osteoarthritis beside pharmacologic and non-pharmacologic treatment.

**KEY WORDS:** Primary knee osteoarthritis, proprioception, fall risk