Background/aim: We investigated the short- and medium-term effectiveness of genicular nerve radiofrequency (RF) applied in patients with chronic knee pain due to osteoarthritis.

Materials and methods: Radiofrequency was performed in 49 patients with a diagnosis of knee osteoarthritis. VAS and WOMAC were measured at baseline and at 1, 4, and 12 weeks postprocedure. Under fluoroscopic guidance, the cannula was advanced percutaneously towards the area connecting the shaft to the epicondyle. The RF electrode was inserted through the cannula and the electrode tip temperature was raised to 80 °C for 90 s. One RF lesion was made for each genicular nerve.

Results: Mean patient age was 64 ± 10.6. VAS score before the procedures was 8.9 ± 0.8, while 1, 4, and 12 weeks after the procedure it was 4.73 ± 3.23, 3.89 ± 2.9, and 3.93 ± 2.95, respectively. WOMAC score before the procedures was 64.26 ± 7.29, while 1, 4, and 12 weeks after the procedures it was 44.93 ± 13.18, 42.81 ± 13.15, and 43.04 ± 13.36, respectively.

Conclusion: RF neurotomy of genicular nerves led to significant pain reduction and functional improvement in a subset of elderly patients with chronic knee osteoarthritis pain, and thus may be an effective treatment in such cases.