The effect of postoperative radiological alignment differences on the clinical and functional evaluations of patients undergoing knee prosthesis

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**Background**: Gonarthrosis is a pathology that causes pain, limitation of movement, deformity, decrease in muscle strength, decrease in proprioception, and decrease in quality of life. It’s a major public health problem especially in the population over 55 years of age. Because of this, it’s emphasized that the treatment of the disease increasingly becoming more important and precautions should be taken. Current and recent treatment option is total knee arthroplasty surgery (TKA) for gonarthrosis treatment.

**Methods**: We studied patients who had undergone total knee prosthesis formation of primary gonarthrosis between 2000-2014 in Dokuz Eylül University Orthopedics and Traumatology Department. 149 patients were included in the study. HSS score, VAS and 30-second chair stand test, 50-step walking test, and 11-step ladder tests were tested. At the same time, we evaluated the relation between the radiographic alignment differences and the range of flexion motion. We also looked at the relationship between the radiological alignment differences between metaphysical lysis and revision necessity.

**Results**: As a result of our study, it was seen that the postoperative radiological alignment differences did not make a statistically significant difference on the mentioned quality of life scores and function evaluations. When metaphyseal lysis and revision requirements were evaluated, we could see that postoperative residual varus and neutral alignment did not show any significant difference with each other.

**Conclusion**: We believe that, in addition to the alignment differences, the patient may affect TKA results in more than one state, such as soft tissue balance, muscle strength, BMI, post-operative rehabilitation process.

**Biography**

Erol Kaya is an Orthopaedics and Traumatology Surgeon in Merzifon Kara Mustafa Paşa Devlet Hastanesi. From Feb 2013 to November 2019 he was working as a Orthopaedic surgeon at Dokuz Eylul Universitesi. He is an Clinical ESSKA Fellow as Sports Traumatology and Arthroscopic Surgery at Evangelisches Krankenhaus Wien, March 2018. Fellow (Imperial College London) (Hip and Knee Arthroplasty) at Epsom and St. Heiler University Hospitals NHS Trust on DISC Sports and Spine Center, May 2017.

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