New technique for additional support point to improve the stability of pedicle screw systems

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Abstract

Statement of the Problem: The aim of this study is description of a new technique to prevent PS loosening and demonstration of application. Results Methodology & Theoretical Orientation: Pedicle screw (PS) fixation for spine arthrodesis is a useful procedure for the treatment of spinal disorders. However, instrument failure often occurs, and PS loosening is the initial step of a range of complications. In order to prevent PS loosening, the author offers to open a hole in the middle of spinous process of vertebra and pass a cross link which connects rods with each other through that hole. The paper provides explanation of an operating technique, clinical impressions in the early and late postoperative period and any technical problems that may occur. Findings: The technique we propose has been applied for two years to 24 patients with idiopathic scoliosis, 4 patients with vertebral fracture and 4 patients with lumbar stenosis, all aged between 13 and 65.

Biography

Togrul Caliliov was born in Baku city, on May 30, 1981. He finished higher school in 1988 with distinguished certificate and at the same year, he admitted to the Faculty of “Treatment Prevention” of Azerbaijan Medical Institute. He graduated the Institute in 2004 with distinguished diploma and passed the internship at the Scientific Research Institute of Orthopedics and Traumatology of Azerbaijan in 2005. He defended dissertation of PhD on the topic of “Surgical treatment of scoliosis with distracting and frontal extending endocorrectors” on March 18, 2015. CALILOV T.Y. showed himself as skillful and careful doctor during his activity. He is the author of 59 scientific articles, 5 effective proposal, 5 invention patents. Now continued his research in Innovation in operative treatment of adolescent idiopathic scoliosis to achive a Doctor of Science degree. He made over 100 operations in patients with severe form of adolescent idiopathic scoliosis.

Publication

1. OPERATIVE TREATMENT OF SEVERE SCOLIOSIS WITH MODIFIED ARC ROTATION MANEUVER