

RANGE OF MOTION OF THE CERVICAL SPINE AFTER ARTHROPLASTY WITH DISCOVER ARTIFICIAL DISC – PRELIMINARY RESULTS OF THE ONGOING STUDY

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AIM: The objective of this study is to define the influence of the arthroplasty on the range of motion of the cervical spine

METHODS: This study is currently being performed at the Department of Neurosurgery, University Hospital Centre Zagreb. Static and dynamic cervical radiographs of patients that had cervical arthroplasty because of one-segmental cervical disc herniation are going to be compared with the cervical radiographs of the same patients before the surgery, and with the radiographs of the control group. The group of patients who underwent cervical arthroplasty consists of the patients that were operated at the Department of Neurosurgery, University Hospital Centre Zagreb in the time period of five years. The control group consists of healthy volunteers. The range of motion of the cervical spine will be calculated after the computer analysis of the static and dynamic cervical radiographs.

RESULTS: After the radiographs have been analysed, preliminary results indicate that the range of motion of the cervical spine after cervical arthroplasty is increased when it is compared with the range of motion of the cervical spine before the arthroplasty.

CONCLUSION: Preliminary results of this study indicate that the range of motion of the cervical spine is increased after the cervical arthroplasty was performed. It confirms that cervical arthroplasty has significant influence on the biomechanics of the cervical spine.