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Usability of transpedicular stabilization for treatment of vertebral tumors

(Przydatność stabilizacji transpedikularnej u chorych z guzem kręgosłupa)

SUMMARY In this preliminary report application of DERO transpedicular stabilization system for the strategy approach of the complex treatment of patients for spine tumors is presented. In an effort to combine the advantages of the posterior approach with an adequate stabilization, a one-stage posterolateral decompression stabilization procedure in seven patients was performed. The approach has been used for decompression and stabilization after thoracolumbar burst fractures. All of were with thoracolumbar spine tumors. The level of neoplasmatic disease was L_1 in three cases, L_1 - L_2 in two, D_8 - D_9 in one and D_{12} in one case. Marked lasting improvement was seen in all seven patients with preoperative neurological deficits. No patient deteriorated neurologically due to this procedure. Transpedicular fixation provides a valuable addition to the surgical decompression or resection

in spine tumors in every case, also in cases with poor diagnosis. The prior indications are fractures of spine, recent neurologic impairment and severe pain. In patients with tumor operative intervention using transpedicular technique the stabilization with decompression of the neural and blood vessels elements should be performed. After that radio- and chemotherapy as well as rehabilitation are applied. In patients with the tumor operative intervention using transpedicular technique improves the quality of patient's life and let patient support themselve in all day life activities. Although the series is small it demonstrates that adequate onestage decompression - stabilization of spinal epidural lesions is possible by the posterolateral approach and should be considered in certain cases as an alternative to the anterior approach.

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