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## Computer aided patient evaluation in the low back pain pathology

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### Abstract

The aim of the paper is to implement an artificially intelligent assessment system that is based on a modified fuzzy inference system. This system reduces the rate of patient complications. This inference system, consisting of 246 rules, avoids the defuzzification process and offers the final result in natural language form. 51 of the rules indicate that appropriate action must be of a lumbar spine surgery, 163 of the rules indicate that the patient should continue medical rehabilitation and 32 of the rules indicate that the patient is medically healthy. Early diagnosis and rapid establishment of a targeted treatment are decisive factors for therapeutic success. The results of this study showed that patients from first lot had better results than patients of the second lot.

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