

## LAPAROSCOPIC VERSUS OPEN APPENDECTOMY FOR TREATMENT OF ACUTE APPENDICITIS-OUR EXPERIENCE

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Acute appendicitis is one of the most common abdominal urgently intervention. Open appendectomy has been a standard procedure for acute appendicitis more than 100 years. But in last 20 years, after many studies, laparoscopic appendectomy was taking position of gold standard in solving of acute appendicitis. The main goal of our study was to compare results of open and laparoscopic appendectomies with regards about intrahospital stay, time of operation, postoperative complications and postoperative pain.

All the patients who underwent open or laparoscopic appendectomy in the period from June 2020 until June 2022 in Center of minimal invasive surgery and Emergency Center University Clinical Center Nis, Serbia. Total number of 260 patients were enrolled and submitted to retrospective analysis.

260 patients where laparoscopic or open appendectomy was performed were retrospectively analysed. Groups were demographically similar and there was no significant difference between age structure and gender distribution ( $t=0,927$ ;  $p=0,355$ ). There was no significant statistical difference in intraoperative findings among two groups ( $\chi^2=4,085$ ;  $p=0,130$ ). Average time of operation was the same in both groups ( $Z=0,214$ ;  $p=0,831$ ).

Number of days of intrahospital stay was shorter in patients who has been performed by laparoscopic appendectomy ( $Z=10,615$ ;  $p<0,001$ ). Significant difference was determined in appearance of bowel movements postoperatively among groups ( $\chi^2=130,124$ ;  $p<0,001$ ). In regards to postoperative pain, group who had laparoscopic appendectomy showed less pain then patients with open appendectomy analysing usage of parenteral and oral analgetics.

There was no significant statistical difference in postoperative complication among 2 groups ( $\chi^2=8,957$ ;  $p=0,062$ ).

The treatment of appendicitis by using laparoscopic surgery in comparison to open approach provides a better result in the term of duration of hospital stay, recovering time, postoperative complications and postoperative pain.

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**Key words:** open appendectomy, laparoscopic appendectomy, acute appendicitis