

The Utility of Preoperatively Marking the Most Tender Point in Appendectomy for Acute Appendicitis-A Randomized Clinical Trial (RCT)

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Abstract

Objectives: We performed a randomized controlled trial to simplify appendix identification by marking the most tender abdominal area in patients with appendicitis before surgery and examining this area during surgery.

Methods: Two hundred forty-one randomly selected cases underwent appendectomy after acute appendicitis [Subjective: 121 cases marking in the most tender area (M) and 120 controls (C)]. Comparisons between the groups included the following: (I) concordance between the most tender area and appendix tip during laparotomy in M and (II) the time required to identify the appendix, surgical duration, incision length, additional incisions, and intra/postoperative complications.

Results: For comparison I, the site marked before surgery and appendix tip direction following laparotomy matched in 75.2% cases. For comparison II, the time required for appendix identification, surgical duration, skin incision length, additional incision, and intraoperative complications were significant differences between two groups ($p < 0.05$). There was no statistically significant difference in postoperative complications (NS).

Conclusion: Marking the most tender area before appendectomy may simplify appendix identification.

Key words: Acute appendicitis, The most tender point, One finger palpation, Appendix tip direction