

## COMMENTS TO THE ARTICLE SUBMITTED BY A.A. KOVALEV ET AL. “THE INTRALUMINAL ADMINISTRATION OF INDOCYANINE GREEN AS A METHOD OF INTRAOPERATIVE DIAGNOSTICS OF MACHINE SUTURE INCOMPETENCE IN EXPERIMENTAL CASES OF LONGITUDINAL GASTRIC RESECTION”

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### ABSTRACT

*The editorial policy of the “Clinical Practice” journal is supposed to be oriented to Applied Clinical Researches, the results of which practicing physicians could use in their routine work. The main objective of creating the journal was informing the physicians on the novel approaches in the diagnostics and treatment of various diseases, as well as rehabilitation and restoration of the quality of life. For this reason, the editorial board had often refused to publish the articles from the authors of well-planned and performed animal research works, even despite the fact that the clinical specialty certificate 3.1.9 “Surgery” supposes the experimental development of new methods.*

*In this specific case, the decision was made to publish the article.*

*Bariatric surgery in Russia is only passing its development phase. Despite the fact that such surgeries are indicated to a significant part of the population, their yearly number remains very small. A considerable role in this is contributed by mass media, which are regularly publishing the cases of complications resulting from the obesity-related surgeries and the consequent judicial proceedings.*

*Safety issues take the central place in bariatrics, for surgical aggression is applied to a healthy organ for the reason of the general disease, not causing a direct threat to life.*

*Longitudinal gastric resection (sleeve gastrectomy) is the most popular bariatric surgery type in Russia. According to data from the National Bariatric Surgery Register, this type of procedure represents 56% of all the primary surgeries. Machine suture incompetence is a rare but the most threatening complication of such a surgery, associated with high mortality rates. In Russia, from 2013 until 2022, a total of 70 cases were reported for suture line disruption, which corresponds to 0.4%, with that being said, three such patients died within the first week after surgery. Due to the high pressure inside the created gastric tube, the treatment of these complications is long-term and requires substantial financial costs. The methods for intraoperative diagnostics of problematic areas of the machine suture line, which require additional suture reinforcement, are deemed necessary. Traditionally, many surgeons use the so-called “bubble-test”, which can detect only large defects and which shows low informational capability. With all of these, two large researches were published recently, which have confirmed the concerns of some investigators about the fact that rapid inflation of air into the nasogastral tube can damage the tissue and can increase the risk of incompetence. In a systematic review and meta-analysis by Ma L., et al. (2024.), involving 469 588 patients, in case of performing the intraoperative diagnostics, the risk was 0.38%, while in absence of such — 0.31% ( $p=0.000$ ) [1]. When analyzing the database of the American Society for Metabolic and Bariatric Surgery (MBSAQIP) within a time period of 2015–2019, based on the evaluation of data from the research works including 283 520 patients, the risk of incompetence during the intraoperative diagnostics was 1.1 (95%CI 1.0–1.4) [2]. Based on these research works, it is possible to recommend the surgeons to avoid the routine use of the “bubble test”. But the alternative option is required. Data on the use of Indocyanine green are still sparse. The research performed by A.A. Kovalev et al., must serve as a basis for more frequent use of this method, especially in complex situations. The editorial board of our journal shall eagerly await for the team of authors to present the results of the clinical approbation of the said method.*

**Keywords:** bariatric surgery; gastropasty, leak; indocyanine green; ICG.

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