Reviewer's report

Title: Visualization of blood supply route to the reconstructed stomach by indocyanine green fluorescence imaging during esophagectomy

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Reviewer: Dawid Murawa

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The publication titled ‘Visualization of blood supply route to the reconstructed stomach by indocyanine green fluorescence imaging during esophagectomy’ discusses the very interesting subject of blood perfusion in the gastric tube, which is used for reconstruction of the gastrointestinal tract after resection of the oesophagus. It is known that poor blood supply is one of the chief factors of the risk of anastomotic leak. The authors of the publication presented the application of an infrared camera and ICG dye for an objective assessment of the blood supply in a gastric interponate. In the last two years there have been several similar reports on the subject. Personally, I find infrared angiography a very interesting technique of the future, which can be used in surgery to evaluate the blood supply in tissues.

As far as the article is concerned, the anatomic analysis of blood supply in the gastric tube is another very interesting element of the report. The statement that the splenic hiatal route is the most commonly observed type of blood perfusion is an important conclusion to the study.

I think the article lacks some important information, which should be added before printing:

1. In the results there is no information about the frequency of simultaneous occurrence of two blood perfusion routes;
2. The results do not provide any information about patients after the surgery – whether and how many leaks of anastomoses were noted and whether the frequency of leak occurrences was related with the type of the interponate blood perfusion route;
3. The discussion in the article is very laconic. The reports on the use of fluorescence for assessment of the blood perfusion in anastomoses in the gastrointestinal tract should be discussed in more detail. Apart from the reports listed in the reference literature, the publication by Kudszus S, Roesel C, Schachtrupp A, Höer JJ. Langenbecks Arch Surg. 2010 is also interesting, but it was not discussed. It is one of the first reports on the subject, describing the cases related with colorectal surgery.

To sum up, the article can be printed after including the corrections listed in the review.

Level of interest: An article of importance in its field
Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.