



## Radiomics May Be a New Opportunity for Bariatric Surgery

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We read with great interest the papers by Lainas et al. [1] and Magouliotis et al. [2]; we have to congratulate the authors for the work. Lainas et al. assessed the role of routine early computed tomography (CT) in the diagnosis of gastric leak and bleeding after laparoscopic sleeve gastrectomy (LSG) in patients at high risk for severe obesity. Although Magouliotis et al. have made some pertinent suggestions, we would like to further highlight a few different points.

Radiomics can extract hundreds of quantitative features from medical images and eliminate subjective factors to a certain extent through quantitative analysis of radiomics features [3]. Another advantage of radiomics is that it can detect invisible disease features compared to traditional imaging features. Therefore, we believe that radiomics used to assess staple-line leak after LSG will improve the sensitivity and accuracy of routine CT. To the best of our knowledge, radiomics has not yet been used in the field of bariatric surgery. We believe that radiomics can be used in bariatric surgery in the following aspects:

1. Preoperative evaluation of the patient: For example, radiomics can accurately predict the severity of non-alcoholic fatty liver disease before bariatric surgery [4]. Accurate preoperative evaluation will improve the clinical benefit of patients.
2. Diagnosis of postoperative complications: Early diagnosis of complications is critical to improve quality standards. Radiomics has great potential in the diagnosis of postoperative complications [5].
3. Long-term follow-up after surgery: Radiomics can extract more features from medical images, which will provide more comprehensive and personalized information about patients' living habits, surgical outcomes, and the need for further treatment after bariatric surgery [6]. In addition, multicentric collaboration, quality, and reproducibility of radiomics should be noted.

We call for new research to explore the application of radiomics in bariatric surgery and would appreciate some comments or thoughts from the authors.

### Declarations

**Ethics Approval** Does not apply.

**Consent to Participate** Does not apply.

**Conflict of Interest** The authors declare no competing interests.

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