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LETTER TO EDITOR/LED REPLY

Invited Response Letter: Our Experience Regarding the Association Between Gastrointestinal Stromal Tumor and Bariatric Surgery. A Response to a Letter "Gastrointestinal Stromal Tumor After Laparoscopic Sleeve Gastrectomy: Be Awake Before, During, and After a Bariatric Procedure"

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Invited Response Letter:

We are grateful to the authors for the presentation of another 12 cases of incidental gastrointestinal stromal tumors (GISTs) during bariatric surgery which substantially expands the current knowledge [1]. We appreciate the opportunity to respond.

The published patients were slightly older (mean age 53.8 years) than our 26 cases (mean age 50.5 years) reported earlier in this journal, but still in the same range [2, 3]. The localization of the tumors in the gastric fundus was somewhat higher than in our population (91.1% vs. 77.7%, respectively), although both, gastric corpus and fundus, are in accordance with the anatomical distribution of interstitial cells of Cajal as origin of the tumor formations [4].

Most gastric GISTs are discovered during the operation rather than before. This may have a substantial impact and often generates the need for a prompt intraoperative decision and consecutive adaption of the bariatric strategy to the specific situation. In our case series of 26 incidental gastric GISTs, the bariatric procedure itself had to be changed eight times (30.8%) [2, 3].

We have drawn the consequences that all patients must have signed informed consent forms not only for the preferential bariatric procedure but also for alternative standard procedures to allow the surgeon to appropriately adapt and alter his procedural strategy during the course of the operation in unexpected situations such as incidental tumors, massive visceral fat, or relevant adhesions [2]. It is our approach to inform the patient about the three most frequently performed techniques worldwide, namely, Roux-en-Y gastric bypass, one anastomosis gastric bypass-mini-gastric bypass (OAGB-MGB), and sleeve gastrectomy [5]. With informed consents for different procedures at hand, surgeons may potentially avoid a two-staged operation after seeking the patient's anew approval. This scenario occurred in two of the 12 cases of the published series, but in none of our 26 cases [2, 3]. Furthermore, one of the above patients refused the surgeon's advice for a second operation.

The appropriate management of incidental GIST underlines the necessity for a broad training of the bariatric surgeon, generating skills in a variety of bariatric and upper GI procedures to individually address unexpected situations and findings during the operation.

The location of GISTs at the lesser curvature in close proximity to the gastroesophageal junction remains a surgical challenge. We propose R0 resection of small tumors with simultaneous surgery for obesity. We would prefer a OAGB-MGB as it is a low-pressure, low-tension construction. In the rare instance of loss of the cardia by the GIST resection, a primary end-to-end stapled circular anastomosis may be performed, again in combination with a OAGB-MGB or, as was done by the authors of the letter a total gastrectomy with esophagojejunostomy.

We agree with the authors that most GISTs are not detected preoperatively; thus, diagnostic laparoscopy and exploration of the gastric wall are the essential steps of every bariatric operation. The incidence of malignancies is generally increased in obese patients [6]. Furthermore, one third of patients with GIST carry another malignant lesion [7].

Two more questions need to be addressed. Firstly, GISTs may grow malignant, too. The histologic classification of four stages (very low, low, intermediate, or high risk) is based on the mitotic rate for which most pathologists request histology of paraffin blocks rather than frozen sections. In cases of

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intraoperative suspicion of high-risk GISTs, e.g., tumor size > 2–5 cm and presence of metastasis, the planned bariatric surgery should be postponed until after definite oncologic assessment.

Secondly, the usefulness of follow-ups is not known as pointed out by the authors. For low-risk tumors, this may be carried out with abdominal CT scan or MRI, e.g., every 6–12 months for 5 years. Very low-risk GISTs probably do not require routine follow-up, although the risk is not zero [8].

Finally, we thank the authors for supporting our view that bariatric surgeons should be able to manage an incidental GIST at the time of bariatric surgery according to oncologic standards and guidelines.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflicts of interest.

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