



## Reply to ‘comment on colopexy in sigmoid volvulus recurrence’

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Dear Sir,

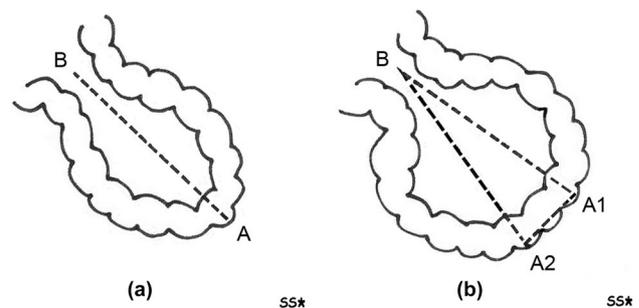
We thank Dr. Disci [1] for her interest in our paper and we appreciate her comments.

As the author stated, to prevent or reduce a recurrence in sigmoid volvulus, percutaneous endoscopic colopexy (PEC) is recommended in some selected patients treated with successful endoscopic decompression, while surgical colopexy is suggested in younger or lower risk patients with viable bowel [2]. Although PEC was first described in 1986, the data available on the role of PEC in the treatment of sigmoid volvulus are limited. Currently, there are fewer than 100 cases reported in the literature. Furthermore, the cases are heterogeneous and the techniques are different. According to the present data, the role of PEC in the treatment of sigmoid volvulus is still controversial [3]. Nevertheless, during or following a successful endoscopic decompression, PEC is recommended in high-risk and elderly patients [4], while elective sigmoid resection is indicated in younger patients who are in good general condition [5].

It is well known that peritonitis caused by fecal leakage is a fatal complication of PEC, which is seen in 5% of patients [3, 4]. As Dr. Disci declared, to use multiple fixation tubes instead of a single one may naturally increase the fecal leakage and leakage-related mortality risk in patients treated with PEC [1]. Nevertheless, fecal leakage is not the only reason for death after PEC. Sigmoid volvulus may recur in 7% of patients after PEC and this is associated with a 14% mortality rate [3, 4]. For this reason, we recommend two or more fixation tubes in PEC to prevent or reduce recurrence and recurrence-related mortality.

Regarding the mechanism of recurrent volvulus in PEC and surgical colopexy, in patients treated with a single fixation tube or suture, a unidimensional apical–basal line is formed between the fixation point and the base of the sigmoid mesentery, which easily allows re-rotation (Fig. 1a). However, when two or more fixation tubes or sutures are used, a two-dimensional triangle or polygon is constituted between two or more fixation points and the base, which hinders re-rotation to some extent (Fig. 1b). For this reason, we recommend multiple fixation points in both PEC and surgical colopexy.

We thank Dr. Disci again for her attentive and valuable comments and contributions.



**Fig. 1** Schematic diagrams showing PEC and colopexy. **a** Unidimensional apical–basal line between the fixation point (A) and the base of the sigmoid mesentery (B) formed in patients treated with a single fixation tube or suture. **b** Two-dimensional triangle between two fixation points (A1, A2) and the base of the sigmoid mesentery (B) constituted in cases treated with two fixation tubes or sutures

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## Compliance with ethical standards

**Conflict of interest** The authors declare that they have no conflict of interest.

**Ethical approval** This article does not contain any studies with human participants performed by any of the authors.

**Informed consent** For this form of study, formal consent is not required.

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