



## Author's Reply

Tomoya Iida<sup>1</sup>, Hiroyuki Kaneto<sup>1</sup>, Hiroshi Nakase<sup>2</sup>

<sup>1</sup>Department of Gastroenterology, Muroran City General Hospital, Muroran, <sup>2</sup>Department of Gastroenterology and Hepatology, Sapporo Medical University School of Medicine, Sapporo, Japan

We thank Dr. Atamanalp for his comments<sup>1</sup> on our paper "Clinical outcomes of sigmoid colon volvulus: identification of the factors associated with successful endoscopic detorsion."<sup>2</sup>

We read with interest their studies by Atamanalp, in which the authors evaluated the clinical features in many patients with sigmoid volvulus (SV).<sup>3-5</sup> Particularly, Atamanalp demonstrated that there were 3 important factors causing unsuccessful endoscopic detorsion; a prolonged symptom period ( $\geq 24$  hours), the presence of an over-rotation (volvulus degree  $\geq 360^\circ$ ), and the co-occurrence of ileosigmoid knotting (ISK).

With regard to the factors pointed out by Atamanalp, we re-evaluated the clinical features of patients in our study. First, The proportion of prolonged symptom period ( $\geq 24$  hours) in possible detorsion group and in impossible detorsion group were 30.8% (4/13) and 50.0% (4/8). Second, the presence or absence of an over-rotation (volvulus degree  $\geq 360^\circ$ ) in all the cases were evaluated by CT. CT examinations were performed in all the 21 cases, and 9 cases showed the findings of over-rotation. The proportion of the cases with the findings of over-rotation in possible detorsion group and in impossible detorsion group were 30.8% (4/13) and 62.5% (5/8). In addition, we overviewed all the CT findings and the operative records. There were no cases presenting ISK in our study.

Taken together, our additional investigation showed that prolonged symptom period and over-rotation might be involved in unsuccessful endoscopic detorsion of SV patients. Unfortunately, our study was underpowered to demonstrate the significant difference of these factors between endoscopically successful and unsuccessful cases because of a small sample size.

In summary, we agree with Atamanalp's comments and lead to our concluding remark that in clinical practice, we should deliberately observe several factors, which was suggested by our group and Atamanalp, to approach the better clinical outcome of SV patients.

## REFERENCES

1. Atamanalp SS. Comments on clinical outcomes of sigmoid colon volvulus: identification of the factors associated with successful endoscopic detorsion. *Intest Res* 2017;15:552-553.
2. Iida T, Nakagaki S, Satoh S, Shimizu H, Kaneto H, Nakase H. Clinical outcomes of sigmoid colon volvulus: identification of the factors associated with successful endoscopic detorsion. *Intest Res* 2017;15:215-220.
3. Atamanalp SS. Sigmoid volvulus: diagnosis in 938 patients over 45.5 years. *Tech Coloproctol* 2013;17:419-424.
4. Atamanalp SS, Oren D, Bařođlu M, et al. Ileosigmoidal knotting: outcome in 63 patients. *Dis Colon Rectum* 2004;47:906-910.
5. Atamanalp SS, Kisaoglu A, Ozogul B. Factors affecting bowel gangrene development in patients with sigmoid volvulus. *Ann Saudi Med* 2013;33:144-148.

**Received** September 14, 2017. **Revised** September 15, 2017.

**Accepted** September 15, 2017.

**Correspondence to** Hiroshi Nakase, Department of Gastroenterology and Hepatology, Sapporo Medical University School of Medicine, Minami 1-jo Nishi 16-chome, Chuo-ku, Sapporo 060-8543, Japan. Tel: +81-11-611-2111, Fax: +81-11-611-2282, E-mail: hiropynakase@gmail.com

**Financial support:** This work was supported by Japan Society for the Promotion of Science KAKENHI (grant number: JP17J02428).

**Conflict of interest:** None.