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**Letter to the Editor**

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# Comments about recurrence development in sigmoid volvulus

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Sigmoid volvulus (SV) is a rarely observed type of intestinal obstruction in which the sigmoid colon wraps around itself. Recurrence after nonoperative detorsion methods or nondefinitive surgical procedures develops in 3%–44% of patients with SV, and each episode of SV carries 8%–28% of mortality risk before, during, and after the treatment no matter which treatment method is used (1). According to Bhatnagar et al. (2), presence of a previous history of an episode duplicates the mortality rate in SV.

In this letter, I report on our 46.5 years of experience from June 1966 to January 2013 with a total of 447 SV patients treated surgically, in East Anatolia, Turkey, a region in which SV is endemic. Some preoperative data and operative findings were studied to determine any correlations with previous history of episodes of SV, and the chi-square test was used for statistical analysis.

In this series, 123 patients (27.5%) had a history of volvulus (92 patients after nonoperative detorsion, 31 patients after surgical detorsion). Of the 123 patients, 118 (87.8%) had 1 SV episode, whereas 8 (6.5%) had 2 episodes and 7 (5.7%) had at least 3 episodes. Advanced age (33.3% in patients 60 years of age and older vs. 21.5% in patients under 60 years of age, $P < 0.01$), male sex (29.8% in males vs. 17.3% in females, $P < 0.05$), and the presence of an elongated sigmoid colon with a dolichocolonic mesentery and a narrow base (30.6% in patients with anatomical predisposition vs. 10.9% in patients without anatomical predisposition, in 352 patients for whom information was available, $P < 0.01$) were positively correlated with recurrence development. However, no correlation was found between recurrence development and the other criteria evaluated, including previous abdominal surgery, the presence of pregnancy, major comorbidity, direction of the volvulus, and degree of the volvulus ($P > 0.05$).

Advanced age is observed to increase the rate of both occurrence and recurrence of SV (1,3). Similarly, male sex is a known risk factor for the development of both primary and recurrent SV (3,4). This increased rate of the recurrence of SV is expected in elderly and male patients due to anatomical predisposition (1,3,4). The role of the presence of an elongated sigmoid colon with a long mesentery and a narrow mesenteric base in the recurrence of SV is also confirmed by our results. Although the present study revealed no correlation between the recurrence of SV and the other parameters mentioned above, there is not enough available literature to evaluate these connections. Other risk factors for the recurrence of SV are known to be the presence of Hirschsprung disease (5), decreased ganglion cells of intestinal plexus (6), and nonoperative reduction or nondefinitive surgery (7).

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