



Comments on “Acute Colonic Volvulus in a Mexican Population: A Case Series”

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To the Editor,

I read with great interest the article written by Gonzalez-Urquijo et al. [1], who reported 34 patients with acute colonic volvulus and 31 of whom suffered from sigmoid volvulus (SV). Interestingly, the authors reported no ileosigmoid knotting (ISK) case. While both SV and ISK are rare worldwide [2], they are endemic in Eastern Anatolia, my practicing area [3, 4]. In a 53.5-year period between June 1966 and January 2020, our 1,028-case SV series is the largest, while 80-case ISK series is one of the largest published single-center series over the world [2]. For this reason, my comments relate to the incidence, diagnosis, and treatment of SV and ISK.

Firstly, while ISK/SV ratio is 1:12.9 in our series, it is from 1:1.6 to 1:2.9 in the reports from sub-Saharan Africa [5, 6]. As seen, ISK constitutes a certain amount of colonic volvulus cases, the incidence of which is reported to be relatively higher in ‘volvulus belt’ African countries. In my opinion, the anatomical pathology of SV and ISK may explain this interesting distribution. As known, dolichosigmoid (a redundant sigmoid colon with a long and narrow-base mesentery) is the main prerequisite for SV, while, additionally, hypermobile ileum is responsible for ISK. In some countries, in which hypermobile ileum is common, the ileum is generally the active component, which wraps around the sigmoid colon (type I ISK). On the other hand, in some other regions in which dolichosigmoid is common, the sigmoid colon is generally the active segment, which encircles the ileum (type II ISK) [7]. It is clear that the incidence of ISK may naturally be low in some regions because of the rarity of the incidence of the hypermobile terminal ileum. Although the anatomic structures of

the bowels are not clearly identified in the authors’ series [1], if possible, a new evaluation may support or decline my idea by explaining the causes of the absence of ISK.

Secondly, abdominal radiography (AR) is diagnostic in 57% to 80% of patients with SV by demonstrating a dilated omega-shaped sigmoid colon, which is the most common sign among a large number of AR signs, including coffee bean or horseshoe signs [3, 8]. Nevertheless, abdominal computed tomography (CT) is highly diagnostic (86% to 97.4%) by demonstrating a dilated omega-shaped sigmoid colon in addition to whirl sign, which is the encircling of the mesenteric vessels by rotated sigmoid colon loops [3, 8]. In our series, the diagnostic accuracy rate is 68.0% for AR while 97.1% for CT [3]. Gonzalez-Urquijo et al. [1] expectedly reported a 76.4% of diagnostic accuracy rate for AR, while the rate for CT was lower (65%) than other literatures. Although they explained the misdiagnosis by the absence of whirl sign in 2 patients, which sign is easy to overlook in some cases and which is the most common cause of misdiagnosis in CT [3, 8], the reasons of inadequacy are not clear in other cases. As known, flexible endoscopy is highly diagnostic with 76% to 100% success rate by demonstrating a spiral sphincter-like twist of the lumen, usually 20 to 30 cm from the anal verge, in suspected uncomplicated and nongangrenous cases [9]. In our series, the correct diagnosis rate was 68.1% for AR, while 97.2% for CT and 98.7% for endoscopy. Misdiagnoses included nonspecific intestinal obstruction, which has been well-treated by emergency surgery without time loss.

Finally, although most authors suggest an elective surgery in some selected cases following an endoscopic decompression to prevent an SV recurrence, as was in the authors’ practice, the selection criteria for elective surgery are not clearly identified either in the authors’ report or in the literature [1, 2]. In practice, I suggest elective surgery with an estimated minimal mortality rate in patients who are under 70 years of age and American Society of Anesthesiologists physical status classification I to III. On the other hand, I recently prefer laparoscopic procedures if possible [9, 10]. In our series, 114 patients (95 open and 19 laparoscopic sigmoid colectomies with primary anastomosis) were treated electively with 0% of mortality, 11.4% of morbidity, and 0% of recurrence rates.

Received: Mar 26, 2020 • Revised: May 4, 2020 • Accepted: May 12, 2020

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I congratulate the authors and wait for the authors' opinion on my comments.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

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