Cukurova Medical Journal
ÇUKUROVA ÜNİVERSİTESİ TIP FAKÜLTESİ

Cukurova Med J 2019;44(4):1534-1535
DOI: 10.17826/cumj.550671

EDİTÖRE MEKTUP / LETTER TO THE EDITOR

Comments on 'Coexistence of diaphragm eventration and multiple organ anomalies after sigmoid volvulus'

"Sigmoid volvulus sonrası tanı konulan diyafram evantrasyonu ve çoklu organ anomali birlikteliği" makalesi üzerine yorumlar

Sabri Selçuk Atamanalp[1]

[1]Department of General Surgery, Faculty of Medicine, Ataturk University, Erzurum, Turkey

Cukurova Medical Journal 2019;44(4):1534-1535.

To the Editor,

I read with great interest the paper by Tasci,[1] whom reported a case with diaphragm eventration and multiple organ anomalies together with sigmoid volvulus (SV). SV is a rare disease worldwide, but it is endemic in Eastern Anatolia[2]. Our clinic has treated 1,018 cases of SV over a 52.5-year period between June 1966 and January 2019. This is the largest single-center SV series over the world. In the light of our comprehensive experience, I want to discuss the predisposing factors that affect the development of SV, and their pathogenesis.

The most known predisposing factor in the development of SV is an anatomical predisposition, dolichosigmoid. Sigmoid dolichocolon is known as the presence of an elongated sigmoid colon with a narrow-base mesentery, in which sigmoid colon easily rotates around its own base[3]. Other rare precipitating factors are postoperative adhesions, internal hernias, Meckel's diverticulum, Hirschsprung's disease, and Chagas disease[4,5].

In our series, dolichosihmoid was present in almost all of 472 patients treated by surgery, while postoperative adhesions were seen in 6.9%, internal hernias in 0.3%, and Meckel's diverticulum in 0.3% of the patients. Nevertheless, we had no patients with diaphragm eventration or multiple organ anomalies.Although the author thinks the presence of diaphragm eventration as a predisposing factor,1 to explain its pathogenesis is not easy. It is well known that, sigmoid colon twists physiologically time to time, and it untwists spontaneously. When the torsion exceeds 180º, it causes an acute clinical picture[5]. Some physiological or pathological situations may induct SV by decreasing the intraabdominal volume and preventing the spontaneous untwisting. In men, in whom SV is common, a small pelvic inlet with a strong abdominal wall prevents detorsion. Similarly, in pregnant women, in whom SV is more frequent, an enlarged uterus doesn't allow derotation[3,4].

On the other hand, pathological pulling due to inflammatory adherence may explain the pathogenesis of SV in cases with Meckel's diverticulum, while collagenous adhesions may be responsible for SV in patients with postoperative adhesions. In other respects, some anatomical pathologies, including internal hernias, may cause SV by preventing the untwisting.

Regarding the case presented by the author, although we have no patient with diaphragm eventration, in my theoretical opinion, it may cause SV by making the untwisting difficult. I congratulate the author for his interesting presentation, and I wonder about his opinion on my comments.

Yazışma Adresi/Address for Correspondence: Dr. Sabri Selcuk Atamanalp, Ataturk University Faculty of Medicine, Department of General Surgery, Erzurum, Turkey E-mail: ssa@atauni.edu.tr
Geliş tarihi/Received: 01.04.2019 Kabul tarihi/Accepted: 08.04.2019 Çevrimiçi yayın/Published online: 18.09.2019

Yazar Katkıları: Çalışma konsepti/Tasarımı: SSA; Veri toplama: SSA; Veri analizi ve yorumlama: SSA; Yazı taslağı: SSA; İçeriğin eleştirel incelenmesi: SSA; Son onay ve sorumluluk: SSA; Teknik ve malzeme desteği: SSA; Süpervizyon: SSA; Fon sağlama (mevcut ise): yok.
Hakem Değerlendirmesi: Editöryal değerlendirme.
Çıkar Çatışması: Yazarlar çıkar çatışması beyan etmemişlerdir.
Finansal Destek: Yazarlar finansal destek beyan etmemişlerdir.

Author Contributions: Concept/Design : SSA; Data acquisition: SSA; Data analysis and interpretation: SSA; Drafting manuscript: SSA; Critical revision of manuscript: SSA; Final approval and accountability: SSA; Technical or material support: SSA; Supervision: SSA; Securing funding (if available): n/a.
Peer-review: Editorial evaluation.
Conflict of Interest: Authors declared no conflict of interest.
Financial Disclosure: Authors declared no financial support

REFERENCES

1. Tasci HI. Coexistence of diaphragm eventration and multiple organ anomalies after sigmoid volvulus. Cukurova Med J. 2019;44:260-4.
2. Atamanalp SS. Sigmoid volvulus: the first one thousand-case single center series in the world. Eur J Trauma Emerg Surg. 2019;45:175-6.
3. Bauman ZM, Evans CH. Volvulus. Surg Clin N Am. 2018;98:973-93.
4. Raveenthiran V, Madiba TE, Atamanalp SS, De U. Volvulus of the sigmoid colon. Colorectal Dis. 2010;12:e1-17.