

Von Wahl Sign in Sigmoid Volvulus Patient with Cerebrovascular Disease

Serebrovasküler Hastalığı olan Sigmoid Volvulus Hastasında Von Wahl İşareti

Sabri Selcuk Atamanalp

Department of General Surgery, Faculty of Medicine, Ataturk University, Erzurum, Turkey

ABSTRACT

Sigmoid volvulus is a rare colonic obstruction form, in which sigmoid colon wraps around itself. Abdominal pain/tenderness, distention, and obstipation are the main clinical features of sigmoid volvulus, while distended sigmoid colon may rarely be palpated by the physicians, which is known as the 'von Wahl sign'. My comments relate to a case report, in which a patient with sigmoid volvulus and von Wahl sign was presented.

Key Words: Sigmoid colon, volvulus, von Wahl sign**Received:** 01.25.2018**Accepted:** 03.20.2018**ÖZET**

Sigmoid volvulus, sigmoid kolonun kendi etrafında dönerek oluşturduğu nadir bir kolon tıkanıklığıdır. Karın ağrısı, şişkinlik ve gaz-gaita çıkaramama sigmoid volvulusun ana özellikleri iken, genişlemiş sigmoid kolon nadiren doktor tarafından palpe edilir, ki bu 'von Wahl işareti' olarak bilinir. Benim tartışmalarım, sigmoid volvuluslu ve von Wahl işareti olan bir hastanın sunulduğu bir olgu sunumu ile ilgilidir.

Anahtar sözcükler: Sigmoid kolon, barsak dönmesi, von Wahl işareti**Geliş Tarihi:** 01.12.2018**Kabul Tarihi:** 21.01.2019

Dear Sir,

I read with interest the paper by Uylas et al. (1), in which the authors present a case with sigmoid volvulus (SV) demonstrating von Wahl sign and emphasize the importance of the clinical examination. Although SV is a sporadic disease worldwide, it is endemic in Eastern Anatolia, my practicing area (2). We have a 1,040-case experience with SV over a 55-year period between June 1966 and July 2021, which is the largest single-center SV series over the world (3). In the light of this experience, I would like to discuss the importance of the diagnostic tools, particularly the role of the clinical examination in SV, and the pathophysiology of von Wahl sign, an uncommon finding in SV.

Volvulus triad (abdominal pain/tenderness, distention, and obstipation) is observed in 52-93% of patients and X-ray findings including coffee bean sign are seen in 57-80% of the cases with SV. Nevertheless, the correct diagnosis of SV is currently depends on computerized tomography (CT) evidences, which involve the presence of a dilated sigmoid colon and mesenteric whirl sign. As an alternative, magnetic resonance imaging (MRI) is preferred in pregnant women with similar findings and success rate, the last which is between 86-97%. However, medical anamnesis and clinical examination revealing both volvulus triad and other relatively rare clinical features including vomiting, hyperkinetic/hypokinetic bowel sound, and empty rectum, mustn't be thought as insignificant (1,4,5). It should not be forgotten that, a palpable dilated sigmoid colon, von Wahl sign, may occasionally be a diagnostic finding in itself in SV, as was presented in the authors' case. In our prospectively evaluated 428-case SV series related to recent years, 34 patients (7.9%) demonstrated von Wahl sign. When compared with 38.6-73.3% of high positivity rate in the literature in past (4), our relatively low detection rate of von Wahl sign may show a fall in importance of the clinical examination recently.

As a pathophysiological explanation, gas generation in closed sigmoid loop causes a palpable or sometimes a visible sigmoid colon in its anatomical location, left upper abdominal quadrant, while excessive gas production may change its position towards the other abdominal quadrants. In my opinion and experience, one of the most important cause of the absence of von Wahl sign is the presence of a competent ileocecal valve, which blocs the gas in colonic segments and camouflage the sign. On the other hand, an excessive abdominal distention may naturally prevent the determination of von Wahl sign in delayed cases.

I congratulate the authors for their informative presentation, and I wonder about their opinion on my comments.

Conflict of interest

No conflict of interest was declared by the author.

REFERENCES

1. Uylas U, Gundogdu R, Turgut E. Von wahl sign in sigmoid volvulus patient with cerebrovascular disease. Gazi Med J 2021;32:476-8.
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. Web of Science. Sigmoid volvulus. Available from. URL: <http://www.webofscience.com/wos/woscc/summary/9ee9d6bc-f659-4aa4-9ea3-1b3f7f7f3870-03ba54e4/relevance/1>. Accessed 10 August 2021.
4. Raveenthiran V, Madiba TE, Atamanalp SS, De U. Volvulus of the sigmoid colon. Colorectal Dis 2010;12:e1-e17.
5. Atamanalp SS, Ozturk G. Sigmoid volvulus in pregnancy. Turk J Med Sci 2012;42:9-15.

ORCID ID: S.S.A. 0000-0003-2561-6461**Address for Correspondence / Yazışma Adresi:** Sabri Selcuk Atamanalp, Prof. MD, Department of General Surgery, Faculty of Medicine, Ataturk University, 25040, Erzurum, Turkey E-mail: ssa@atauni.edu.tr©Telif Hakkı 2022 Gazi Üniversitesi Tıp Fakültesi - Makale metnine <http://medicaljournal.gazi.edu.tr/> web adresinden ulaşılabilir.©Copyright 2022 by Gazi University Medical Faculty - Available on-line at web site <http://medicaljournal.gazi.edu.tr/>doi:<http://dx.doi.org/10.12996/gmj.2022.46>