International Journal of Latest Research in Science and Technology **ISSN (Online):2278-5299**
Volume 6, Issue 5: Page No. 31-32,September-October 2017
https://www.mnkpublication.com/journal/ijlrst/index.php

CLOSTRIDIUM DIFFICILE INFECTIONS WITH PSEUDOMEMBRANOUS COLITIS AND TOXIC MEGACOLON. VENOUS THROMBOSIS WITH NECROSIS OF SMALL INTESTINES. FIBRINOUS –SUPPURATIVE PERITONITIS. CASE REPORT.

Ivaylo Vazharov PhD[1], Snezha Zlateva PhD[2], Georgi Bonchev[2]
[1]First Clinic of Internal Medicine, Naval hospital - Military Medical Academy, Bulgaria
[2]Clinic for Intensive Treatment of Acute Intoxications and Toxicoallergies, Naval Hospital - Military Medical Academy, Bulgaria

Corresponding author: Associate professor Ivaylo Vazharov, PhD, Naval hospital - Military Medical Academy, Varna, Republic of Bulgaria, Hristo Smirnenski str.3, Fax: + 359 52 386 650,Phone: + 359 52 386 200, E-mail: ivaylovajarov@gmail.com

Abstract – This is a case of 65 year old woman who had taken Clindamycin on the occasion of odontogenic infection a week before the hospitalization. After her admission to the hospital she develops Clostridium difficile infection which despite the adequate therapy turns in pseudomembranous colitis and toxic megacolon, and subsequently venous thrombosis with necrosis of the small intestines with fibrinous-suppurative peritonitis. The case demonstrates a serious Clostridium difficile infection which leads to unfavourable result despite the adequate treatment.

Keywords: Clostridium difficile infection, pseudomembranous colitis. mesenteric vein thrombosis

Case presentation

A woman at the age of 65 years, admitted to the intensive ward on the occasion of hypertonic crisis. She was treated with Clindamycin ambulatorily for odontogenic infection. On the third day after the hospitalization diarrhoea appeared with 7-8 watery defecations daily. She was examined for toxin A and B of C. difficile, the tests showed a positive result. Oral therapy with Metronidazol 4 x 500 mg/daily and total parenteral feeding started. Notwithstanding the therapy the diarrhoea aggravated, dehydration, febrility, leucocytosis and presence of typical pseudomembranes along the whole large intestine at endoscopic examination appeared (Fig.1).

Fig.1 Pseudomembranous colitis observed at the endoscopic examination.

Vankomycin 4 x 500 mg/daily and rectally through enemas were started. On the 6th day after the initial symptoms of toxic megacolon and acute surgical abdomen developed. The control endoscopy showed fusion of the pseudomembranes (Fig.2).

Fig. 2 Fusion of the membranes of the pseudomembranous colitis at the control endoscopy.

The patient was operated for venous thrombosis with necrosis of ileum and 70% of jejunum and the engaged parts and 60 cm of jejunum were resected. Fibrinous-suppurative peritonitis was also found intraoperatively. On the tenth day the patient died with the symptoms of acute cardiac-vascular and respiratory failure.

Publication History
Manuscript Received : ***2 October 2017***

DISCUSSION

The antibiotic associated diarrhoea (AAD) is defined as inexplicable diarrhoea in connection to the application of antibiotics. [3] It occurs in 5% to 39% of the patients depending on the type of the antibiotic. [8] C. difficile associated diarrhoea is connected to a quarter of all cases of AAD. [2] C. difficile produces an enterotoxin (toxin A) and a cytotoxin (toxin B). Toxin A has been shown to be the cause of diarrhea and pseudommembranous colitis. [4] After diagnosing the infection, the antibiotic should be stopped and specific antimicrobial therapy should be administered. For the initial infection the recommended antibiotics are peroral metronidazol and vankomycin. [6] C. difficile infection may take the course of fulminant colitis in about 3% of the patients and may lead to most serious complications including perforation, continuous ileus, toxic megacolon and exitus. [7] Mesenteric vein thrombosis almost always involves the distal small intestine (superior mesenteric venous drainage). [5] The anatomic site of involvement in acute mesenteric venous thrombosis is most often ileum (64 to 83 percent) or jejunum (50 to 81 percent), followed by colon (14 percent) and duodenum (4 to 8 percent). [9] Thirty-day mortality for mesenteric vein thrombosis is strongly associated with colonic involvement as well as „short-bowel" syndrome. [1]

The presented clinical case demonstrates a severe Clostridium difficile infection, which leads to adverse result despite the adequate therapy.

REFERENCES

[1] Abu-Daff S, Abu-Daff N, Al-Shahed M. Mesenteric venous thrombosis and factors associated with mortality: a statistical analysis with five-year follow-up. J Gastrointest Surg. 2009 Jul;13(7):1245-50.Bartlett JG. Antibiotic-associated diarrhea. Clin Infect Dis. 1992 Oct;15(4):573-81.

[2] Bartlett JG. Clinical practice. Antibiotic-associated diarrhea. N Engl J Med. 2002 Jan 31;346(5):334-9.

[3] Carter GP, Chakravorty A, Pham Nguyen TA, Mileto S, Schreiber F, Li L, et al. Defining the Roles of TcdA and TcdB in Localized Gastrointestinal Disease, Systemic Organ Damage, and the Host Response during Clostridium difficile Infections. MBio. 2015 Jun 2;6(3):e00551.

[4] Clavien PA, Dürig M, Harder F. Venous mesenteric infarction: a particular entity. Br J Surg. 1988 Mar;75(3):252-5.

[5] Cohen SH, Gerding DN, Johnson S, Kelly CP, Loo VG, McDonald LC, et al. Clinical practice guidelines for Clostridium difficile infection in adults: 2010 update by the society for healthcare epidemiology of America (SHEA) and the infectious diseases society of America (IDSA). Infect Control Hosp Epidemiol. 2010 May;31(5):431-55.

[6] Khanna S, Pardi DS. Clostridium difficile infection: management strategies for a difficult disease. Therap Adv Gastroenterol. 2014 Mar;7(2):72-86.

[7] McFarland L.V. Epidemiology, risk factors and treatments for antibiotic-associated diarrhea. Dig Dis. 1998 Sep-Oct;16(5):292-307.

[8] Rhee RY, Gloviczki P, Mendonca CT, Petterson TM, Serry RD, Sarr MG, J et al. Mesenteric venous thrombosis: still a lethal disease in the 1990s. J Vasc Surg. 1994 Nov;20(5):688-97.