World Journal of Gastrointestinal Pharmacology and Therapeutics

Online Submissions: http://www.wjgnet.com/2150-5349office *World J Gastrointest Pharmacol Ther* 2010 December 6; 1(6): 135-136
wjgpt@wjgnet.com ISSN 2150-5349 (online)
doi:10.4292/wjgpt.v1.i6.135

CASE REPORT

Intestinal pseudo-obstruction in inactive systemic lupus erythematosus: An unusual finding

Giulia Leonardi, Nicola de Bortoli, Massimo Bellini, Maria Gloria Mumolo, Francesco Costa, Angelo Ricchiuti, Stefano Bombardieri, Santino Marchi

Giulia Leonardi, Nicola de Bortoli, Massimo Bellini, Maria Gloria Mumolo, Francesco Costa, Angelo Ricchiuti, Santino Marchi, Gastroenterology Unit, Cisanello Hospital, University of Pisa, Via Paradisa 2, 56124 Pisa, Italy
Stefano Bombardieri, Reumatology Unit, Hospital of Santa Chiara, University of Pisa, Via Roma, 56126 Pisa, Italy
Author contributions: Mumolo MG and Costa F designed the research; Ricchiuti A performed the research; Bombardieri S and Marchi S analyzed the data; Leonardi G, Bellini M and de Bortoli N wrote the paper.
Correspondence to: Giulia Leonardi, MD, Gastroenterology Unit, Cisanello Hospital, University of Pisa, Via Paradisa 2, 56124 Pisa, Italy. giulialeonardi@alice.it
Telephone: +39-50-997435 Fax: +39-50-997436
Received: February 26, 2010 Revised: September 15, 2010
Accepted: September 22, 2010
Published online: December 6, 2010

Abstract

Chronic intestinal pseudo-obstruction (CIP) is an infrequent complication of an active systemic lupus erythematosus (SLE). We illustrate a case of SLE inactive-related CIP. A 51-year old female with inactive SLE (ECLAM score 2) was hospitalized with postprandial fullness, vomiting, abdominal bloating and abdominal pain. She had had no bowel movements for five days. Plain abdominal X-ray revealed multiple fluid levels and dilated small and large bowel loops with air-fluid levels. Intestinal contrast radiology detected dilated loops. CIP was diagnosed. The patient was treated with prokinetics, octreotide, claritromycin, rifaximin, azathioprine and tegaserod without any clinical improvement. Then methylprednisolone (500 mg iv daily) was started. After the first administration, the patient showed peristaltic movements. A bowel movement was reported after the second administration. A plain abdominal X-ray revealed no air-fluid levels. Steroid therapy was slowly reduced with complete resolution of the symptoms. The patient is still in a good clinical condition. SLE-related CIP is generally reported as a complication of an active disease. In our case, CIP was the only clinical demonstration of the SLE.

Key words: Chronic intestinal pseudo-obstruction; Systemic lupus erythematosus

Peer reviewer: Dolores B Njoku, MD, Associate Professor, Division of Pediatric Anesthesiology and Critical Care Medicine, Department of Anesthesiology and Critical Care Medicine, Johns Hopkins School of Medicine, 600 North Wolfe Street, Blalock 906A, Baltimore, MA 21287, United States

Leonardi G, de Bortoli N, Bellini M, Mumolo MG, Costa F, Ricchiuti A, Bombardieri S, Marchi S. Intestinal pseudo-obstruction in inactive systemic lupus erythematosus: An unusual finding. *World J Gastrointest Pharmacol Ther* 2010; 1(6): 135-136 Available from: URL: http://www.wjgnet.com/2150-5349/full/v1/i6/135.htm DOI: http://dx.doi.org/10.4292/wjgpt.v1.i6.135

INTRODUCTION

Systemic lupus erythematosus (SLE) is an autoimmune disease with a wide spectrum of multisystemic presentations[1]. Chronic intestinal pseudo-obstruction (CIP) is a complication that usually occurs during active SLE and is characterised by ineffective intestinal propulsion without any mechanical obstruction of the gut[2]. It is caused by the involvement of visceral smooth muscle and enteric nervous system and can be further classified as idiopathic or secondary. A secondary CIP can be induced by neurological, muscular, endocrine, metabolic and connective tissue diseases, infective agents and drugs[3].

CASE REPORT

A 51-year old female with a 13-year history of SLE (ACR criteria 1997) and nephrotic syndrome was hospitalized

after the onset of postprandial fullness with vomiting, abdominal bloating, dysphagia with solid foods and abdominal pain with cramps. She had had no bowel movements for five days.

Physical examination disclosed abdominal tenderness and distended abdomen with absent bowel sounds. She had been unsuccessfully treated with common prokinetics at the maximum dosage. Nasogastric probe and rectal tube were positioned. Cyclosporine (5 mg/kg per day), esomeprazole (40 mg daily), rifaximin (600 mg daily) and gentle enemas were started.

Blood tests showed slight anemia and leukopenia with reduction of serum proteins. Plasmatic levels of RCP, ERV, IgG and IgA were increased. The other laboratory tests were normal including urea nitrogen, creatinine, C3, C4 and CH50.

An upper digestive endoscopy was performed which detected esophagitis grade A according to the Los Angeles Classification and antral gastritis (H.P. negative).

Plain abdominal X-ray revealed multiple fluid levels and dilated small and large bowel loops with air-fluid levels. Ultrasound scan and abdominal computed tomography scan showed gastric distension and circumferential thickening of the large bowel without mechanical obstruction. Intestinal contrast radiology with soluble material detected dilated loops with very slow transit. Esophageal and ano-rectal manometry were performed to rule out scleroderma and Hirschsprung's disease respectively.

On the basis of these findings, chronic intestinal pseudo-obstruction was suspected and the patient was treated with octreotide (50 mg daily), clarithromycin (500 mg daily), rifaximin (1200 mg daily) and azathioprine (100 mg daily) without any clinical improvement. Tegaserod (6 mg bid) was also added without any positive effect.

Then an intravenous bolus of methylprednisolone (500 mg daily) was planned for three days. Quickly after the first administration the patient reported peristaltic movements. A bowel movement was reported after the second administration and a plain abdominal X-ray revealed no air-fluid levels. After the third bolus of 500 mg, it was decided to decrease the methylprednisolone to 100 mg iv daily for a week. After a few days, the abdominal tenderness and distension completely disappeared and abdominal sounds were clearly present. Over the next weeks, the steroid therapy was slowly but constantly reduced with a good response and a complete resolution of the symptoms. The patient is still in a good clinical condition.

DISCUSSION

SLE can involve each part of the gastrointestinal tract with oral aphthosis, esophageal dysmotility, mesenteric vasculitis, protein-losing enteropathy and pancreatitis as the most frequent manifestations[4]. Gastrointestinal involvement in SLE is rare. Apart from the mucosal involvement, the frequency of GI manifestations is very low.

CIP has been recognized as an uncommon and poorly understood complication of SLE: it usually occurs during active lupus (it can appear as a complication or as the initial presentation of SLE) but may manifest itself in inactive lupus. Until now, only 27 cases of SLE related CIP have been reported in literature[2].

This is the only SLE-related case of CIP in our experience. We started to treat the patient for a motility intestinal disorder because, on the basis of the clinical and serological criteria, the disease was inactive (ECLAM score 2)[5]. After the failure of a targeted motility approach, we considered the autoimmune disease as the core of the problem and the patient was successfully given a steroid therapy. SLE-related CIP, generally unusual, is reported as a complication of an active disease and favourably responds to high doses of corticosteroids[6]. In our case, CIP was the only clinical demonstration of the SLE.

Also, in inactive SLE, it is mandatory to start steroid therapy when CIP fails to respond to a targeted motility therapy.

REFERENCES

1 **Moldovan I**. Systemic lupus erythematosus: current state of diagnosis and treatment. *Compr Ther* 2006; **32**: 158-162

2 **Ceccato F**, Salas A, Góngora V, Ruta S, Roverano S, Marcos JC, Garcìa M, Paira S. Chronic intestinal pseudo-obstruction in patients with systemic lupus erythematosus: report of four cases. *Clin Rheumatol* 2008; **27**: 399-402

3 **Connor FL**, Di Lorenzo C. Chronic intestinal pseudo-obstruction: assessment and management. *Gastroenterology* 2006; **130**: S29-S36

4 **Hallegua DS**, Wallace DJ. Gastrointestinal manifestations of systemic lupus erythematosus. *Curr Opin Rheumatol* 2000; **12**: 379-385

5 **Griffiths B**, Mosca M, Gordon C. Assessment of patients with systemic lupus erythematosus and the use of lupus disease activity indices. *Best Pract Res Clin Rheumatol* 2005; **19**: 685-708

6 **Cogliandro RF**, De Giorgio R, Barbara G, Cogliandro L, Concordia A, Corinaldesi R, Stanghellini V. Chronic intestinal pseudo-obstruction. *Best Pract Res Clin Gastroenterol* 2007; **21**: 657-669

S- Editor Wang JL **L- Editor** Roemmele A **E- Editor** Lin YP