Asian Journal of Research and Reports in Gastroenterology

3(1): 21-25, 2020; Article no.AJRRGA.57698

Isolated Massive Ascites Revealing Systemic Lupus Erythematosus

Salem Bouomrani[1,2*] and Wided Letaïef[2,3]

[1]Department of Internal Medicine, Military Hospital of Gabes, Gabes 6000, Tunisia.
[2]Sfax Faculty of Medicine, University of Sfax, Sfax 3029, Tunisia.
[3]Department of Gynecology, Regional Hospital of Gabes, Mtorrech 6014, Tunisia.

Authors' contributions

This work was carried out in collaboration between both authors. Both authors were involved in the diagnosis and treatment of the patient. Author SB had primary responsibility for drafting this manuscript. Author WL was actively involved in the evaluation of the findings and has revised this article. Both authors read and approved the final manuscript.

Article Information

Editor(s):
(1) Dr. Pramod Kumar Sharma, All India Institute of Medical Sciences, India.
Reviewers:
(1) Beata Kaleta, Medical University of Warsaw, Poland.
(2) A. Angelin Esther, The Tamil Nadu Dr. MGR University, India.
Complete Peer review History: http://www.sdiarticle4.com/review-history/57698

Case Report

Received 03 April 2020
Accepted 10 June 2020
Published 22 June 2020

ABSTRACT

Serositiscan be noted in 10-16% of patients followed for systemic lupus erythematosus (SLE). They are by far dominated by pleural and pericardial effusions; ascites, however, remains extremely rare. The ascites associated with SLE is exceptionally primitive due to lupus peritonitis with only a few sporadic cases reportedin the medical literature. It may exceptionally be the first manifestation revealing SLE representing a real diagnostic and therapeutic challenge for clinicians. We report an original observation of isolated massive ascites due to lupus peritonitis revealing systemic lupus a 28-year-old Tunisian woman.

Keywords: Massive ascites; lupus peritonitis; systemic lupus erythematosus.

1. INTRODUCTION

Abdominal complications of systemic lupus erythematosus (SLE) are frequent and very heterogeneous. They are by far dominated by intestinal pseudo-obstructions, lupus enteritis, pancreatitis, mesenteric vasculitis, gastrointestinal necrosis and / or perforation,

**Corresponding author: Email: salembouomrani@yahoo.fr;*

hepatitis, splenic infarction, mesenteric vessel thrombosis, and mesenteric panniculitis [1,2].

Serositiscan be noted in 10-16% of patients followed for SLE [3-6]. They are by far dominated by pleural and pericardial effusions; ascites, however, remains extremely rare [5,7]. The ascites associated with SLE is exceptionally primitive due to lupus peritonitis with only a few sporadic cases reported [3,4,7,8].

The isolated and massive forms revealing lupus disease are exceptional and represent a real diagnostic challenge for clinicians [9-11].

We report the original observation of isolated massive ascites due to lupus peritonitis revealing SLE in 28-year-old woman.

2. CASE REPORT

28-year-old Tunisian woman, without pathological medical history(in particular, no family or personal history of connective tissue diseases, systemic vasculitis, thromboembolic events, repeat abortion, antiphospholipid antibodies, or cancer has been noted.), was explored for acute abdominal pain associated with progressive abdominal distention evolving for two weeks and not improved by symptomatic treatment. His pain had started initially at the level of the hypogastrium and then gradually spread to all the squares of the abdomen with an epigastric maximum. Abdominal pain and distension were aggravated by decubitus and physical activity, sometimes with episodes of nocturnal dyspnea.

There have been no reports of associated vomiting or bowel transit disturbances.

The somatic examination showed only massive ascites. The patient was apyretic with preserved hemodynamic, respiratory, and neurological status. No jaundice, peripheral lymphadenopathy, palpable masses, visceromegalies, or active skin lesions have been noted.

Biology showed erythrocyte sedimentation rate at 68 mm/H1, C-reactive protein (CRP) at 12 mg/l, polyclonal hypergammaglobulinemia at 29.15 g/l, and thrombopenia at 112000/mm^3.

The other basic laboratory tests were within normal limits: hemoglobin, leukocytes, neutrophils, lymphocytes, creatinine, blood glucose, serum ionogram, transaminases, muscle enzymes, calcemia, lipid parameters, thyroid hormones,serumalbumin,and urine analysis.

The abdominopelvic ultrasound and computed tomography (CT) confirmed the diagnosis of massive ascites without other abnormalities (Figs. 1, 2, 3 and 4). The ascites puncture showed nonspecific inflammatory fluid without neoplastic cells. Direct examination and culture of ascites fluid were negative.

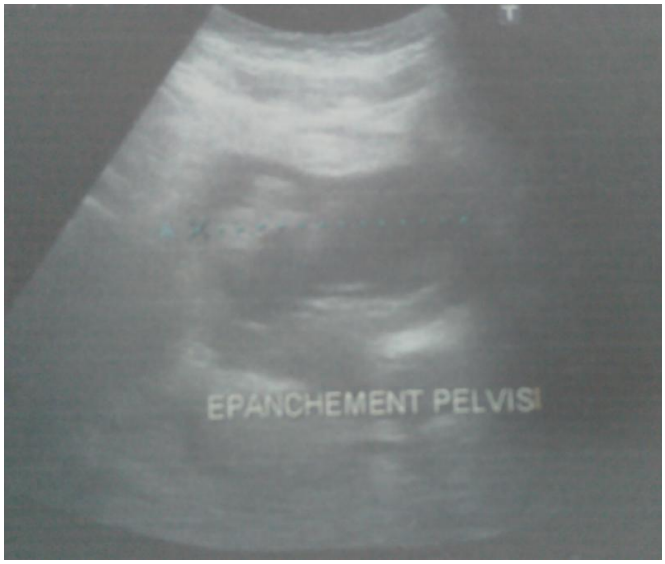

Fig. 1. Pelvic ultrasound: Abundant free pelvic effusion

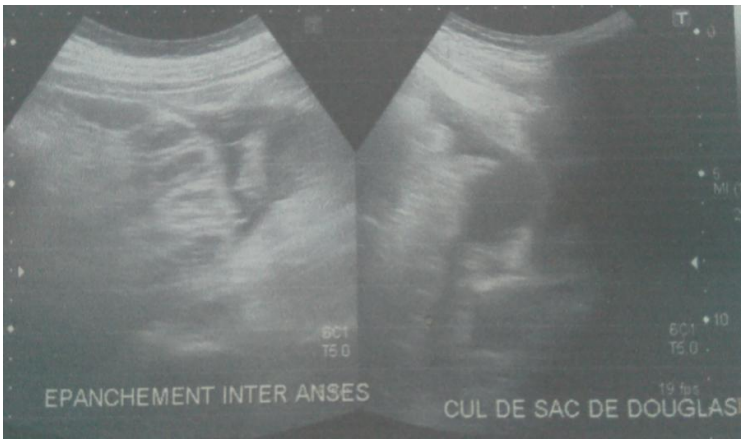

Fig. 2. Abdominal ultrasound: Inter-bowel loops effusion and fluid collection in pouch of douglas

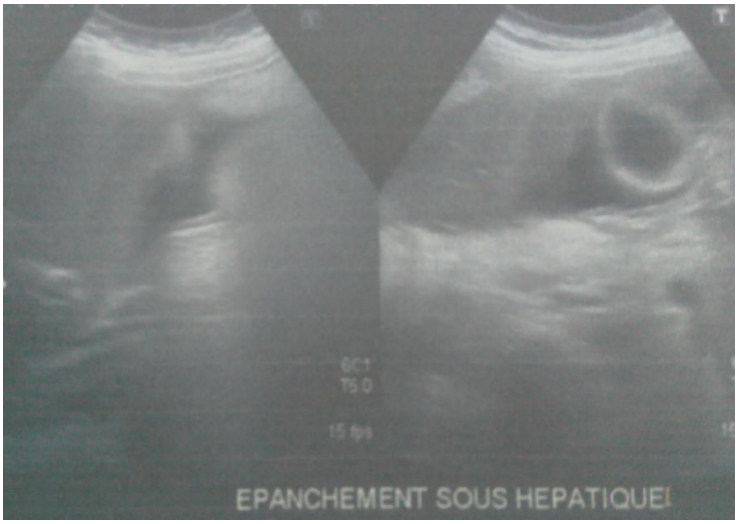

Fig. 3. Abdominal ultrasound: Sub-hepatic effusion

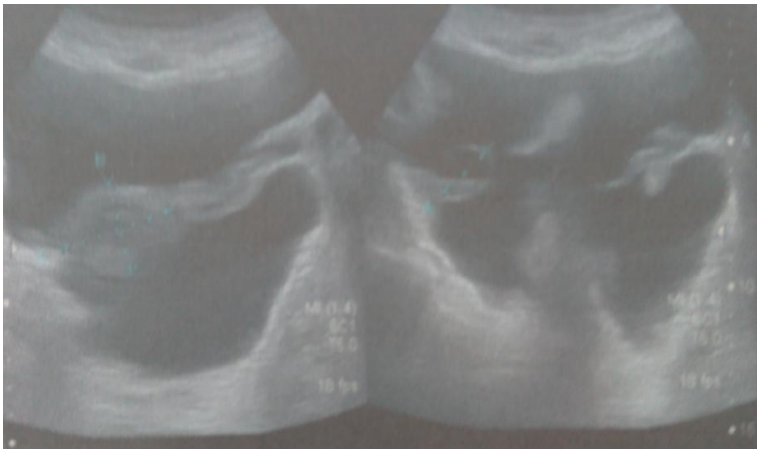

Fig. 4. Abdominopelvic ultrasound: Massive ascites

Subsequent investigations made it possible to eliminate infectious, renal, cardiac, cancerous, or hepatic cause: chest radiography, thoraco-abdomino-pelvic CT scan, transthoracic echo-cardiography, tuberculosis tests, tumor markers, colonoscopy, gastroscopy, prothrombin time, coagulation factor V, viral hepatitis serologies,and 24h proteinuria without anomalies.

The immunological assessment revealed positive anti-nuclear antibodies at 1/1280, positive anti-double-stranded DNA antibodies at 113 IU/ml, and positive anti-phospholipid antibodies (IgGanti-cardiolipinantibodies at 46.1 GPL/ml and IgGanti-β2 glycoprotein I antibodies at 30.2 AU/ml).

Investigations for other specific visceral disorders of SLE were negative, and there were no associated pericardial or pleural effusion.

The diagnosis of isolated massive ascites of lupus peritonitis revealing SLE was retained.

The patient was treated with systemic glucocorticoids (0.5 mg/kg/day for four weeks followed by progressive decrease), hydroxychloroquine (400 mg/day), and salicylic acid (100 mg/day).She did not require albumin infusion since her basal rate was normal.

The outcome was favorable with progressive disappearance of clinical complaints, normalization of biological parameters of inflammation and total blood count at three weeks, and normal abdominal ultrasound at two month of treatment. The patient was kept under regular clinical and radiological follow up with a consultation (somatic examination and basic biological tests) every three months and an abdominal ultrasound every year. No recurrence has been noted for six years.

3. DISCUSSION

Primary lupus ascites reflecting lupus peritonitis remains exceptional and unusual [5,7]. It is most often secondary to another severe complication of lupus disease: nephrotic syndrome, nephritis, congestive heart failure, portal vein thrombosis, constrictive pericarditis, or pancreatitis [3].

Lupus ascites can exceptionally be the first manifestation revealing the disease [9-11] representing a real diagnostic and therapeutic challenge for clinicians [11]. For our patient, the diagnostic delay was around a month with several consultations in primary care (family medicine) and specialized medicine (gynecology, visceral surgery, and gastroenterology).

It can be recurrent [9] and precede by several years the diagnosis of lupus disease: three years in the two observations of Hammoudeh M and Averbuch M [9,10] and two years in the observation of Aljebreen AM [4].

Lupus ascites can remain isolated or be associated with other abdominal manifestations of SLE such as: mesenteric lymphadenitis and peritoneal panniculitis [9].

Massive lupus ascites is unusual [4,7]. It can be painful [7] or remain completely painless [4]. Classically ascites fluid is inflammatory, clear, lymphocytic, and rich in circulating immune complexes [3,4,7-9]. Exceptionally chylous ascites has been reported during SLE [11].

Lupus ascites is usually of good prognosis and respond quickly favorably to systemic corticosteroid therapy and hydroxychloroquine [7-9]. Exceptionally refractory forms of lupus ascites have been reported requiring the use of methylprednisolone pulses [4].

4. CONCLUSION

During SLE, ascites often reflects a severe form of the disease with severe kidney, liver or heart damage. Primitive ascites due to lupus peritonitis is much rarer.

The massive and revealing forms, like our observation, are exceptional and unusual.

Screening for SLE seems to be useful in front of any isolated ascites that is not proven, especially in young women.

CONSENT

Oral and written informed consent were obtained from the patient.

ETHICAL APPROVAL

As per international standard written ethical permission has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Stoddard CJ, Kay PH, Simms JM, Kennedy A, Hughes P. Acute abdominal complications of systemic lupus erythematosus. Br J Surg. 1978;65(9):625-8.
2. Henc-Mitis J. Peritoneal symptoms in the initial stage of systemic lupus erythematosus. WiadLek. 1987;40(16): 1131-3.
3. Kirby JM, Jhaveri KS, Maizlin ZV, Midia M, Haider E, Khalili K. Abdominal manifestations of systemic lupus erythematosus: Spectrum of imaging findings. Can AssocRadiol J. 2009;60(3): 121-32.
4. Aljebreen AM, Al-Mogairen SA. Refractory ascites as the first presentation of systemic lupus erythematosus. Arab J Gastroenterol. 2014;15(3-4):161-2.
5. PottJúnior H, AmateNeto A, Teixeira MA, Provenza JR. Ascites due to lupus peritonitis: A rare form of onset of systemic lupus erythematosus. Rev Bras Reumatol. 2012;52(1):116-9.
6. Man BL, Mok CC. Serositis related to systemic lupus erythematosus: Prevalence and outcome. Lupus. 2005;14(10):822-6.
7. Zhou L, Ming Sun C, Li Chen W, Zhang H, Wang P, Wu J. Massive and painful ascites as a presenting manifestation of systemic lupus erythematosus flare: A case report and literature review. Rev Med Chil. 2014;142(2):255-60.
8. Mier A, Weir W. Ascites in systemic lupus erythematosus. Ann Rheum Dis. 1985; 44(11):778-9.
9. Hammoudeh M, Siam AR. Recurrent peritonitis with ascites as the predominant manifestation of systemic lupus erythematosus. ClinRheumatol. 1995; 14(3):352-4.
10. Averbuch M, Levo Y. Longstanding intractable ascites as the initial and predominant manifestation of systemic lupus erythematosus. J Rheumatol. 1986; 13(2):442-3.
11. Hasan B, Asif T, Hasan M, Edrees AF. Chylous Ascites in Systemic Lupus Erythematosus: A Diagnostic Challenge. Cureus. 2017;9(5):e1226.

Peer-review history:
The peer review history for this paper can be accessed here:
http://www.sdiarticle4.com/review-history/57698