

Endometriosis with massive recurrent hemorrhagic ascites: A case report

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ABSTRACT

Ascites is a rare manifestation of endometriosis. The case reported is that of a 26-year-old woman with recurrent massive hemorrhagic ascites. The analysis of biopsy specimens made at laparoscopy confirmed the diagnosis. The report noted pelvic endometriosis associated but there was no umbilical or pleural involvement. The evolution was favorable under a long term hormone treatment (by GnRH analogues) with relay through continuous estrogen-progestogen. The diagnostic and therapeutic difficulties of this rare form of endometriosis are presented through a review of the literature.

Key words: Endometriosis; hemorrhagic ascites; management.

Introduction

Endometriosis is characterized by the presence of endometrial tissue outside the uterine cavity. It is a relatively common benign pathology affecting about 10% of women of childbearing age.^[1] Its usual locations are pelvic but with extra-pelvic forms in 5% of cases.^[2] In these extra pelvic forms, the positive diagnosis is made difficult by a heterogeneous clinical symptomatology. Endometriosis revealed by an ascites is rare and is presented in the form of a recurrent hemorrhagic ascites sometimes associated with pleurisy. The use of laparoscopy with biopsy is often necessary to eliminate any neoplastic or tuberculosis pathology. Its treatment is based on long-term hormone therapy with frequent recurrences. We report the difficulties encountered in the diagnostic procedure and the therapeutic attitude in a 26-year-old woman with endometriosis with hemorrhagic ascites.

Case Report

A 26-year-old woman, nulliparous, was sent by the department of internal medicine to explore an ascites. Its history is unusual (HIV serology negative, negative IDR).

The symptomatology is said to go back to about 1 year by spread abdominal pains with progressive increase of its size. Her initial management in a level 2 health care center in a provincial town where she lived evoked the peritoneal tuberculous diagnosis on indirect arguments: ascites with lymphocytic exudate in a young patient in endemic area.


An antituberculous treatment was imposed for 8 months without success. The evolution was characterized by a significant increase in the abdominal size for which an abdominal ultrasound showed a high ascitic quantity. She was then addressed to the internal medicine service of our level 3 health care center, where an magnetic resonance imaging (MRI) performed and it revealed an ovarian hypertrophy (54 mm major axis to the right and 48.8 mm to the left) associated with ascites [Figure 1]. Therefore, she was taken to our gynecology service.

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In our service, the oriented interrogation found dysmenorrhea evolving since teens and a notion of cyclical abdominal distension of recent onset. The physical examination revealed a stable hemodynamic state, a high quantity of ascites making difficult the pelvic exploration (uterus and annexes), without peritoneal syndrome or occlusive syndrome.

The exploratory puncture brought a hemorrhagic and exudative liquid.

Biologically, there was a normal hepatorenal balance, hemoglobin 10.6 g/dl and CA-125 levels raised to 63 IU/ml. Laparoscopy confirmed the abundance of hemorrhagic ascites (6 l) with normal liver and gallbladder. The parietal peritoneum was inflammatory bleeding on contact and dotted with brownish spots. The pelvic organs were taken from magma adhesions that made impossible their exploration. Several biopsies were performed after aspiration of ascites and the histological examination of these pieces was in favor of endometriosis [Figure 2]. An analogue treatment of GnRH was established for 6 months relayed by a continuous intaking of a monophasic oestroprogestative pill. The evolution was marked by a complete drying up of ascites after 3 months of treatment and an absence of recurrence after 11 months of decline.

Discussion

Ascites is a rare manifestation of endometriosis.^[3] Since the description of the first case by Brews in 1954,^[4] the literature relates only 60 sporadic cases.^[3] However, in our country, there was no case published on that issue.

The characteristics of our patient correspond to the classical profile of the patients usually affected by this rare form of endometriosis. Indeed, the majority of cases reported in the

literature concerns young women with an average age of 29 years, of black race (70%-80% of cases) and nulliparous.^[2-4] Ascites associated with endometriosis is generally massive with an average of 3-4 l.^[2] The ascites fluid is typically chocolate color, sero-hematic or hemorrhagic as in our case.^[5] Ascites can be associated with right hand pleural effusion in about 30% of cases.^[3,5] The pathogenesis of ascites associated with endometriosis remains unknown. The most mentioned mechanism is the irritation and stimulation of peritoneum by blood and endometriotic cells from a broken endometriotic cyst.^[6] Regarding the pleural effusion, it might be due to passage of ascites fluid in the pleura by trans-diaphragmatic or lymphatic way through the thoracic duct explaining its right hand location.^[4,5]

The diagnostic difficulties of ascites associated with endometriosis are well known. Indeed facing this type of ascites, practitioners generally evoke, in first intention, peritoneal tuberculosis, neoplastic pathologies, or Demons-Meigs syndrome.^[3,7] Moreover, the presence of an alteration of the general state of a pelvic mass and elevated CA-125 associated with ascites make think to ovarian cancer or Demons-Meigs syndrome.^[4]

Finally, MRI may reveal lesions suggestive of endometriosis (hyperintense on T1) but does not eliminate the existence of infra-centimetric implants.^[8,9] Thus, in most cases, the diagnosis is mentioned only during surgical exploration by laparoscopy or laparotomy and histological examination confirmed by biopsy.^[10]

The analysis of the literature does not reveal a well-codified therapeutic strategy to this form of endometriosis. The hysterectomy with bilateral oophorectomy is the only definitive treatment but its indications are restricted by the young age

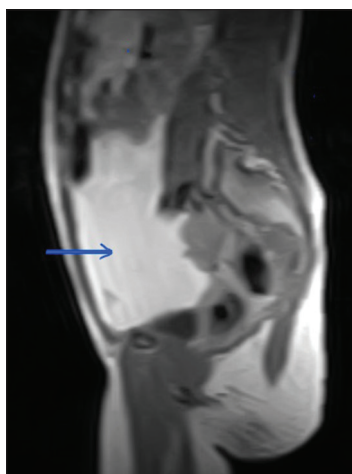


Figure 1: Coronal section showing high abundance ascites and an ovarian bilateral hypertrophy (MRI in T2 sequence)

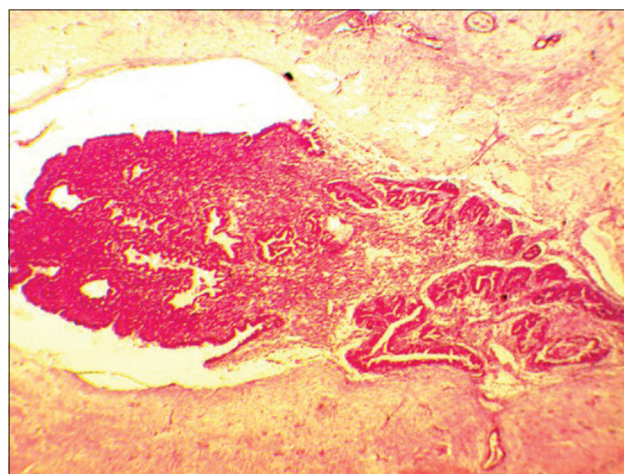


Figure 2: Microscopic examination of the peritoneal biopsy showing endometrial glands and stroma (x50, HE Stain)

of the patients and their fertility desire.^[6] Complete excision of endometriosis nodes, principle of conservative surgery for endometriosis cannot be obtained because of the diffuse nature of the peritoneal involvement and the importance of peritoneal adhesions. Therefore, the authors tend to favor suppressive hormone treatment by GnRH analogues over a period of 6 months but the ascites recurrences in stopping treatment are common.^[7] Preventing recurrences of painful symptoms of endometriosis is usually based on a long-term prescription of progestative or estroprogestative, but their effect on the development of the ascites is not yet rated.^[4] In our observation, the continuous use of estroprogestative in relay of the GnRH analogues saw no recurrence of ascites with 11 months of decline. The management of infertility in these patients is more difficult and usually requires recourse to *in vitro* fertilization (IVF). But be aware that ovarian stimulation may induce recurrence of ascites.^[4]

Conclusion

The ascites is a rare manifestation of endometriosis which is a severe form of this affection. Its diagnosis is often difficult and requires laparoscopic exploration. However, the cyclical and catamenial symptoms are a strong argument justifying a careful interrogation. The assessment should seek other localizations associated, in particular pelvic, umbilical and right hand pleural. Medical treatment by GnRH analogues gives good answers but relapses are common. The long-term use of estroprogestative in relay to GnRH analogues for preventing these recurrences should be evaluated.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given her consent for her images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Authors' contributions

Edouard N'guessan was writing the final draft of the manuscript. Franck Gbeli was writing the first draft of the manuscript. N'goran Kouamé selected the MRI image included in this report and revised the manuscript. Privat Guie revised and finalized the manuscript.

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Conflicts of interest

There are no conflicts of interest.

Authors statement

All authors read and agreed to the final version of this manuscript and equally contributed to its content and to the management of the case. Each author believes that the manuscript represents honest work.

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