Case report

Rectorrhagia revealing colonic metastasis from an ovarian primary, an exceptional case report

Rachid Jabi a,b,*, Siham Elmir c, Soumia El Arabi d, Achraf Merry e, Mohammed Bouziane a,b

a Department of General Surgery, Mohammed VI University Hospital, Faculty of Medicine and Pharmacy, Oujda, Morocco
b Laboratory of Anatomy, Microsurgery and Surgery Experimental and Medical Simulation (LAMCESM), Mohammed Ist University, Oujda, Morocco
c Department of Physical Medicine and Rehabilitation, Mohammed VI University Hospital, Faculty of Medicine and Pharmacy, Oujda, Morocco
d Department of Medical Radiology, Mohammed VI University Hospital, Faculty of Medicine and Pharmacy, Oujda, Morocco
e Department of Anatomopathology, Mohammed VI University Hospital, Faculty of Medicine and Pharmacy, Oujda, Morocco

ARTICLE INFO

Keywords:
Ovarian cancer
Colonic metastasis
CA 125
SCARE
Case report

ABSTRACT

Introduction: Ovarian cancer is a gynecological cancer with a very poor prognosis despite the improvement of therapeutic means, of which metastases at the colic level are exceptional. We report an exceptional case which makes it possible to enrich the poor literature published on the subject.

Case presentation: Through this article, we present a very rare case of colonic metastases from ovarian cancer. Biological monitoring and rectal bleeding allowed this rare secondary location to be discovered. Resection then anastomosis allowed our patient to heal.

The objectives of this work are threefold: i), to report this very rare case ovarian metastasis ii), to highlight nulliparity as a risk factor in our patient iii), to report that our therapeutic management interrupted and delayed because of COVID 19.

Discussion and conclusion: Our case report shows that we have to take into consideration this very rare presentation and this even in the absence of true clinical sign. Our work reported also another case of colonic metastasis of a primary ovarian in the very rare case described in the literature and emphasizes the importance of surgical management.

1. Introduction

Ovarian cancer is the fifth gynecological cancer diagnosed in the USA and it is the leading cause of death [1]. Its metastatic dissemination occurs by several routes namely peritoneal according to the circulation of the liquid, lymphatic according to the 5 lymphatic drainage routes [2,3] and rarely by the hematogenous route as he reported Bijk et al. [4]. Despite the therapeutic progress, its prognosis remains very poor [5] given the resistance to various medical treatments. We report according to the SCARE recommendations [6] an exceptional case of colonic metastasis from an ovarian primary revealed by rectal bleeding four years after gynecological surgery. Our case is the first case reported in Morocco and one among less than fifty reported cases published in the literature.

2. Case presentation

The paper presents the case of a 47-year-old woman, originally from and has been living in the northeast of Morocco. She is single, comes from a low socioeconomic level with an early menarche at the early age of 10. She was operated 4 years ago because of a mass loss left ovary returning in favor of a grade 1 serous cystadenocarcinoma with a macroscopically normal right ovary.

One month later, surgical totalization was performed with performance of a hysterectomy + omentectomy + appendectomy, the pathologic results of which were in favor of a grade 1 serous cystadenocarcinoma of the right ovary without secondary localization at the peritoneal level initially classified T2N0M0 according to FIGO 2018. Our patient was staffed in multidisciplinary consultation with a decision not to administer adjuvant chemotherapy with classical clinical biological and radiological surveillance.
The current study case happened two months ago when the patient presented with constipation and notion of average abundance rectorrhagia. A colonoscopy objectifying an ulcerative stenosing was done at 11 cm from the anal margin of which the biopsy returned in favor a poorly differentiated adenocarcinoma (Fig. 1).

Our patient underwent a clinical, biological and radiological extension assessment, which showed an increased level of CA125 and a tumor of the rectosigmoid hinge without hepatic metastasis or signs in favor of carcinoma on the CT scan on both sagittal and transverse slices (Fig. 2).

The multidisciplinary decision was to perform a colectomy oncological left, made after discussion with the patient and colonic medical preparation.

Surgical exploration done under general anesthesia by laparotomy seen the adhesive abdomen and after colonic preparation showed a process of the left colon without carcinoma or hepatic metastases. Despite the difficult dissection of the left ureter, a carcinological resection of the colon with a mechanical anastomosis was performed by the head of visceral surgery. The postoperative period also went well without incident, the resumption of feeding was authorized from the second day and the drain was removed just before discharge.

Our patient was satisfied with the treatment and the discharge from the hospital environment was made on the fifth day. The pathological results were in favor of colonic metastases from a primary ovarian confirmed by immunohistochemistry with expression of PAX8 and CK7 (Figs. 3, 4, 5).

As a final step, it was planned to put the patient on adjuvant chemotherapy but unfortunately a month later our patient died from COVID 19.

3. Discussion

According to Globbocan, the annual incidence per 100,000 of ovarian cancer is estimated at 295,414 while the incidence of colonic cancer is 575,789 putting this cancer in fourth position by frequency of diagnosis and in third position as cause of death from cancer [7]. Despite screening programs, [5] and its fifth place in order of frequency of gynecological cancers in the USA, ovarian cancer mortality ranks first [1].

This cancer has several risk factors [8] such as precocious menarche and nulliparity; as we observed in our patient; and it is considered as heterogeneous disease [9], resistant to therapy [10] whose prognosis is very poor in metastatic form [11,12]. These ovarian tumors are spread by hematogenous, lymphatic and peritoneal routes, which explains the various distant metastases [2,3]. They can exceptionally affect certain organs such as the breast [13], the stomach [14], the spleen, [15] and the colon [16,17]; as presented our case. The time to onset of colonic metastases is variable, exceeding 20 years in some cases [18]. In the presented case it was four years after the first surgery. The reason for discovery varied between functional digestive disorder [19], elevation of serum markers [20]. This requires the use of different types of standard or functional imaging in some cases [17]; in our patient the elevation of CA125 and the rectal bleeding motivated our discovery.

In most of the published cases; which do not exceed 50 cases in the literature, a carcinological colectomy was performed with immunohistochemical results confirming the ovarian origin of colonic tumors with PAX8 positive as shown in our case.

The poor prognosis for ovarian cancer worsens in a metastatic situation [21] and the majority of cases in the literature on colonic metastases are published as a case report treated with surgery followed by adjuvant chemotherapy without strong scientific evidence. In our case, chemotherapy was scheduled but not administered given the death due to severe COVID 19 disease.

4. Conclusion

We reported in this work a new case of colonic metastases from a primary ovarian discovered years after gynecological surgery. We highlighted the importance of clinical biological radiological monitoring and we insisted on the exploration of any clinical sign in a patient with
Fig. 2. CT1: CT scan, sagittal slice. 
CT2: CT scan, transversal slice.
Fig. 3. Microphotography showing infiltration of the colic wall by a carcinomatous proliferation made of nests and sheets of markedly atypical cells. HE, 200×.
Fig. 4. CK7: Neoplastic cells showed expression of cytokeratin 7.

Fig. 5. PAX8: Neoplastic cells showed nuclear expression of PAX-8.
informed consent was taken from her.

**Ethics approval**
Not applicable.

**Funding**
The authors received no financial support for the research, authorship and/or publication of this article.

**CRediT authorship contribution statement**

Jabi Rachid: Writing, review and editing of the manuscript.

Siham Elmir, Acharf Merry, Soumia El Arabi Contributed for diagnosis and treatment of the patient.

Mohammed Bouziane: Review, Supervision and surgeons of the patient.

**Guarantor**

Jabi Rachid

**Registration of research studies**

Our paper is a case report; no registration was done for it.

**Patient perceptive**

The procedure of surgery was explained to the patient with all advantages and possible complications. He agreed on the procedure and informed consent was taken from her.

**Consent of patient**
Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of the written consent is available for review by the Editor-In-Chief of this journal on request.

**Provenance and peer review**

Not commissioned, externally peer-reviewed.

**Declaration of competing interest**

The authors declared no potential conflicts of interests with respect to research, authorship and/or publication of the article.

**References**

[1] R.L. Siegel, K.D. Miller, A. Jemal, Cancer statistics, 2020, CA Cancer J. Clin. 70 (1) (2020 Jan 7-30, https://doi.org/10.3322/caac.21590, Epub 2020 Jan 8 PMID: 31912902.

[2] R.A. Agha, T. Franchi, C. Sohrabi, G. Mathew, A. Kerwan, Groupe SCARE, Ligne directrice SCARE 2020: mise a jour des lignes directrices du rapport SCARE sur les cas chirurgicaux consensuels, Int. J. Surg. 84 (2020) 226–230, https://doi.org/10.1016/j.ijsu.2020.07.005, Epub 2018 Jan 5. PMID: 29438284.

[3] D. Nasiosidis, E.M. Ko, A.F. Haggerty, R.L. Giuntoli II, R.A. Burger, M.A. Morgan, N. A. Lattif, Isolated distant lymph node metastases in ovarian cancer. Should a new subclass be created?, Gynecol. Oncol. Rep. 28 (2019 Mar 13) 86–90, https://doi.org/10.1016/j.gyore.2019.03.008. PMID: 30976643; PMCID: PMC6439225.

[4] J.H. Bijek, N. Ehnart, P. Mathew, Dissemination métastatique par voie hématogène d’un cancer épithélial de l’ovaire: un propon d’un cas (Hematogenous dissemination in epithelial ovarian cancer: case report), J. Gynecol. Obstet. Biol. Reprod. (Paris) 40 (5) (2011 Sep) 465–468, https://doi.org/10.1016/j.jgyn.2010.07.014. Epub 2011 Jul 6. PMID: 21737212.

[5] C. Marchetti, F. De Felice, G. Pernisla, F. Lecce, L. Vertechy, M. Monti, D. Musio, L. Muzii, V. Tombolini, P. Benedetti Panici, Screening program in ovarian cancer: a logical step in clinical management? A meta-analysis, Curr. Probl. Cancer 42 (2) (2018 Mar-Apr) 235–240, https://doi.org/10.1016/j. currprobcancer.2017.12.005, Epub 2018 Jan 5. PMID: 29438284.

[6] R.A. Agha, T. Franchi, C. Sohrabi, G. Mathew, A. Kerwan, Groupe SCARE, Ligne directrice SCARE 2020: mise a jour des lignes directrices du rapport SCARE sur les cas chirurgicaux consensuels, Int. J. Surg. 84 (2020) 226–230, https://doi.org/10.1016/j.ijsu.2020.07.005, Epub 2018 Jan 5. PMID: 29438284.