



## Case report

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

Rachid Jabi<sup>a,b,\*</sup>, Siham Elmir<sup>c</sup>, Soumia El Arabi<sup>d</sup>, Achraf Merry<sup>e</sup>, Mohammed Bouziane<sup>a,b</sup>

<sup>a</sup> Department of General Surgery, Mohammed VI University Hospital, Faculty of Medicine and Pharmacy, Oujda, Morocco

<sup>b</sup> Laboratory of Anatomy, Microsurgery and Surgery Experimental and Medical Simulation (LAMCESM), Mohammed Ist University, Oujda, Morocco

<sup>c</sup> Department of Physical Medicine and Rehabilitation, Mohammed VI University Hospital, Faculty of Medicine and Pharmacy, Oujda, Morocco

<sup>d</sup> Department of Medical Radiology, Mohammed VI University Hospital, Faculty of Medicine and Pharmacy, Oujda, Morocco

<sup>e</sup> 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 Bijek 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 pathological results of which were in favor of a 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.

\* Corresponding author at: Department of Surgery, Laboratory of Anatomy, Microsurgery and Surgery Experimental and Medical Simulation (LAMCESM), Mohammed Ist University, Oujda, Morocco.

E-mail address: [jabirachid@gmail.com](mailto:jabirachid@gmail.com) (R. Jabi).

<https://doi.org/10.1016/j.ijscr.2021.106490>

Received 1 September 2021; Received in revised form 6 October 2021; Accepted 6 October 2021

Available online 12 October 2021

2210-2612/© 2021 The Authors. Published by Elsevier Ltd on behalf of IJS Publishing Group Ltd. This is an open access article under the CC BY-NC-ND license

(<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

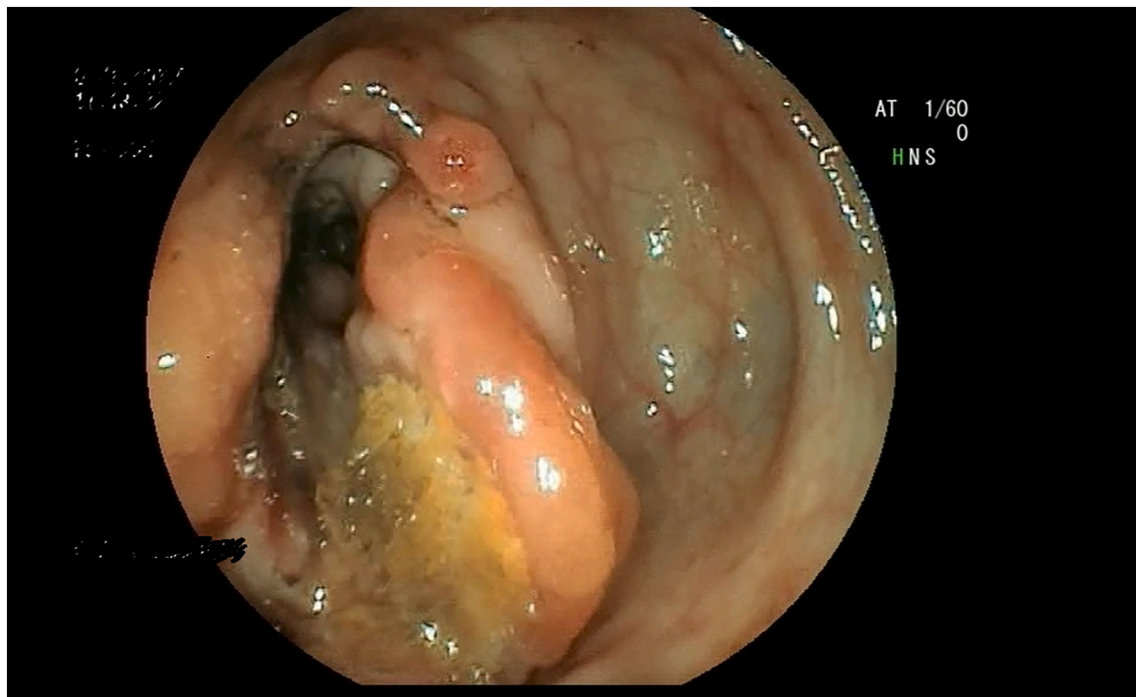


Fig. 1. Colonoscopy objectifying an ulcerative stenosing was done at 11 cm from the anal margin.

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 adjutant chemotherapy but unfortunately a month later our patient died from COVID 19.

### 3. Discussion

According to Globocan, 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].

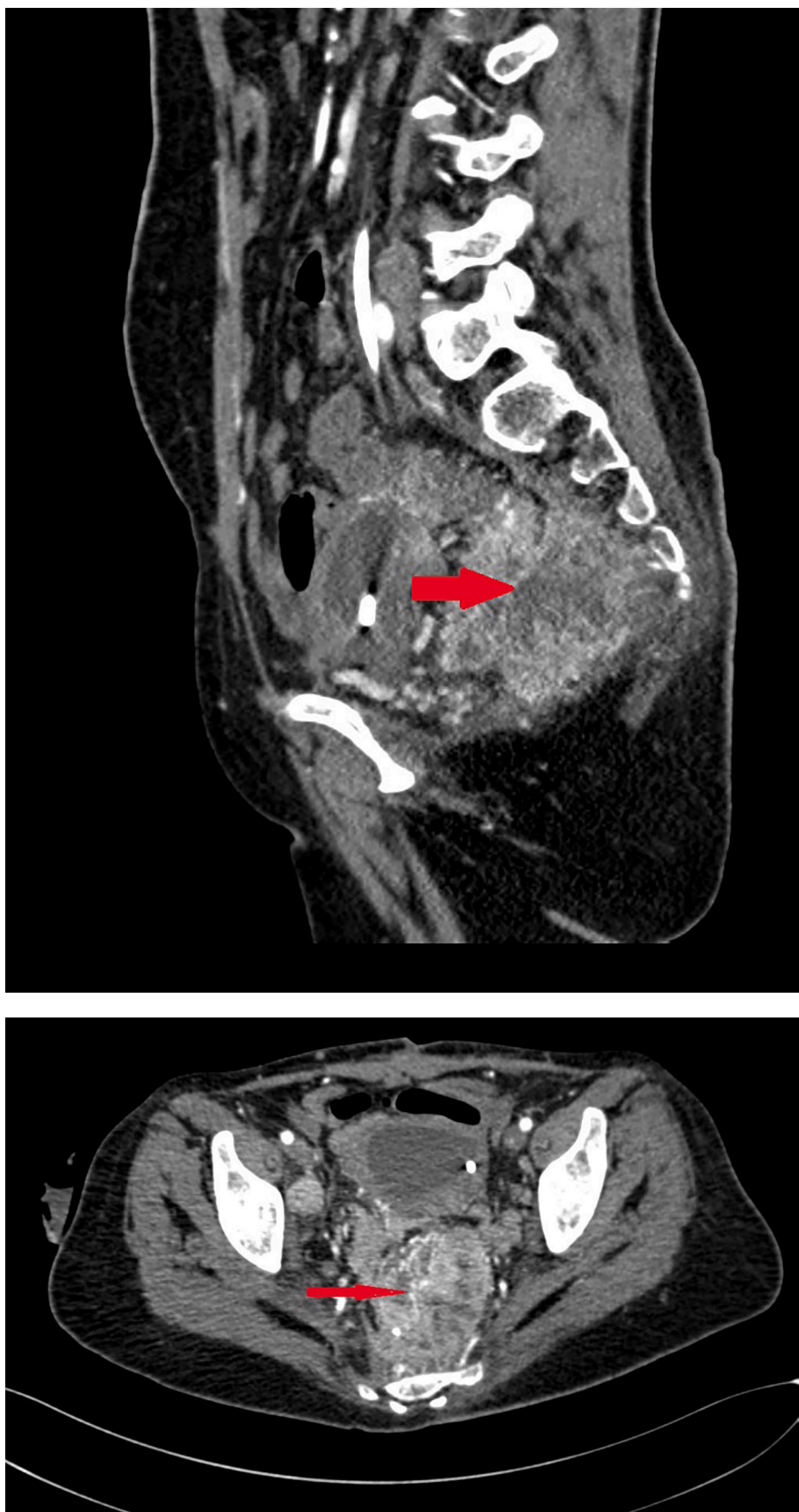
This cancer has several risk factors [8] such as precocious menarche and nulliparity; as we observed in our patient; and it is considered as heterogeneous disease [9], resistant to therapy [10] whose prognosis is very poor in metastatic form [11,12]. These ovarian tumors are spread by hematogenous, lymphatic 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.

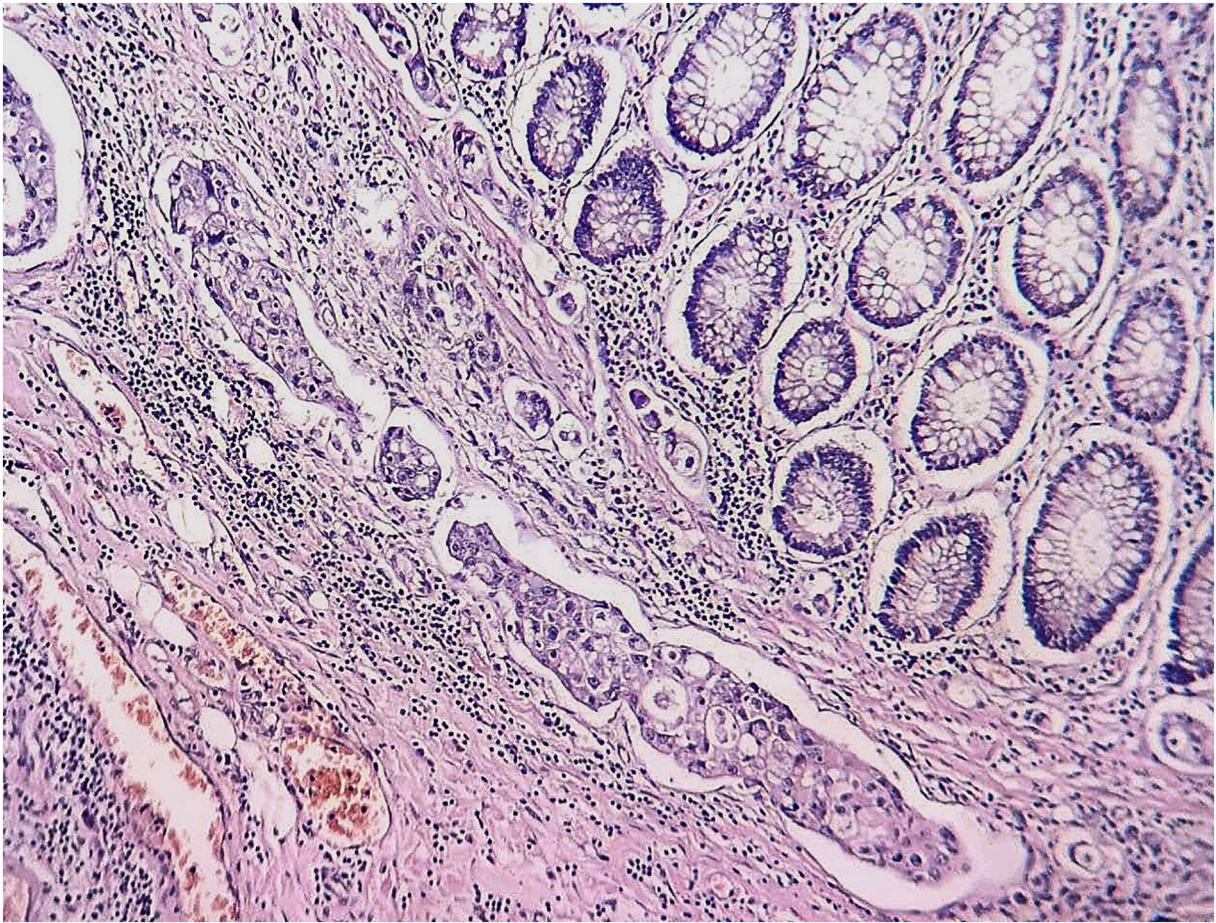
### 4. Conclusion

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 $\times$ .



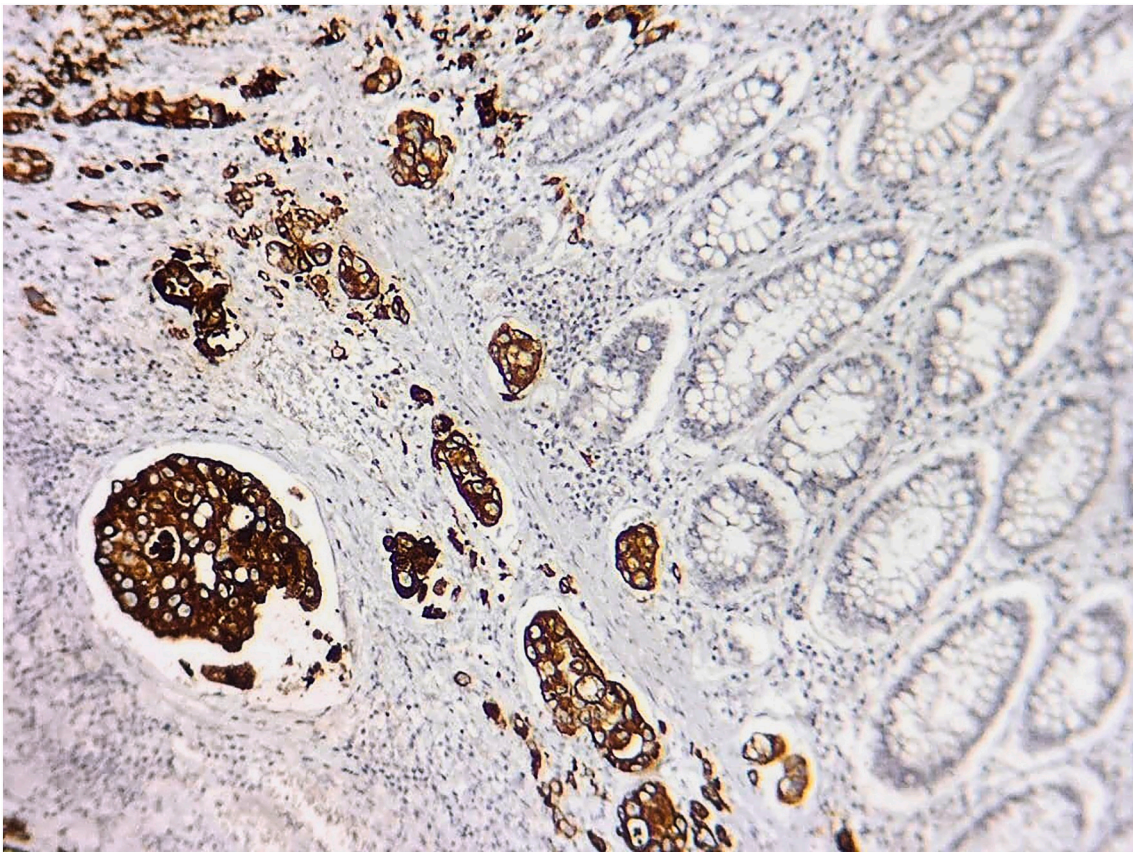


Fig. 4. CK7: Neoplastic cells showed expression of cytokeratin 7.

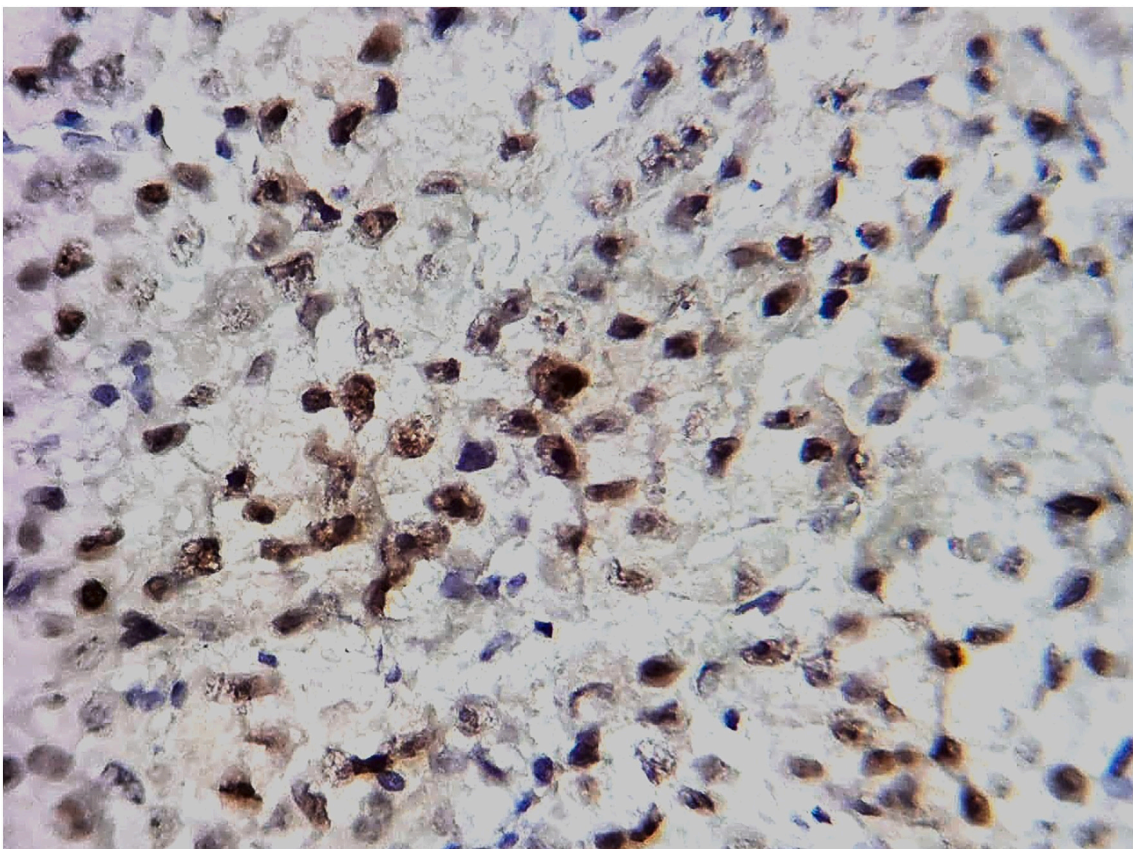


Fig. 5. PAX8: Neoplastic cells showed nuclear expression of PAX-8.



ovarian cancer. Also, we recommend routine endoscopic exploration and in front of functional digestive signs without any real screening program for this sporadic pathology.

Moreover, we add a new case to the poor literature published on this subject which will enrich the discussion and the management of other similar cases in the future and hopefully standardize the procedure to be taken for this type of patient.

## Ethics approval

Not applicable.

## Funding

The author(s) 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 diagnose 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] U.H. Weidle, F. Birzele, G. Kollmorgen, R. Rueger, Mechanisms and targets involved in dissemination of ovarian cancer, *Cancer Genomics Proteomics* 11-12 (13(6)) (2016) 407–423, <https://doi.org/10.21873/cgp.20004>. PMID: 27807064; PMCID: PMC5219915.
- [3] D. Nasioudis, E.M. Ko, A.F. Haggerty, R.L. Giuntoli II, R.A. Burger, M.A. Morgan, N. A. Latif, Isolated distant lymph node metastases in ovarian cancer. Should a new substage be created? *Gynecol. Oncol. Rep.* 28 (2019 Mar 13) 86–90, <https://doi.org/10.1016/j.gore.2019.03.008>. PMID: 30976643; PMCID: PMC6439225.
- [4] J.H. Bijek, N. Ehnart, P. Mathevet, Dissémination métastatique par voie hémotogène d'un cancer épithélial de l'ovaire: à propos d'un cas [Hematogenous dissemination in epithelial ovarian cancer: case report], *French, 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. Perniola, F. Lecce, L. Veretechy, 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.cupr.2017.12.005>. Epub 2018 Jan 5. PMID: 29433824.
- [6] R.A. Agha, T. Franchi, C. Sohrabi, G. Mathew, A. Kerwan, Groupe SCARE, Ligne directrice SCARE 2020: mise à 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.2020.10.034>. S1743-9191(20)30771-8.
- [7] F. Bray, J. Ferlay, I. Soerjomataram, R.L. Siegel, L.A. Torre, A. Jemal, Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries, *CA Cancer J. Clin.* 68 (6) (2018 Nov) 394–424, <https://doi.org/10.3322/caac.21492>. Epub 2018 Sep 12. Erratum in: *CA Cancer J. Clin.* 2020 Jul;70(4):313. PMID: 30207593.
- [8] C. La Vecchia, Ovarian cancer: epidemiology and risk factors, *Eur. J. Cancer Prev.* 26 (1) (2017 Jan) 55–62, <https://doi.org/10.1097/CEJ.0000000000000217>. PMID: 26731563.
- [9] M. Kossai, A. Leary, J.Y. Scoazec, C. Genestie, Ovarian cancer: a heterogeneous disease, *Pathobiology* 85 (1–2) (2018) 41–49, <https://doi.org/10.1159/000479006>. Epub 2017 Oct 12 PMID: 29020678.
- [10] K. El Bairy, M. Amrani, A.H. Kandhro, S. Afqir, Prediction of therapy response in ovarian cancer: where are we now? *Crit. Rev. Clin. Lab. Sci.* 54 (4) (2017 Jun) 233–266, <https://doi.org/10.1080/10408363.2017.1313190>. Epub 2017 Apr 26 PMID: 28443762.
- [11] S. Narod, Can advanced-stage ovarian cancer be cured? *Nat. Rev. Clin. Oncol.* 13 (4) (2016 Apr) 255–261, <https://doi.org/10.1038/nrclinonc.2015.224>. Epub 2016 Jan 20 PMID: 26787282.
- [12] M. Yousefi, S. Dehghani, R. Nosrati, M. Ghanei, A. Salmaninejad, S. Rajaie, M. Hasanazadeh, A. Pasdar, Current insights into the metastasis of epithelial ovarian cancer - hopes and hurdles, *Cell Oncol. (Dordr.)* 43 (4) (2020 Aug) 515–538, <https://doi.org/10.1007/s13402-020-00513-9>. Epub 2020 May 16 PMID: 32418122.
- [13] T. Susini, S. Olivieri, C. Molino, F. Castiglione, K. Tavella, R. Viligiardi, Ovarian cancer initially presenting as intramammary metastases and mimicking a primary breast carcinoma: a case report and literature review, *J. Women's Health (Larchmt)* 19 (1) (2010 Jan) 169–174, <https://doi.org/10.1089/jwh.2009.1465>. PMID: 20088673.
- [14] K. Mizuguchi, H. Minato, I. Yoshida, J. Iwadare, K. Kayahashi, Y. Mitani, K. Watanabe, Solitary gastric metastasis from a stage IA serous ovarian carcinoma: a case report with literature review, *Intern. Med.* 56 (8) (2017) 915–919, <https://doi.org/10.2169/internalmedicine.56.7784>. Epub 2017 Apr 15. PMID: 28420839; PMCID: PMC5465407.
- [15] A.B. Olsen, S. Pargman, T. Gillespie, Solitary splenic metastasis from ovarian carcinosarcoma: a case report, *J. Med. Case Rep.* 10 (5) (2011 Feb) 56, <https://doi.org/10.1186/1752-1947-5-56>. PMID: 21310035; PMCID: PMC3045934.
- [16] I. Zigelboim, Broaddus R, Ramirez PT. Atypical sigmoid metastasis from a high-grade mixed adenocarcinoma of the ovary. *Gynecol Oncol., Colorectal metastasis from ovarian neoplasm mimicking primary colon cancer*, *Gynecol Oncol.* 94 (3) (2004) 850–853, <https://doi.org/10.1016/j.ygyno.2004.05.058>. PMID: 15350388.
- [17] K. Shibahara, K. Endo, T. Ikeda, H. Sakata, N. Sadanaga, M. Morita, Y. Kakeji, Y. Maehara, Colon metastasis 20 years after the removal of ovarian cancer: report of a case, *Surg. Today* 39 (2) (2009) 153–156, <https://doi.org/10.1007/s00595-008-3809-4>. Epub 2009 Feb 7 PMID: 19198996.
- [18] J.R. Kim, B.M. Kim, Y.M. Kim, W.A. Lee, H. Namgung, Colonic metastasis presenting as an intraluminal fungating mass 8 years after surgery for ovarian cancer, *Ann. Coloproctol.* 31 (5) (2015 Oct) 198–201, <https://doi.org/10.3393/ac.2015.31.5.198>. Epub 2015 Oct 31. PMID: 26576399; PMCID: PMC4644708.
- [19] S.A. Bhange, M. Bhansali, T. Shaikh, U. Ajgaonkar, Colonic metastases 13 years after the primary ovarian cancer: a case study with a brief review of literature, *BMJ Case Rep.* 12 (7) (2019 Jul 19), e230127. PMID: 31326907; PMCID: PMC6663209.
- [20] A. Aqsa, S. Droubi, S. Amarnath, F. Haddad, L. Deeb, Colorectal metastasis from ovarian neoplasm mimicking primary colon cancer, *Case Rep. Gastroenterol.* 15 (1) (2021 Jan 21) 41–46. PMID: 33613162; PMCID: PMC7879281.
- [21] N. Colombo, C. Sessa, A. du Bois, J. Ledermann, W.G. McCluggage, I. McNeish, P. Morice, S. Pignata, I. Ray-Coquard, I. Vergote, T. Baert, I. Belaroussi, A. Dashora, S. Olbrecht, F. Planchamp, D. Querleu, ESMO-ESGO Ovarian Cancer Consensus Conference Working Group. ESMO-ESGO consensus conference recommendations on ovarian cancer: pathology and molecular biology, early and advanced stages, borderline tumours and recurrent disease, *Ann. Oncol.* 30 (5) (2019 May 1) 672–705, <https://doi.org/10.1093/annonc/mdz062>. PMID: 31046081.