JPESON
Journal of Perinatal Society of Nepal

CASE REPORT

Ovarian Mucinous Carcinoma Diagnosed Seven Months Post Cesarean In A Lactating Multipara: A Case Report

Apariharya Rana[1], Sudip Shrestha[2], Anju Shrestha,[2] Srijana Lama[2], Rajeev Raj Shahi[3]
[1]Sumeru Hospital, Lalitpur, Nepal.
[2]Nepal Cancer Hospital and Research Center, Harisiddhi, Lalitpur, Nepal.
[3]Kundalini Diagnostics, Harisiddhi, Lalitpur, Nepal.

ISSN: 2976-1050 (Online)
ISSN : 2976-1042 (Print)

Received : 12 Feb, 2023
Accepted : 20 Mar, 2023

Online Access

DOI: 10.59881/jpeson18

Funding Source : None

Conflict of Interest : None

Corresponding Author

Dr Anju Shrestha,
Consultant, Nepal Cancer Hospital and Research Center, Harsiddhi, Lalitpur Nepal.
Email:
anjushrestha2012@gmail.com

ABSTRACT

A 30 year P2 L2 seven months post repeat cesarean, noticed abdominal bloating and underwent investigations showing complex cystic solid multiseptated huge ovarian tumor measuring 22.5 x18x14.5 cm amidst gross ascites with marked rise in tumor markers CEA (40.5 ng/ml) and CA125 63 u/ml. A primary debulking surgery [Total abdominal hysterectomy, bilateral salpingo-oophorectomy (TAHBSO), omentectomy] was done. Histopathology finding was suggestive of advanced-stage mucinous epithelial ovarian carcinoma mEOC based upon which surgical treatment was followed by adjuvant FOLFOX based 1st line combination chemotherapy for 12 cycles from December 2021 to June 2022. (2021- 12- 31 to 2022- 6 -30).

A fast-progressing mEOC, shortly after caesarean in breast feeding multipara woman cautions not to overlook symptoms of dyspepsia and abdominal distention in pretext of puerperal heavy diet, always keeping the possibilities of ovarian malignancy, as diagnosis at early-stage disease ensures benefit of fertility preserving surgery and better reproductive health prognosis.

Keywords: *Mucinous epithelial ovarian carcinoma (mEOC), postpartum ovarian carcinoma, FOLFOX*

INTRODUCTION

Ovarian cancers are rare occurrence during pregnancy, puerperium and postpartum period.[1-3] Pregnancy-associated cancer (PAC) was adopted for malignancy detected during pregnancy or within 2 years of delivery.[4]

Described herewith is a case of advanced stage mucinous epithelial carcinoma (mEOC) which was diagnosed in a multipara seventh months after cesarean delivery that mandated surgical resection followed by 12 cycles of Folfox based first line adjuvant chemotherapy consisting of Oxaliplatin, Leucovorin 5-FU two weekly which has resulted in complete remission.

CASE

A 34 years P2L2, both caesarean delivery, first a baby girl 9 years of age and the last birth being term baby boy weighing 4kg on 2.2.2021while on breast feeding seven months postpartum presented with abdominal bloating, distension and pain followed by vomiting. Radiology was

Citation
Rana A, Shrestha S, Shrestha A, Lama S, Shahi RR. Ovarian Mucinous Carcinoma Diagnosed Seven Months Post Cesarean in A Lactating Multipara, A Case Report . J. Per. Soc. Nepal 2023;02(01):39-41. DOI: 10.59881/jpeson18

suggestive of ovarian tumour. Tumour CEA and CA125 were both increased to 40.5 ng/ml (0 to 2.5 ng/mL) and 63 u/ml (0-35 units/mL) respectively. USG/CECT / PET scan (fig 1) detected a unilateral left sided ovarian cystosolid multiseptated complex mass [22.5 x18x14.5 cm (thickness of septa 13mm)] with gross ascites FNAC from ascetic fluid showed negative cytology and the biopsy from omentum free of cancer (6.12.2021). Staging exploratory laparotomy (10.12. 2121) was done which revealed 1L of mucinous peritoneal fluid and a left adnexal mass size 25 x18 x 15 cm (fig 2). Total abdominal hysterectomy with bilateral salpingo -ophorectmy and omentectomy was done in a cancer center in India. Histopathology reported advanced stage moderately differentiated mucinous epithelial carcinoma (mEOC) with negative peritoneal fluid cytology and omentum free of tumour cells. Twelve cycles of adjuvant Folfox based first line adjuvant chemotherapy consisting of Oxaliplatin, Leucovorin 5-FU every 2 weekly was planned. The first cycle chemotherapy was initiated on December 2021 through peripherally inserted central catheter (PICC), successfully completing last cycle on June 2022 6. 30. . Chemotherapy was well supported by giving subcutaneous injection grastim/ neukine 300 mcg 1ml for leukopenia and adjusting 20% reduction in dose adopted whenever the Liver Function Test was deranged [Inj. Oxaliplatin 120 mg iv d1, Inj Leucovorin 560 mg iv d1, Inj Flurouracil (5FU) iv bolus 560 mg, iv infusion 850-850 mg d1/d2 / (Inj. Oxaliplatin 100mg iv d1, Inj. Leucovorin 700 mg iv d1, Inj Fluorouracil iv bolus 700 mg, infusion 2100 g d1 x d2)]. After completion of chemotherapy, CEA and CA-125 decreased to 3.40 ng/ml and 16.2 u/ml respectively and PET CT scan confirmed no residual disease.

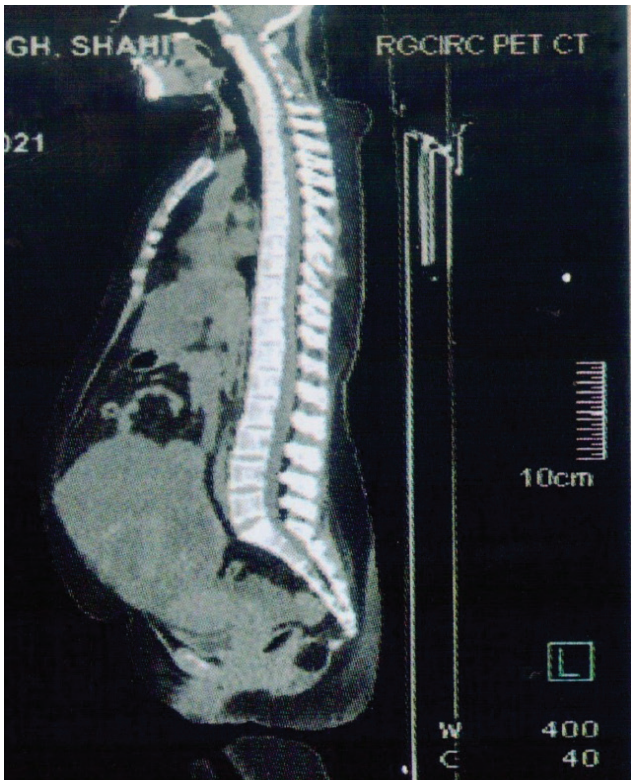

Figure 1. PET Scan showing ovarian tumo

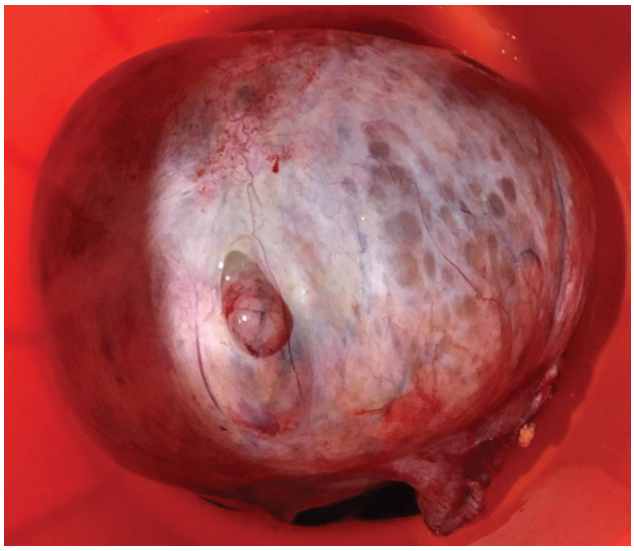

Figure 2. Cystic ovarian tumor consisting mucinous material

DISCUSSION

Mucinous tumors involving the ovary can be benign, borderline or malignant. The latter are mucinous epithelial ovarian carcinoma (mEOC) are either primary invasive originating in ovary or secondary metastasizing from other organs. mEOC is characterized as a type I tumor exhibiting apparent identifiable stepwise progression from a premalignant lesion, through non-invasive, to invasive malignancy with poor prognosis. Advanced-stage mEOC are treated by complete cytoreductive surgery and adjuvant chemotherapy. Unlike conventional carboplatin and paclitaxel chemotherapy regime used in other epithelial ovarian cancer, tumor having biological similarity to colorectal carcinoma is treated by colorectal regimen combining oxaliplatin either with leucovorin, 5 fluorouracil (5 FU) FOLFOX - 1st line or capecitabine XELOX: 2nd line chemotherapy).[5]

This is a case of primary mucinous epithelial ovarian carcinoma based on Immunohistochemistry for Müllerian markers (estrogen and progesterone receptors, PAX8) positivity, estimated to affect 2-5 % of all ovarian malignancy exactly fitting to the etiological description with predilection to affect younger age , less than 40 years , usually huge unilateral neoplasm with septations containing mucinous secretion. Diagnosed in late stage, (III or IV) mEOC thus mandating surgery followed by 12 cycles of adjuvant FOLFOX based 1st line chemotherapy, similar to GI colorectal regimen chemotherapy protocols, consisting of two weekly Oxaliplatin, Leucovorin 5-FU [Oxaliplatin 85 mg/m^2, IV over 2 h, Leucovorin 400 mg/m^2, IV over 2 h, 5-FU 400 mg/m^2, IV push after LV, then 5-FU 2400 mg/m^2, IV infusion over 46 h. The cycle is repeated every 2 weeks for 12 cycles].

One can only presume whether the disease existed in microscopic form at the time of cesarean section, illusioned

by grossly normal looking bilateral ovaries. The abdominal symptoms of bloating and dyspepsia, recognized as alerting symptoms of advanced ovarian malignancy, were over looked and considered to be due to rich puerperal diet full of ghee. Perhaps the fear of contracting Covid -19 during the pandemic was another reason for delayed medical consultation which resulted in late stage disease at diagnosis, not amenable to fertility preserving surgery and also adversely affecting the prognosis.

CONCLUSION

A fast progression of mucinous epithelial carcinoma (mEOC) evidenced during postpartum period, few months after caesarean, cautions to always keep the possibilities of ovarian carcinoma and not overlook symptoms of dyspepsia and distention to puerperal heavy diet to ensure a timely diagnosis at early stage disease which is amenable to fertility preserving surgery and also carries better reproductive health prognosis.

REFERENCES

1. Duski DF, Mierzyski R, Czajkowska EP, Gorzelak BL. Ovarian Cancer and Pregnancy—A Current Problem in Perinatal Medicine: A Comprehensive Review. Cancers (Basel). 2020 Dec; 12(12): 3795. PMCID: PMC7765590. PMID: 33339178. DOI: 10.3390/cancers12123795

2. Behtash N, Zarchi M K , Gilani MM , Ghaemmaghami F, Mousavi A, Ghotbizadeh F. Ovarian carcinoma associated with pregnancy: a clinicopathologic analysis of 23 cases and review of the literature. BMC Pregnancy Childbirth. 2008 Jan 20;8:3. PMID: 18205951, PMCID: PMC2266699, DOI: 10.1186/1471-2393-8-3

3. Kunpalin Y, Triratanachat S, Tantbirojn P. Proportion of ovarian cans in overall ovarian masses in Thailand. Asian Pac J Cancer Prev. 2014;15(18):7929-34. PMID: 25292089 DOI: 10.7314/apjcp.2014.15.18.7929

4. Andersson T ML, Johansson Anna LV, Fredriksson, Lambe M. Cancer during pregnancy and the postpartum period: A population-based study Cancer. 2015 Jun 15;121(12):2072-7. Epub 2015 Mar 3. PMID: 25737403. DOI: 10.1002/cncr.29325

5. Jain A, Seiden MV. Rare epithelial tumors arising in or near the ovary: a review of the risk factors, presentation, and future treatment direction for ovarian clear cell and mucinous carcinoma Am Soc Clin Oncol Educ Book. 2013 PMID: 23714502 DOI: 10.14694/EdBook_AM.2013.33.e200