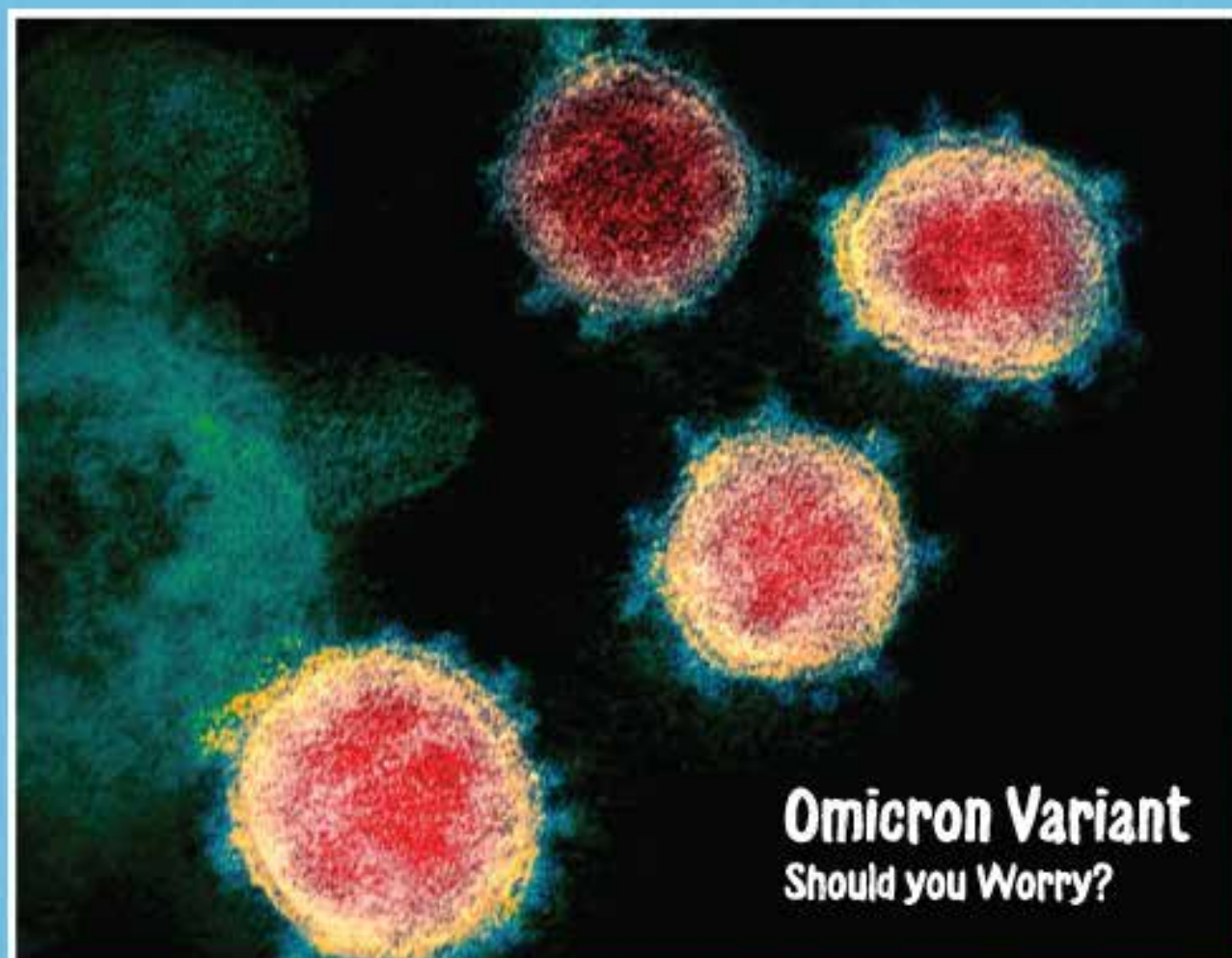


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Omicron Variant
Should you Worry?

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Case Report

A Rare Occurrence: Triple 'True' Metachronous Endometrial, Nasal Cavity and Recto–Sigmoid Cancer.

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Abstract

Incidence of multiple primary malignancies is reportedly increasing globally. Limited cases of triple metachronous cancers are available in the literature. Here, we report a case of a female with an unusual combination of triple metachronous malignancy over a span of 15 years

involving endometrium, nasal cavity and rectosigmoid that has not been reported before in the literature.

Keywords: multiple primary malignancy, triple metachronous cancer, nasal squamous cell cancer, endometrial cancer, recto–sigmoid cancer, Lynch Syndrome

Introduction

The incidence of multiple primary malignancies is on the rise. Occurrence of two metachronous primary malignancy is more common than before but more than two metachronous malignancies remains rare. Very few case reports of 'true' metachronous malignancies are available in literature where all the three or more cancers were metachronous to each other. Here, we report an unusual combination of triple metachronous malignancy in a female patient that has not been reported before in the literature.

Case Presentation

A 59 years old female presented with complaint of lower abdominal pain with significant weight loss. She was evaluated with fluoro–deoxyglucose positron emission tomography and computed tomography that showed standard uptake value of 10.4 in 3.9cm length of recto–sigmoid area. She underwent total mesorectal excision and histopathology was suggestive of mucinous adenocarcinoma (Fig.IA) reaching up to serosa without lymph node involvement. She was diagnosed as recto–sigmoid cancer and staged as pT3N0. Patient had a history of papillary adenocarcinoma (Fig.IB) of endometrium 15 years back for which she had undergone total abdominal hysterectomy with bilateral salpingo–oophorectomy followed by external beam radiation of 50Gy in 25 fractions and intracavitary radiation. Six years on follow up, she presented with swelling in right nasal cavity. Mass was excised and histopathology was suggestive of squamous cell carcinoma (Fig.IC) of nasal cavity with clear margins, following which she was on follow up for next 9 years.

Discussion

The incidence of new primary in cancer survivors is increasing as a result of lifestyle changes, use of alcohol and tobacco, genetic susceptibility, presence of carcinogens in the environment and previous oncological treatment. Improvement in diagnostic and screening modalities along with better treatment options have led to longer survival that gives time for carcinogenesis and effects of molecular changes of age to occur. As many cancers have common etiological factors, it makes patient susceptible to occurrence of other cancers.⁽¹⁾

Multiple primary malignancies (MPM) is said to occur when each of the tumour is disconnected, occurs at different sites, is confirmed by histopathology with pathomorphological features and is not suspicious for metastasis.⁽²⁾ If the new primary is discovered within 6 months of initial diagnosis, it is considered to be synchronous MPM whereas, if the incidence is beyond that, it is said metachronous.⁽³⁾

Cancer survivors have a 14% more risk of developing a second primary than general population with a higher risk in females. Occurrence of more than two primary cancers is rare with less than 0.5% chance of three malignancies.⁽⁴⁾ So, cancer patients should be closely followed up and clinical features like atypical site of metastatic spread,

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high tumour burden relative to tumour marker and suspicious lesions on follow up must be evaluated.⁽⁵⁾

The case reported here had a relatively better prognosis due to identification of endometrial cancer in early stage where surgery and adjuvant radiation was possible. Patient remained disease free for 6 years. The second tumour occurred in nasal cavity, which was symptomatic in the initial stage and hence was detected early. Due to the significant difference between the locations of the two sites above, the second malignancy cannot be said to be result of treatment modality used for the first malignancy. As the surgical margins were clear, she was kept on close follow up. However after 9 years, she was diagnosed with stage II recto–sigmoid cancer. Due to good general condition of the patient, she was able to tolerate multiple types of oncological treatment.

As the treatment guidelines of MPM are not defined, treatment should be specific to each patient, type of tumour, prior treatment modality and temporal association. Although, the prognosis remains poor in MPM compared to new cancer cases, early diagnosis of MPM will allow for wider treatment options and better prognosis as was in our case.

Occurrence of EC in pre–menopausal females is attributed to germline or somatic mutation. Hereditary syndromes like Lynch Syndrome (LS) is an autosomal dominant condition due to germline inactivation in any of the four DNA mismatch repair genes – MLH1, MSH2, MSH6 or PMS2. LS is found in 3–5% of all CRC and 2–3% of EC.⁽⁶⁾

Our case had endometrial cancer at less than 50 years which suggests >20–25 % chance for LS. Occurrence of metachronous CRC in this case also increases the suspicion for LS.⁽⁷⁾ Unfortunately, we could not get genetic testing done for the patient.

In the literature, only thirteen ‘true’ metachronous triple malignancies cases (Table1) have been reported till date where colon, endometrium or nasal cavity was involved. 7 cases were female while 6 were male with average age of diagnosis was 52 years. The average disease free interval (DFI) between first and second malignancy was 5.6 years whereas between second and third malignancy was 4 years. However, our case first reported at 44 years of age and had a DFI of 6 years and 9 years respectively.

Conclusion:

The combination of Endometrial carcinoma, Recto–sigmoid Cancer and Nasal Squamous cell carcinoma in a single case has never been reported till now, making it first ever case report of its kind. Our case emphasizes the need of close follow up of cancer patients after definitive

treatment even in early stage cancer. Genetic testing should be popularised to identify at risk patients for early treatment.

Funding and Conflict of interest

None

References

- Hu N, Hsieh S, Chen T, Chang J. Multiple primary malignancies including colon, stomach, lung, breast, and liver cancer: a case report and literature review. *Chin Med J*. 2009;122(24):3091–3093.
- Ying X, Zhang H, Chen B, Wu H, Bao L, Qian S et al. Multiple metachronous rare primary malignant tumors: A case report. *Thorac Cancer*. 2019;10(10):2050–2053.
- Gheonea I, Popp C, Ivan E, Gheonea D. Unusual triple combination of prostate, lung and skin cancer. *Rom J Morphol Embryol*. 2017;58(2):567–574.
- Jayarajah U, Basnayake O, Wijerathne P, Jayasinghe J, Samarasekera D, Seneviratne S. A Rare Occurrence of Three Primary Malignancies of the Rectum, Breast, and Kidney in the Same Patient: A Case Report and Review of the Literature. *Case Rep Surg*. 2019;2019:1–4.
- Balineni P, Arcot R, Pathivada S, Narayanasami B. Multiple primary malignancies: Vigilance is paramount in identification. *Clin Reviews Opinions*. 2020;9(1):1–6.
- Tafe L, Riggs E, Tsongalis G. Lynch Syndrome Presenting as Endometrial Cancer. *Clin Chem*. 2014;60(1):111–121.
- Meyer L, Broaddus R, Lu K. Endometrial Cancer and Lynch Syndrome: Clinical and Pathologic Considerations. *Cancer Control*. 2009;16(1):14–22.
- Li G, Yao J, Wu T, Chen Y, Wang Z, Wang Y et al. Triple metachronous primary cancer of uterus, colon, and breast cancer. *Medicine*. 2020;99(34):e21764.
- Ilioka Y, Tsuchida A, Okubo K, Ogiso M, Ichimiya H, Saito K et al. Metachronous Triple Cancers of the Sigmoid Colon, Stomach, and Esophagus: Report of a Case. *Surg Today*. 2000;30(4):368–371.
- Fletcher H, Wharfe G, Williams E, Hanchard B, Mitchell D. Multiple metachronous malignancies, one patient with three primary malignancies: a case report. *J Med Case Reports*. 2007;1(1).
- Han J, Xing J, Zeng Q, Gao Y, Yu J. Metachronous triple primary malignancies of the nose, lung, and urinary bladder in a male patient: a case report and literature review. *Int J Clin Exp Med*. 2018;11(11):12717–12722.
- Hung C, Ueng S, Lin Y, Chou W. Metastatic carcinoma of the urinary bladder in a 67–year–old female with underlying triple primary cancers. *J Cancer Res Pract*. 2016;3(2):49–53.

Author	Triple Malignancy	HPE	Gender	Age at diagnosis	Treatment given	Disease free interval
Our case	Endometrial Ca Nasal Ca Colorectal Ca	AdenoCa SCC AdenoCa	Female	44 yrs 50 yrs 59 yrs	TAH + BSO + EBRT Excision TME + Adjuvant CT	NA 6 years 9 years
Li et al⁸	Endometrial Colon Breast	AdenoCa AdenoCa IDC	Female	48 yrs 57 yrs 67 yrs	Radical hysterectomy + EBRT Hemicolectomy + Adjuvant CT Mastectomy + SLN biopsy	NA 9 yrs 11 yrs
Iioka et al⁹	Rectum Gastric Esophagus	AdenoCa AdenoCa SCC	Male	60 yrs 65 yrs 68 yrs	Resection Gastrectomy EBRT	NA 5 yrs 6 yrs
Fletcher et al¹⁰	Breast Ca Multiple myeloma Endometrial Ca	Infiltrating lobular ca Multiple myeloma AdenoCa	Female	61 yrs 68 yrs 69 yrs	MRM CT TAH + BSO	NA 7 yrs 10 months
Han et al¹¹	Nose Urinary bladder Lung	Basal cell Ca TCC SCC	Male	66 yrs 68 yrs 74 yrs	Excision + EBRT cystectomy CT + EBRT	NA 2 yrs 6 yrs
Hung et al¹²	Gastric Breast Colon	Signet ring cell ILC AdenoCa	Female	43 yrs 49 yrs 51 yrs	Subtotal gastrectomy MRM + CT Hemicolectomy + CT	NA 6 yrs 2 yrs
Lee et al¹³	Breast Lung Colon	IDC AdenoCa AdenoCa	Female	69 yrs 71 yrs 74 yrs	MRM Surgery + Oral CT Hemicolectomy	NA 2 yrs 3 yrs
Nakada et al¹⁴	Colon Stomach Gall bladder	AdenoCa AdenoCa AdenoCa	Male	61 yrs 63 yrs 69 yrs	Resection Distal gastrectomy Cholecystectomy	NA 16 months 65 months
Badan et al¹⁵	Vulva Endometrial Thyroid	SCC Endometrioid Papillary	Female	53 yrs 60 yrs 62 yrs	Vulvectomy with right inguinal lymphadenectomy total hysterectomy and bilateral adnexectomy, and EBRT NA	NA 7 yrs 2 yrs
Badan et al¹⁵	Thyroid Colon Prostate	Papillary AdenoCa AdenoCa	Male	46 yrs 48 yrs 54 yrs	Total thyroidectomy and selective lymphadenectomy with radio-iodine treatment hemicolectomy and liver metastases resection + CT prostatectomy	NA 2 yrs 6 yrs
Oztop et al¹⁶	Rectal Prostate Chronic myeloid leukemia	NA NA Chronic myeloid leukemia	Male	76 yrs 78 yrs 79 yrs	Resection + CT hormonalT + palliative RT Imatinib	NA 30 months 12 months
Suzuki et al¹⁷	Uterus Ca Breast Ca Tongue Ca	? ? SCC	Female	48 yrs 65 yrs 68 yrs	NA	NA 17 yrs 3 yrs
Suzuki et al¹⁷	Uterine Ca Breast Ca Thyroid	Leiomyosarcoma AdenoCa Papillary	Female	45 yrs 52 yrs 54 yrs	NA	NA 7 yrs 2 yrs
Suzuki et al¹⁷	Larynx Epipharynx Colon	SCC SCC AdenoCa	Male	65 yrs 70 yrs 74 yrs	NA	NA 5 yrs 4 yrs

Table1: Triple "true" metachronous malignancy with endometrial cancer or colorectal cancer or nasal cavity cancer reported in the literature.

(AdenoCa– adenocarcinoma, SCC– squamous cell carcinoma, TAH + BSO – total abdominal hysterectomy and bilateral salpingo–oophorectomy, EBRT – external beam radiation, TME – total mesolectal excision, CT – chemotherapy, NA – not applicable, IDC/ ILC – infiltrating ductal/ lobular carcinoma, TCC – transitional cell carcinoma, MRM – modified radical mastectomy)

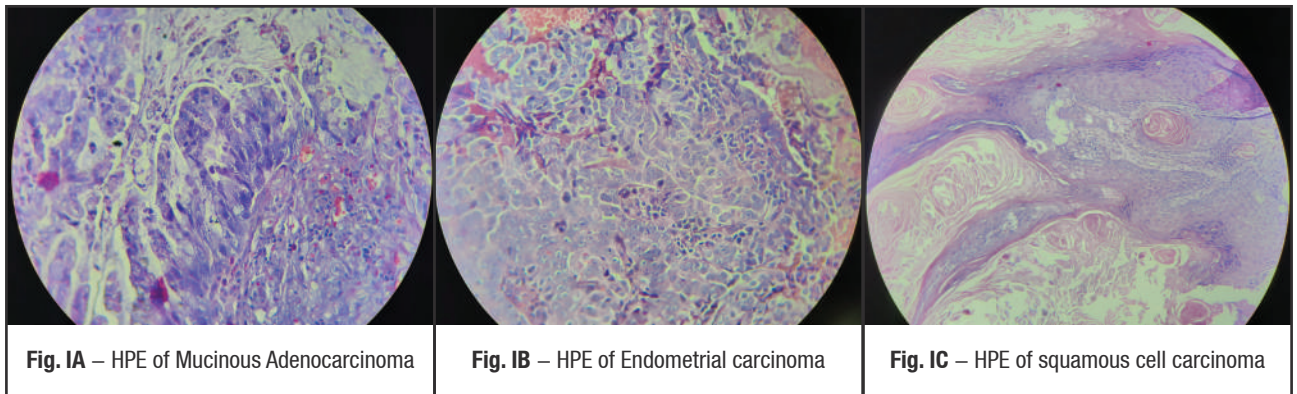


Figure:– Fig. IA – HPE of Mucinous Adenocarcinoma; IB – HPE of Endometrial carcinoma; IC – HPE of squamous cell carcinoma

13. Lee T, Chang C, Wu C, Lin Y, Chen Y, Hsu C. Incidental Second and Third Primary Cancers Asynchronously Detected by FDG–PET in a Patient with Breast Cancer. *Ann Nucl Med Sci.* 2008;21(3):171–176.
14. Nakada I, Shimazaki J, Kawasaki S, Ubukata H, Goto Y, Watanabe Y et al. Early Triple Carcinomas Metachronously Involving the Sigmoid Colon, Stomach and Gallbladder. *coloproctology.* 2000;22:104–108.
15. Bădan M, Piciu D. Triple Metachronous Malignancies with Thyroid Involvement: A Brief Overview of Five Case Reports over 20 Years of Institutional Experience. *Diagnostics.* 2020;10(3):168.
16. Oztop I, Yaren A, Demirpence M, Alacacioglu I, Tuna B, Piskin O et al. The development of metachronous prostate cancer and chronic myeloid leukemia in a patient with metastatic rectal cancer. *J BUON.* 2020;13(2):267–70.
17. Suzuki T, Takahashi H, Yao K, Inagi K, Nakayama M, Makoshi T et al. Multiple Primary Malignancies in the Head and Neck: A Clinical Review of 121 Patients. *Acta Otolaryngol.* 2002;122(4):88–92.