IGCS20_1233

230 SEARCH FOR PREDICTIVE BIOMARKERS OF SENSITIVITY/ RESISTANCE AGAINST CISPLATIN IN HIGH-GRADE SEROUS OVARIAN CANCER

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Our aim was to search for potential predictive biomarker(s) of cisplatin resistance in high-grade serous ovarian cancer (HGSOC). We have re-analyzed the data published by Koti et al.[1]

Data encompassed 28 HGSOC gene expression profiles obtained using Affymetrix U133-Plus-2.0-GeneChips. Based on progression free survival (PFS) after first-line chemotherapy, 16 samples were classified as platinum-sensitive (PFS>18 months), 12 as platinum-resistant (PFS<6). Data was filtered using Gaussian Mixture Modeling decomposition,[2] in order to select transcripts that were characterized by large value of variance. Normality of data distribution was checked with Shapiro-Wilk test. Because of non-normal distribution U Mann-Whitney Test was performed and U Mann Whitney effect size was calculated for up- and down-regulated transcripts. Transcripts with p-values<0,001 and large or very large effect size were considered significant.

Our approach resulted in 356 probe-sets. Based on literature review we selected 40 potential candidate biomarkers for further validation. Selected probe-sets correspond to proteins related with mitochondrial function, nuclear- and cellular-membrane transport, that are processes related with drug resistance.

Our computational approach resulted in a larger list of probe-sets than that of Koti et al.[1] In our opinion, their analysis suffered from the combination of parametric and non-parametric tests, inappropriately used for the data with non-normal distribution. Using non-parametric test suited for non-normal distributed dataset and analysis of effect size allowed to receive more reliable results, although selected candidate biomarkers must be further validated.

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IGCS20_1234

231 UTILIZATION OF IMMUNOTHERAPY AMONG ELIGIBLE PATIENTS WITH CERVICAL CANCER

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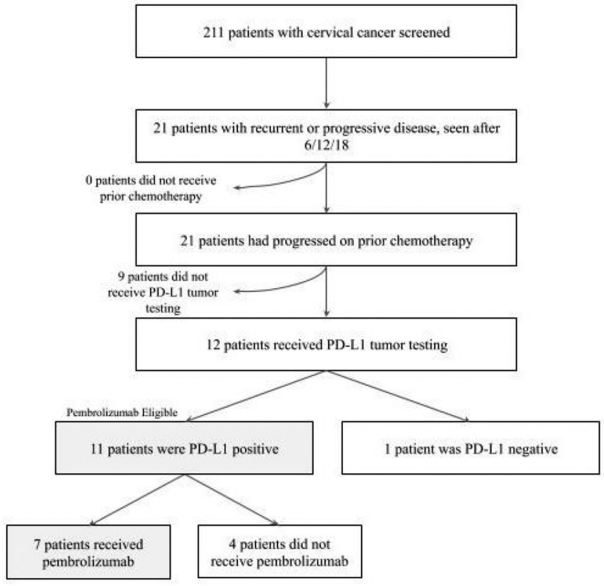
Introduction Pembrolizumab, a checkpoint inhibitor with a favorable risk/benefit profile, is FDA approved for recurrent or progressive PD-L1 positive cervical cancer treated with prior chemotherapy. The use of pembrolizumab in clinical practice after approval has not been extensively studied. The purpose of this study is to determine frequency of pembrolizumab use among eligible patients with cervical cancer.

Methods This retrospective study includes all patients who underwent surgical procedure or radiation therapy for cervical cancer at an urban private and public hospital system between 5/1/2012 and 1/31/2019 with recurrent or progressive disease after chemotherapy diagnosed after 7/12/18 (date of FDA approval) and PD-L1 positive tumor. Eligible patients were recorded as having received or not received pembrolizumab.

Results Of the 211 cervical cancer patients screened, 21 presented after the date of FDA approval with recurrent or progressive disease and received prior chemotherapy. Twelve (57.1%) patients received PD-L1 testing and 9 (42.9%) potentially eligible patients did not. Eleven patients had PD-L1 positive tumors and were eligible for pembrolizumab. Of eligible patients, 7 (63.6%) received pembrolizumab and 4 (36.4%) did not; 1 was enrolled in a clinical trial and 3 received chemotherapy.



Abstract 231 Figure 1

Conclusion Immunotherapy is underused in patients with advanced cervical cancer. Over 40% of patients with progressive/recurrent cervical cancer don't even undergo testing for PD-L1 expression; in those with positive PD-L1 expression only two thirds of patients received pembrolizumab, an FDA approved therapy. There is an opportunity to improve the identification of eligible patients and increase the use of checkpoint inhibitors in cervical cancer.

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232 UNRAVELLING CERVICAL ADENOSARCOMA

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Adenosarcomas are rare tumors that typically occur in the uterus. It accounts for approximately 1 – 3% of all female genital tract malignancies. Rarer still are cervical adenosarcomas, accounting for only 2% of all genital tract adenosarcoma with only few reported cases in literature, and the second reported case in the Philippines. Unlike other cervical malignancies that are HPV related, adenosarcoma of the cervix may arise from a pre-existing endometriosis or a history of recurrent cervical polyp. This is a case of a 37 year old G3P3 (3003), who had been having dysmenorrhea and later had abnormal vaginal bleeding. On her initial consult, she was diagnosed with cervical polyp and later, biopsy showed leiomyosarcoma. She underwent radical hysterectomy with bilateral salpingooophorectomy and bilateral lymphadenectomy. Final histopathology showed a poorly differentiated adenosarcoma of the cervix with stromal invasion. She was given adjuvant treatment in the form of chemotherapy and brachytherapy post surgery. At present the patient had no evidence of disease. Due to its rarity, there is no existing recommendation or consensus regarding the surgery of choice and on the adjuvant treatment for cervical adenosarcoma. Here we review the possible etiology, and the different management and treatment options to optimally manage such a rare case.

IGCS20_1236

233 GYNECOLOGICAL MALIGNANCIES IN EMERGENCY DEPARTMENT

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An oncologic emergency may be defined as any acute potentially morbid or life-threatening event directly or indirectly related to a patient's tumor or its treatment. Occasionally, these emergent conditions may be the presenting symptom of a previously undiagnosed neoplasm.

Our hospital have the emergency departments(ED) covering about one million population in the medical area, and accept bout 20,000 patients a year. In ED, some female patient show the critical symptom caused by gynecological malignancies undiagnosed.

Methods We review the clinical data of emergent gynecologic malignancies in 2016,17,18 and 2019.

Results We had 21 patients with gynecological malignancies. In those patients, 12 patients were ovarian cancer with acute abdominal pain caused by tumor torsion or rupture.

Four patients were endometrial cancer. One of those had brain metastasis and operated by brain surgeon.

Five cervical cancer patients complained various symptoms as general fatigue, renal failure, chronic severe anemia, acute abdomen, shock with genital bleeding. Two patients had emergent ureter catheterization because of the severe renal failure. One patient with acute abdomen had omentum metastasis from cervical squamous cancer(Reported in 2019IGCS).

Conclusions Emergent female cancer patients need gynecological oncological care in ED. For ovarian and endometrial cancer, screening and prevention is not established. But cervical cancer is one of the preventable disease by screening and vaccination. Unfortunately, we still have the critical advanced cervical cancer patients. In Japan, we have no nation-wide vaccination program and PAP screening rate is only 40%. We re-emphasize the urgent establishment of nation-wide program of vaccination and screening for cervical cancer.

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234 ADDRESSING VARIATION IN PREOPERATIVE WORKUP OF HIGH-GRADE ENDOMETRIAL CARCINOMA

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Introduction Patients with high-grade endometrial carcinoma (HGEC) are more likely to present with metastatic disease and require multimodal treatment. Appropriate workup of patients preoperatively can direct optimal order of treatment. International guidelines to guide care are non-proscriptive and inconsistent. We were interested in addressing practice variation and consequences.

Methods Retrospective cohort study of HGEC patients referred to a single tertiary cancer centre from 2017–2018. We evaluated CA125, imaging, treatment, pathological and outcomes data.

Results 129 HGEC cases were reviewed; 57% serous, 26% Gr3 endometrioid, 17% 'other' (clear cell, carcinosarcoma, undifferentiated). Preoperative CA125 was obtained for 76% of patients, and this was elevated in 32%. Of patients with an elevated CA125, 90% had stage III/IV disease. Of patients with no CA125, 52% were upstaged to stage III/IV disease after surgery or imaging. Only 50% of women with HGEC had imaging; 44% with preoperative CT and 6% with PET or MRI. Imaging detected extra-uterine disease in 46% of HGEC, and treatment plan changed based on imaging in 38%; 9 patients received neoadjuvant chemotherapy with delayed surgery, 14 received chemotherapy only, and 2 patients chemo-radiation only. Of patients without imaging, 40% were upstaged to stage III/IV disease and 12.5% of patients had primary surgery with suboptimal debulking.

Conclusion We found inconsistent practice of ordering preoperative CA125 and imaging in patients with HGEC. Elevated CA125 was associated with advanced stage disease, and imaging altered treatment in over 1/3 of patients. Routine imaging and CA125 should be performed for all HGECs to help guide appropriate treatment.

IGCS20_1239

235 MODE OF PRESENTATION AND FACTORS ASSOCIATED WITH LATE CLINICAL PRESENTATION OF CERVICAL CANCER IN KOMFO ANOKYE TEACHING HOSPITAL (KATH)

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Introduction Cervical cancer is the commonest gynecologic cancer in Ghana, especially in the Ashanti region where this study was conducted and where there is little understanding