RACIAL DISPARITIES IN PATIENTS WITH COVID-19 INFECTION AND GYNECOLOGIC MALIGNANCY

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10.1136/ijgc-2020-ESGO.96

Introduction/Background Mounting evidence suggests disproportionate COVID-19 hospitalizations and deaths due to racial disparities. The association of race in a cohort of gynecologic oncology patients with SARS-CoV-2 infection is unknown.

Methodology Data were abstracted from gynecologic oncology patients with COVID-19 infection among 8 New York City (NYC) area hospital systems. Multivariable mixed-effects logistic regression model accounting for county clustering was utilized to analyse COVID-19 related hospitalization and mortality.

Results Of 193 patients with gynecologic cancer and COVID-19, 67 (34.7%) were Black and 126 (65.3%) were non-Black. Black patients were more likely to require hospitalization compared with non-Black patients (71.6% [48/67] vs. 46.0% [58/126], $P=.001$). Of 34 (17.6%) patients who died from COVID-19, 14 (41.2%) were Black. Among those hospitalized, Black patients compared to non-Black patients were more likely to: have ≥ 3 comorbidities (81.1% [30/37] vs 59.2% [29/49], $P=.05$); reside in Brooklyn (81.0% [17/21] vs 44.4% [12/27], $P=.02$); live with family (69.4% [25/36] vs 41.6% [37/89], $P=.009$); and have public insurance (79.6% [39/49] vs 53.4% [39/73], $P=.006$). In multivariable analysis, for patients younger than 65 years of age, Black patients were more likely to require hospitalization compared to non-Black patients (OR, 4.87; 95% CI 1.82 to 12.99, $P=.002$).

Conclusion Although Black patients with gynecologic cancer represented only 1/3 of patients, they accounted for disproportionate rates of hospitalization (>45%) and death (>40%) due to COVID-19 infection; younger Black patients had nearly 5-fold greater risk of hospitalization. Efforts to understand and improve these disparities in COVID-19 outcomes in Black patients are critical.

Disclosures B.P. reports grants, personal fees and non-financial support outside the submitted work; institutional PI for industry sponsored trials from Tesaro/GSK, AstraZeneca, Merck, Genentech/Roche, and Clovis Oncology. Compensated advisory boards include Tesaro/GSK, AstraZeneca, Merck and Eisai. J.J. reports a patent license from MDSec Inc. R.OC reports personal fees from Tesaro, GlaxoSmithKline, Regeneron and Genentech USA, outside the submitted work and non-compensated steering committee member for the PRIMA, Moonstone (Tesaro/GSK) and DUO-O (AstraZeneca) studies. R.OC's institute receives funding for clinical research from Celgene/Juno, Tesaro/GSK, Ludwig Cancer Institute, Abbvie, Regeneron, TCR2 Therapeutics, Atara Biotherapeutics, Marker Therapeutics, Syndax Pharmaceuticals, Genmab Therapeutics, Sellas Therapeutics, Genentech, Kite Pharma, Gynecologic Oncology Foundation. S.V.B. has research collaborations with Roche/Genentech, Tesaro/GK, Seattle Genetics, Merck and Asta Zeneca

Ovarian cancer

DIAGNOSTIC ACCURACY OF SERUM INSULIN-LIKE GROWTH FACTOR BINDING PROTEIN 2 FOR OVARIAN CANCER

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10.1136/ijgc-2020-ESGO.97

Introduction/Background Insulin-like growth factor binding protein-2 (IGFBP2) have been shown to play important roles in the pathogenesis of ovarian cancer. It also serves as a potential biomarker for prognosis of ovarian cancer. However, its role in the diagnosis of ovarian cancer has never been studied. This study is aimed to determine the diagnostic accuracy of serum IGFBP2 in differentiating between malignant and benign ovarian lesion.

Methodology Preoperative IGFBP2 level was determined from the serum of 76 patients with adnexal mass who underwent exploratory laparotomy and subsequent histopathology examination at Sanglah General Hospital, Denpasar, Bali, Indonesia. Diagnostic accuracy of IGFBP2 level was determined from the receiver operating characteristics curve (ROC).

Results Of the 76 patients, 46 patients were diagnosed with ovarian cancer and 30 patients were diagnosed with benign ovarian lesions. Serum IGFBP2 level was significantly higher in patients with ovarian cancer, as compared to those with benign ovarian lesions (median: 945.9 vs. 401.5 g/ml, $p<0.001$). Using a cut off value of 551.6 ng/ml, the area under the ROC (AUC) for diagnosing ovarian cancer was 0.815 (95% CI 0.721–0.910, $p<0.001$), sensitivity was 76.1%, specificity was 80%, and diagnostic odd ratio (DOR) was 12.7 (95% CI 4.1–39.0, $p<0.001$). The diagnostic performance of IGFBP2 was enhanced in postmenopausal women [AUC 0.893 (95% CI 0.771–1.000, $p=0.002$), sensitivity 85%, specificity 85.7%, DOR 34 (95% CI 2.9–392.8), $p=0.001$] and in advance stage [AUC 0.904 (95% CI 0.806–1.000, $p<0.001$), sensitivity 87.5%, specificity 80%, DOR 28 (95% CI 6.2–126), $p<0.001$].

Conclusion IGFBP2 is a potential biomarker for diagnosis of ovarian cancer.

Disclosures Pande Kadek Aditya Prayudi discloses no potential conflict of interest. I Nyoman Gede Budiana discloses no potential conflict of interest. Ketut Suwiyoga discloses no potential conflict of interest.

ROLE OF MICRORNA-145 IN EPITHELIAL OVARIAN CANCER

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10.1136/ijgc-2020-ESGO.98

Introduction/Background Epithelial ovarian cancer (EOC) is one of the deadliest gynaecologic malignancies worldwide. Nerve Growth Factor (NGF) and its high affinity receptor