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

¹Olivia Lara, ²Maria Smith, ³Yuyan Wang, ⁴Roisin O'cearbhaill, ⁵Stephanie Blank, ⁶Anne Knisely, ⁷Jennifer Mceachron, ⁸Lisa Gabor, ⁹Eloise Chapman-Davis, ⁴Justin Jee, ⁸Sara Isani, ³Mengling Liu, ⁶Jason Wright, ¹Bhavana Pothuri. ¹Nyu Langone Health; Obstetrics and Gynecology; ²NYU Langone Health, New York, United States; ³Nyu Langone Health; Population Health; ⁴Memorial Sloan Kettering Cancer Center; Weill Cornell Medical College; Medical Oncology; ⁵Icahn School of Medicine at Mount Sinai; Obstetrics, Gynecologic and Reproductive Science; ⁶College of Physicians and Surgeons, Columbia University; Obstetrics and Gynecology; ⁷State University of New York Downstate Medical Center; Obstetrics and Gynecology; ⁸Montefiore Medical Center and Albert Einstein College of Medicine; Obstetrics and Gynecology and Women's Health; ⁹Cornell University; Obstetrics and Gynecology

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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.

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Ovarian cancer

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

Pande Kadek Aditya Prayudi, I Nyoman Gede Budiana, Ketut Suwiyoga. Division of Gynecologic Oncology, Department of Obstetrics and Gynecology Faculty of Medicine Udayana University/Sanglah General Hospital

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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.

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ROLE OF MICRORNA-145 IN EPITHELIAL OVARIAN CANCER

¹Carmen Romero, ¹Maritza P Garrido, ¹Ignacio Torres, ¹Andrea Hernandez, ²Jonas Chnaideman, ¹Margarita Vega, ¹Alberto Selman, ³Jessica Preisler, ⁴Lorena Lobos. ¹Hospital Clínico Universidad de Chile; ²Instituto de Ciencias Biomédicas, Facultad de Medicina, Universidad de Chile; ³Hospital Clínico Universidad de Chile; ⁴Clínica Alemana de Santiago; ⁴Centro De Medicina Regenerativa, Facultad de Medicina, Universidad del Desarrollo

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