RADIANCE1: Reducing Delays in Endometrial Cancer Care Symptoms Through Gynecologic Oncology Referral

Sibley, Hannah[1]; Anderson, Jessica[1]; Maitski, Rebecca[1]; Catalano, Nicole[1]; Maupin, Kyla[1]; Nair, Navya[2]; Castellano, Tara[2]; Chapple, Andrew[3]; Jernigan, Amelia[2]

[1]LSU Health Sciences Center, School of Medicine, New Orleans, LA
[2]LSU Health Sciences Center, Department of Obstetrics and Gynecology, New Orleans, LA
[3]LSU Health Sciences Center, Biostatistics Program, School of Public Health, New Orleans, LA

Introduction

- Endometrial cancer (EC) is the 4th most common cancer among females in the US.
- Black women with EC have 55% higher mortality than white women due to increased chances of high-risk histology. Black women are also more likely to be diagnosed with advanced-stage disease as a result of improper evaluation.
- Conditions such as obesity, diabetes mellitus, hypertension, tamoxifen therapy, nulliparity, and genetic factors increase risk of EC.
- Abnormal uterine bleeding is the cardinal feature of EC. A minority of patients present with cervical cytology abnormalities.
- Tissue sampling is needed via endometrial biopsy, curettage, or hysterectomy specimen for histopathology and definitive diagnosis.

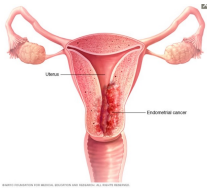

Figure 1: Endometrial Cancer

Objective

In this cohort of women seeking care at a university practice in the Gulf South, we aimed to identify specific delays from patient experience of abnormal uterine bleeding (AUB) to referral to gynecologic oncology (GON) with a diagnosis of endometrial cancer (EC).

Methods

- A multicenter, IRB-approved retrospective chart review was performed.
- Women diagnosed with Stage I-IV endometrial cancer from 2013 to 2022 were included.
- Demographic and clinical data were collected, and time frames between key events were calculated.
- Time periods were evaluated for difference with regards to race, insurance status, cancer stage, BMI, CCI and distance from the clinic site.

Results

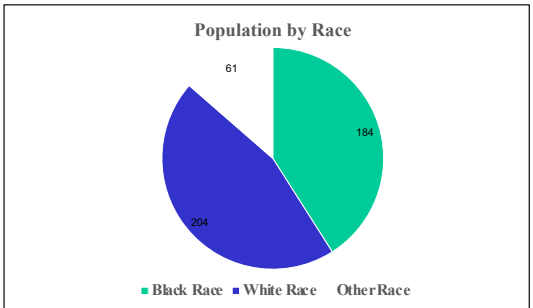

Figure 2: Patient population by race.

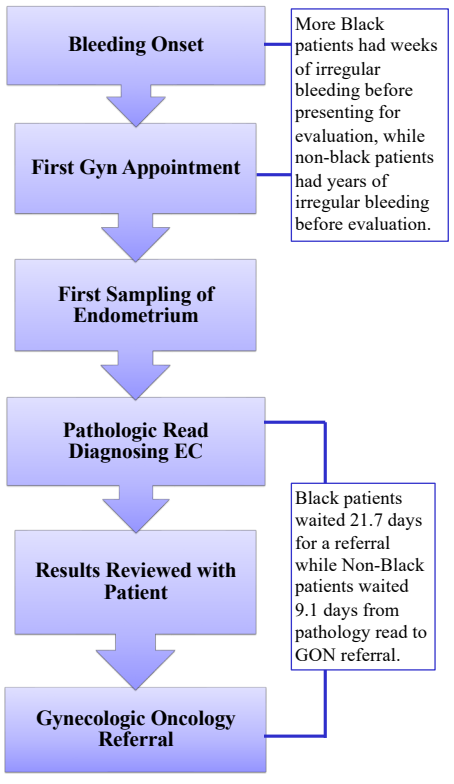

Figure 3: Time-to outcomes for patient workup for EC prior to seeing GON.

- Of the 449 women included, 184 (41.0%) were Black-not Hispanic, 204 (45.4%) were White, and 61 other race (13.6%)
- Most (76.2%) had stage I-II EC.
- The mean BMI was 37.22 (SD= 10.35) and Charleston Comorbidity Index (CCI) was 4.77 (SD= 2.41).
- Two-hundred twenty-four patients had documented accounts of AUB prior to diagnosis.
- Black patients were more likely than non-black patients to report shorter stints of AUB before presenting for evaluation: days (10.1% vs 9.6%), weeks (15% vs 11.3%), months (55.0% vs 41.7%), or years (19.3% vs 37.4%) (p value 0.025).
- There was no significant difference with regards to days from gynecology (GYN) referral to first GYN appointment, first GYN appointment to first endometrial sampling, endometrial sampling to pathology read diagnosing EC, or EC on pathology read to review with patient.
- Black patients waited 21.7 days for a referral after pathology read confirming EC compared to non-black patients who waited 9.1 days; this was 2.64 times as long as other patients to be referred.
- Otherwise, the time from pathologic diagnosis of EC to GON referral was similar between groups.

Conclusion

- We report time-to-outcomes for patient workup for EC prior to seeing GON in a diverse patient population.
- Black patients presented with more advanced disease and comorbidities but reported shorter duration of AUB leading up to their evaluation.
- This highlights the importance of an expedient work up in this patient population.
- Time from pathology read to GON referral was 2.6 times longer for Black patients than non-Black patients, representing an opportunity to address systematic delays.
- These results highlight barriers to diagnosis and work up of EC that are potentially actionable.

References

1. American Cancer Society. Cancer Facts & Figures 2022. Atlanta: American Cancer Society; 2022 http://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2022/cancer-facts-and-figures-2022.pdf (Accessed on September 29, 2022).
2. Constantine GD, Kessler G, Graham S, Goldstein SR. Increased Incidence of Endometrial Cancer Following the Women's Health Initiative: An Assessment of Risk Factors. J Womens Health (Larchmt) 2019;28:237.
3. Doll KM, Winn AN, Goff BA. Untangling the Black-White mortality gap in endometrial cancer: a cohort simulation. Am J Obstet Gynecol. 2017 Mar;216(3):324-325. doi: 10.1016/j.ajog.2016.12.023. Epub 2016 Dec 26. PMID: 28034650.
4. Mayo Foundation for Medical Education and Research. (2021, May 20). *Endometrial cancer*. Mayo Clinic. Retrieved October 2, 2022, from https://www.mayoclinic.org/diseases-conditions/endometrial-cancer/symptoms-causes/syc-20352461