

Conclusion: Time to colonoscopy plays a significant role in CRC death after abnormal SBT. Compared to a colonoscopy performed during a 3–6-month window, a colonoscopy performed outside of the 15-month window had a higher risk for mortality. Given the impact of timely diagnostic colonoscopy on CRC mortality, development of interventions to increase timely diagnostic follow-up after abnormal SBT are essential to CRC outcome improvement.

Published first March 4, 2020.

doi: 10.1158/1055-9965.EPI-20-0070

©2020 American Association for Cancer Research.

Composition of the Vaginal Microbiome Associated with High Risk HPV Infection and Increased Risk for Cervical Cancer

Madhivanan P, Bokulich NA, Coudray M, Colbert B, Ruiz-Perez D, Krupp K, Mathee K, Narasimhan G, Caporaso JG

Persistent high-risk Human papillomavirus (HPV) is a necessary but not sufficient cause for development of cervical cancer. Changes in the vaginal microbiota including reduction of *Lactobacillus* and increased microbial diversity may facilitate HPV infection and persistence as well as the pathogenesis of cervical cancer. Our objective was to characterize the vaginal microbiota among women with and without persistent HPV infection with HPV 6, 11, 16, 18, 31, 33, 45, 52, 58 in a cohort of young U.S. women. Methods: This analysis used data from a longitudinal study of 1365 women followed for 12 months every two months apart from six locations across the US. HPV genotyping was performed using quantitative PCR using TaqMan probes in a customized plate (ThermoFisher Scientific). Bacterial communities were profiled by 16S rRNA gene sequences from the V3-V4 region using high-throughput pyrosequencing. Persistence was defined by examining for HPV presence in two consecutive visits. Results: Participants included 80 African-American women tested at 3 consecutive time-points. The mean age of participants was 21.4 years. About 43.7% (95% CI: 32.7%–55.3%) had persistent HPV infection, 20% (11.9%–30.4%) were able to clear the infection, and 36.2% (25.8%–47.8%) were consistently negative for HPV infection at all three time points. *Atopobium* and *Peptoniphilus* were significantly more abundant in women who were HPV negative suggesting possible protective effects. *Prevotella bivia* was enriched among women with persistent HPV. Conclusion: Based on these data, we can hypothesize that *Prevotella* richness is significantly associated with HPV persistence, suggesting a possible role in chronic HPV infection and development of cervical cancer.

Published first March 4, 2020.

doi: 10.1158/1055-9965.EPI-20-0071

©2020 American Association for Cancer Research.

Financial Distress and its Associated Burden in Couples Coping with an Incurable Cancer

Milbury K, Lopez G, Contreras J, Weather S-P, Bruera E

Although financial toxicity has been linked to poor disease outcomes in cancer patients, the associations between subjective financial distress (FD) and symptom burden and quality of life (QOL) are rarely examined from a patient-partner dyadic perspective. Thus, this cross-sectional study seeks to examine dyadic associations in couples coping with an incurable cancer. Method: Patients undergoing systemic and/or radiotherapy for advanced lung cancer ($n = 50$) or high grade glioma ($n = 50$) and their spouses/romantic partners completed measures of psychological distress (BSI-18), symptom severity including FD (ESAS, 0–10 scale), QOL (PROMIS-10), relationship wellbeing (SRI), and avoidance (AAQ-2). Results: Patients were mainly female (60%), and patients and partners were all in a heterosexual relationship (mean length: 30.12 ± 15.1 yrs), mainly non-Hispanic White (80%), married to each other (93%) and well educated with a mean age of 57.9 years (range: 28.5–79.0 years). FD was interrelated in couples (ICC = 0.53, $P < 0.0001$), and mean score did not significantly differ by role (patient = 2.32 vs partner = 2.81). Controlling for medical and demographic factors, based on dyadic level analyses, FD was significantly associated with physical QOL ($P = 0.01$) so that those with higher FD reported lower QOL. Interestingly, FD was significantly associated with psychological distress ($P = 0.001$), mental QOL ($P < 0.001$), avoidance ($P = 0.01$), and relationship wellbeing ($P = 0.03$) for partners but not for patients so that partners reporting higher FD had worse health and wellbeing. Moreover, in terms of relative burden, FD was the 7th (out of 12) most severe symptom for patients, and the 2nd most severe symptom for partners (after sleep disturbances). Based on concordance analyses, patients significantly underestimated their partners' FD ($P = 0.007$), which was further associated with increased partner psychological distress ($P = 0.04$). Conclusion: Although FD is interdependent in couples coping with an incurable cancer, FD appears to be a greater relative burden for partners than patients. In the palliative care setting, reducing FD may be an important target for caregiver interventions seeking to improve their health and wellbeing and reduce the overall cancer burden.

Published first March 4, 2020.

doi: 10.1158/1055-9965.EPI-20-0072

©2020 American Association for Cancer Research.

Cancer Epidemiology, Biomarkers & Prevention

AACR American Association
for Cancer Research

Composition of the Vaginal Microbiome Associated with High Risk HPV Infection and Increased Risk for Cervical Cancer

P Madhivanan, NA Bokulich, M Coudray, et al.

Cancer Epidemiol Biomarkers Prev 2020;29:696.

Updated version Access the most recent version of this article at:
<http://cebp.aacrjournals.org/content/29/3/696.1>

E-mail alerts [Sign up to receive free email-alerts](#) related to this article or journal.

Reprints and Subscriptions To order reprints of this article or to subscribe to the journal, contact the AACR Publications Department at pubs@aacr.org.

Permissions To request permission to re-use all or part of this article, use this link <http://cebp.aacrjournals.org/content/29/3/696.1>. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.