Physiological and psychosocial aspects of reproductive health after early-onset colorectal cancer: The Preserving Fertility After Colorectal Cancer (PREFACE) Study

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Despite the number of adults within their child-bearing years diagnosed with, treated for, and surviving colorectal cancer, reproductive health concerns stand as an unmet care need among adults ages 18 to 49 years with colorectal cancer (early-onset colorectal cancer) and their families. This is because there is a paucity of prospective data to objectively measure the deleterious effects of colorectal cancer and its therapies on fertility and sexual health over time within this patient population. Consequently, we recently established the PREserving Fertility After Colorectal CancEr (PREFACE) Study—a prospective, longitudinal clinical cohort study that is actively recruiting newly-diagnosed colorectal cancer patients between ages 18 and 49 years at Vanderbilt-Ingram Cancer Center (www.theprefacestudy.org). In the PREFACE Study, we are utilizing validated PROMIS sexual function and satisfaction (SexFS), PROMIS-29 core health, lifestyle-related and reproductive health questionnaires, as well as qualitative interviews, to define the psychological dimensions of reproductive health at multiple, uniform timepoints; as well as changes in these measures over time. This will inform the highest reproductive health concerns and needs specifically for early-onset colorectal cancer patients across the cancer care continuum. In parallel, we are also collecting repeat blood samples and detailed clinical and treatment/outcomes data to measure the impact of colorectal cancer therapies on AMH, estradiol, FSH, SHBG, LH, DHEAS, inhibin B, testosterone, DHT, and androstenedione over time using FDA-approved clinical immunoassays in a CLIA-accredited and CDC-certified laboratory. Taken together, results from the PREFACE Study are statistically powered to drive significant advances toward concordant reproductive health care assessment and support strategies specific to colorectal cancer patients of reproductive age. Our findings will ultimately lead to incorporating reproductive health care in the clinical management of early-onset colorectal cancer and improving clinical outcomes for this growing patient population.