Editorial

Obesity Crisis in Cancer Care:
Gynecologic Cancer Prevention, Treatment, and Survivorship in Obese Women
in the United States

For this special issue, Gynecologic Oncology sought to recruit investigators studying the obesity epidemic's myriad and profound influences on all of the components of gynecologic cancer care. The range of obesity related topics is extensive but can be generally categorized into prevention of obesity related cancer, challenges of cancer treatment in obese patients, and survivorship in this patient population. Meaningful discussion of reversing the obesity epidemic remains beyond the scope of this issue; however, we will be trying to address the impact of the epidemic on gynecologic cancer patients, the treating oncologists, and the entire cancer care delivery system.

Following solicitation, 97 abstracts were received and about a third were invited to submit manuscripts for consideration. The editors attempted to find a balance between types of articles and to include research topics such as public health policy, cancer prevention, all-cause mortality, cancer treatment strategies, survivorship and translational science of obesity related research. Seventeen manuscripts were accepted following the usual rigorous peer review process.

The overweight and obesity epidemic is manifestly obvious to anyone in clinical practice and this has escalated in the last generation so it now affects the majority of the U.S. population as 72% of women have a BMI ≥ 25 kg/m² [1,2]. Interestingly, the percentage of overweight U.S. women has really not increased substantially from 1960 to 62 compared to 2009–10 (24.7% vs. 27.5%) but the more dramatic increases were in percentages of the obese women (15.8% vs. 36.1%) and morbidly obese women (1.4% to 8.5%) in that same time frame (Fig. 1) [2].

Obesity is now considered “normal” in the U.S. and this inappropriate perception is highlighted by Henretta et al.’s survey of obese women presenting for bariatric weight loss surgery where almost 30% of women did not correctly identify themselves as obese; the mean BMI of the women with self-described normal weight was 35.1 kg/m², the self-described overweight women had a mean BMI of 43.8 kg/m² and the self-described obese women had a mean BMI of 51 kg/m² [3]. It is not surprising to physicians that patients often do not perceive obesity to be either abnormal or a disease state which makes it exceedingly difficult to convince patients of the need for behavioral change. The normalization of obesity has also given rise to many of the research topics in this issue, from endometrial polyp incidence [4] to bariatric surgery's malization of obesity has also given rise to many of the research topics.

Further research gaps also exist for obese individuals once the cancer develops. Despite the explosion of obesity related research in general and specifically in oncology, there remain formidable knowledge gaps that adversely impact the practicing clinician’s ability to care for this
unique population of cancer patients. Some of the major clinical questions include the following: How big is too big to safely perform a surgical procedure, should chemotherapy dosing be on actual body weight even for a BMI over 50 kg/m² and how can we objectively set parameters to guide care? Lastly, tremendous gaps exist in defining the natural history of untreated or only palliated cancers in profoundly obese women with cancer—should we even focus on the cancer in the face of overwhelming and potentially life threatening co-morbidities and baseline costs of care for this population and, if the answer is yes, how long can our society afford to do so?

The taxpayers, health policy professionals, the medical systems, and payers are also concerned about treatment costs, disability costs, infrastructure needs, and patient access to care, facilities, technical equipment, long term care, and quality of the survival of the obese woman. The morbidly obese require specialized equipment to handle the increased weight including wheel chairs, beds, speculums, surgical retractors, gurneys, mechanical lifts, and CT scanners, OR and radiation tables that can accommodate weights of greater than the standard 350 lb. The nation needs to have a conversation about the responsibilities of the medical system to manage the morbidly obese. When do we determine that the standard of care expectations are unrealistic and palliative care is all that can be provided? How do we calculate life expectancy in the morbidly obese cancer patient when they are treated according to usual care versus a less aggressive treatment modality or simply palliation? Our first priority is “first do no harm” and, at some tipping point, cancer treatment is more harmful than beneficial. How do we find that balance and define that tipping point? We have some limited information such as the hazard ratio for death from any cause according to BMI in healthy women (Fig. 2) where the tipping point appears to be a BMI of 36 having a HR = 2 and BMI of 43 having a HR = 3 [13]. Clinicians need a “Gail Model” type calculator for life expectancy that could factor in BMI, creatinine, ejection fraction, pulmonary hypertension, performance status etc., to provide an objective scale for potentially deciding a woman may be too ill for surgical intervention for cancer treatment.

The Institute of Medicine’s (IOM) report on the “Crisis in Cancer Care Delivery” focused heavily on the aging population and one of the conclusions was that to improve evidence-based cancer care, we will need to expand the breadth of data collected on cancer interventions for older adults and individuals with multiple co-morbid conditions which is also quite relevant to the delivery of cancer care in the obese populations [14]. For such myriad reasons, the new NCI Division of Cancer Prevention program NCORP (National Community Oncology Research Program) has a FY 2014 to FY 2018 budget of $465 million for Cancer Care Delivery Research and Health Disparities Research as new components added to the traditional Cancer Prevention and Control (CPC) programs that will focus on these issues. The NRG (merged organization of NSABP, RTOG, and GOG) has submitted a grant application to be an NCI research base to conduct cancer care delivery research, health disparities research and CPC research. The goal of this NRG application is to support our specialty’s transition into improved health care information technology systems that provide real-time data for review/learning and thus allows subsequent evidence based clinical care changes to be implemented in a timely fashion.

The Affordable Care Act and initiation of “Pay for Performance” may have the unexpected consequences of causing physicians (or institutions) to avoid caring for high risk individuals or performing complex or challenging surgeries as they could adversely impact nationally reported performance measures. The balance must be found, but who is the judge of that proper balance? The Society of Gynecologic Oncology is working to find meaningful and standard metrics of quality care specific to our specialty to avoid unintentionally promoting further disparities in access to outstanding gynecologic cancer care due to misleading data reporting [15].

We hope that this issue of Gynecologic Oncology stimulates excitement in these wide ranging fields of research and participation in the NCORP program of NRG to find the data necessary to improve our cancer prevention, symptom management, supportive care, survivorship, and cancer care delivery system.

References


Fig. 2. Estimated hazard ratios for death from any cause according to body mass index for all study participants and for healthy subjects who never smoked. Body mass index and mortality among 1.46 million white adults NEJM 2010;363:2211–2219. Hazard ratios and 95% confidence intervals are shown for white women. The hazard ratios were calculated with the use of age as the underlying time scale, were stratified by study, and were adjusted for alcohol intake (grams per day), educational level, marital status, and overall physical activity. Subjects were deemed healthy if they had no cancer or heart disease at baseline.

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