Maladaptive Stress Responses in Children of Parents Diagnosed with Cancer

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UPMC Shadyside, Hillman Cancer Center
Cooper Classroom C

Light lunch provided. In order to ensure enough food is available, please RSVP to Stacy Fitzsimmons (fitzsimmonss3@upmc.edu), or contact her if you need directions or additional information.

The Cooper Classrooms are located on the ground level of the Hillman Cancer Center, 5115 Centre Avenue, in Shadyside. After entering the building, walk to the left past the elevators. Facing the gift shop, turn right down the hallway. Room C is the 3rd door in the lobby area on the left.

BRAIN, BEHAVIOR, AND CANCER Seminar Series
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Abstract: Cancer constitutes the leading cause of death in individuals aged 25-64 years, those most likely to have school-age or dependent children. Children of parents with cancer are at high risk for psychiatric morbidity, specifically depression and PTSD; and their increased risk continues into adulthood. Studies show that patients with advanced cancer who have dependent children have worse quality of life because they often prefer more aggressive treatments focused on extending life over relieving pain and palliative care. The quality of life of the ill parent in turn affects their children’s stress responses. Stress in childhood alters biological systems and the expression of genes regulating the HPA axis and immune responses in a manner that persists across decades. In an ongoing study evaluating the unfolding of stress responses in children of parents newly diagnosed with cancer, we find increased depression and PTSD symptomatology and alarmingly, increased suicidal ideation within 9 months of parental cancer diagnosis. We find increased hair cortisol concentrations (HCC) and increased inflammation over time to be associated with both depression and PTSD symptomatology; and corresponding changes in gene expression profiles in the HPA axis and inflammatory pathways. However, we find a different neuroendocrine profile to be associated with increased suicidal ideation with increased glucocorticoid receptor (GR) mRNA and reduced HCC over time. Vulnerability factors related to parental cancer diagnosis as well as protective factors that can modify biological trajectories and subsequently risk in children will be discussed. These results shed light on the neurobiological, environmental, and behavioral pathways of stress responses in children and its impact on liability to psychiatric illness. Most importantly, the clinical implications will be discussed to better help patients diagnosed with advanced cancer and their families during one of their most stressful life experiences.

CME Faculty Disclosure
In accordance with Accreditation Council for Continuing Medical Education requirements on disclosure, information about relationships of presenters with commercial interests (if any) will be included in materials distributed at the time of the conference.

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