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POSTER ABSTRACTS

905.OUTCOMES RESEARCH-LYMPHOID MALIGNANCIES

Oncofertility Counseling Practices in Pediatric Hematology/Oncology: Addressing Barriers and Time Pressures

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The National Comprehensive Cancer Network, American Society of Reproductive Medicine, and American Society of Clinical Oncology emphasize the importance of counseling patients receiving chemotherapy about its long-term effects on fertility. However, survivors often report inadequate attention to this crucial aspect of care. Balancing timely treatment initiation with comprehensive oncofertility counseling presents several challenges, including cost, patient age at diagnosis, information overload at diagnosis, and time constraints.

To address the insufficient study of time pressures on oncofertility counseling, we conducted a retrospective review at the University of Rochester Medical Center. The study involved 210 pediatric patients diagnosed with a malignancy requiring chemotherapy between January 1st, 2015, and May 31st, 2022, excluding those treated elsewhere or with relapsed disease. We performed individual electronic medical record (EMR) chart abstractions, collecting data on diagnosis, pathologic diagnosis date, systemic chemotherapy initiation, oncofertility documentation, and Tanner staging. Hematologic malignancies comprised 37.65% of the cohort, with acute lymphoblastic leukemia (15.43%) and acute myeloid leukemia (7.72%) being the most prevalent. The median age was 7, with a male predominance (59%) and predominantly Caucasian patients (845)

Only 11.9% of the patient population saw reproductive endocrinology or urology for an oncofertility visit and 59% had documented oncofertility discussions with their oncology team. Sexual health was discussed in only 2.3% of cases, and only 10.9% of patients had documented Tanner staging before treatment initiation. Hematologic malignancy patients had an average of 14.38 days between pathologic diagnosis and treatment initiation, significantly lower than extracranial solid tumors (14.78 days) and CNS tumors (97.18 days). Peripubertal or post-pubertal patients ($\geq$10 years) had an average of 19.7 days from diagnosis to treatment, compared to 12.4 days for pre-pubertal patients ($<$10 years).

Considering the short interval between diagnosis and treatment initiation for pediatric hematologic malignancies, achieving in-depth oncofertility discussions before therapy initiation seems unrealistic, particularly given fertility interventions will normally take days to weeks to coordinate. While most of these patients will likely have retained fertility on current treatment protocols, any chemotherapy exposure can potentially affect fertility. Additionally, high risk patients that relapse will receive definitive salvage therapy with a bone marrow transplant which is much more likely to threaten fertility. The results of this study illustrate that in depth oncofertility counseling may be better suited after initial diagnosis but before relapse in high-risk patients. This will balance the opportunity for patients and families to discuss an important topic close to diagnosis but at a time when they can effectively process the information and plan for their future.

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