detection among those at older ages or whether they have a greater resilience to metastasis.

GERIATRIC ASSESSMENT BEFORE HEMATOPOIETIC STEM CELL TRANSPLANT IDENTIFIES DEFICITS ACROSS ALL AGES

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Allogeneic hematopoietic stem cell transplant (HCT) is a lifesaving procedure; however, it is associated with significant morbidity, and treatment-related mortality ranges from 10-30%. Morbidity and mortality have been associated with poor functional status. The geriatric assessment (GA) may allow identification of deficits pre-HCT, allowing intervention and improvement. While focused on older adults, we hypothesize that GA may also identify deficits in younger patients who may be debilitated by chemotherapy or cancer before HCT. We performed a GA in all adult patients at the time of initial evaluation for HCT (between 10/1/17-1/31/19) and again immediately before HCT. Deficits were identified and patients referred to specialists (physical therapy, neuropsychology, etc.) prior to HCT. Among 83 patients, the median age was 58 years (age range: 19-75), 59 (71%) had ≥1 deficits, including 41 (49%) had ≥2 deficits that required referral. The most common deficit was physical function (45, 54%), followed by cognitive function (29, 35%), nutrition (26, 31%), and mental health (7, 8%). Deficits were common across all age groups: 9/16 (56%) 60 years old. To date, 40 patients have undergone HCT; of the 24 with deficits at initial evaluation, 10 (42%) improved at least one deficit, 5 (21%) were unchanged, and 9 (38%) not evaluated. Physical and nutrition deficits were most responsive to intervention. These results suggest that there is a high degree of impairment prior to HCT among both older and younger patients; however, these deficits are amenable to improvement prior to HCT.

COMBINED EFFECT OF CMV SEROPOSITIVITY AND SYSTEMIC INFLAMMATION ON DEMENTIA PREVALENCE IN CANCER SURVIVORS

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Though cancer patients treated with multi-modal therapies demonstrate higher levels of systemic inflammation, which is associated with dementia, cancer survivors have not shown a consistent association with dementia. Since several studies reported an independent association between cytomegalovirus (CMV) infection, inflammation and dementia in non-cancer populations, we have evaluated whether CMV infection and systemic inflammation were associated with increased prevalence of dementia in cancer survivors in Health and Retirement Study (HRS). We evaluated prevalence of dementia (using score ≤7 on the 27-point scale) among 1607 cancer survivors, in whom we measured CMV seropositivity and two biomarkers of systemic inflammation: C-reactive protein (CRP) and neutrophil-lymphocyte ratio (NLR). The prevalence of CMV seropositivity was 68.26% (n=1097), while prevalence of increased systemic inflammation [CRP >5mg/L and NLR >4] was 4.23% (n=68). Using survey logistic regression, adjusted for age, race, gender, BMI (Body Mass Index) and sampling design, cancer survivors who were both CMV seropositive and had increased systemic inflammation had the highest odds of dementia compared to those who were CMV seronegative and had low levels of systemic inflammation (OR=6.59; 95% CI [2.81, 15.44]; p<.0001). Cancer survivors who were CMV seropositive without evidence of systemic inflammation had a lower but increased odds of dementia (OR=2.02; 95% CI [1.17, 3.47]; p=0.01). Odds of dementia among those who were CMV seronegative with elevated systemic inflammation was not significant (p=0.09). Our study demonstrates a possible role for ongoing CMV induced inflammation in determining dementia prevalence among cancer survivors that needs further confirmation.

CHARACTERIZING CONCURRENT ALZHEIMER'S DISEASE AND CANCER IN U.S. ADULTS OVER 65

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Cancer (CA) care delivery fragmentation persists for patients across the cancer continuum. Racial and ethnic disparities are one of the primary factors attributable for variation in treatment outcomes, in addition to language and patient-provider communication barriers. Latino and African-American communities also bear a greater burden of Alzheimer's Disease (AD) risk than White making patients experiencing AD+CA at risk for poor quality and treatment disparities. This study aims to characterize AD+CA in a population-based sample. Using 2004-2013 SEER-Medicare data we identified multiple cancers and the prevalence of concurrent AD+CA in the database (N=273,349). Patients selected for a first primary, histologically confirmed, any stage, not diagnosed in death certificate or autopsy and had at least 24 months of data prior to diagnosis to calculate a comorbidity index. All analyses were conducted in SAS 9.4 (Cary, N.C.). Across lung (LC), colorectal, head and neck (HNC), prostate (PC), and cervical cancer (CC) we found 5890 cases of AD+CA or 2.15%. While lung represented the largest sample, colorectal (CRC) cancer was responsible for the largest proportion of concurrent AD+CA cases at 3.52% of all CRC. Black and Latino CRC, HNC patients had higher than overall prevalence of AD+CC. Black CRC patients had 6.13% AD+CA vs White 3.27 and Latino HNC patients reported 5.06% vs 3.25 White. Earlier stage patients had higher AD+CA vs later stages for CRC, HNC, and CC. The opposite was true for LC. Finally, women