Conclusions: Anthropometric measures can be used to accurately estimate LBM of cancer patients. Future research should apply these derived equations to measure LBM thresholds associated with chemotherapy adverse event risk.

Breast biopsy patterns and findings among older women undergoing screening mammography: what is the impact of age and comorbidity?

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Purpose: The goal of this project is to assess rates of biopsy and biopsy findings among older women undergoing screening mammography by age and comorbidity.
Method: We included 171,636 women ages 66-99 years with at least one screening mammogram from the Medicare-linked Breast Cancer Surveillance Consortium (BCSC) during 1999-2010. We calculated percentage of screens followed by biopsy within 90 days by age and comorbidity. Further, we assessed trends in biopsy rates using the Cochran–Armitage trend test.
Results: Among 527,254 screening mammograms, 6587(1.2%) were followed by biopsy within 90 days. Whereas the proportion of screens followed by any biopsy did not vary significantly by age (ages 66-74: 1.3%, ages 75-84:1.2%, ages 85-99:1.2%; p_{trend}=0.07), the proportions increased with increasing Charlson Comorbidity score (CCS) for women ages 66-74 and 75-84 (ages 66-74:CCS0:1.2%,CCS1:1.3%,CCS$\geq$2: 1.6%; p_{trend}=<0.001 and ages 75-84:CCS0:1.2%,CCS1:1.3%,CCS$\geq$2:1.3%; p_{trend}=0.01) but not ages 85-99 (CCS0:1.1%,CCS1:1.2%,CCS$\geq$2:1.4%; p_{trend}=0.16). The proportion of screens followed by benign biopsy increased with increasing CCS for women ages 66-74 and 75-84 (ages 66-74:CCS0:0.77%,CCS1:0.88%, CCS$\geq$2:0.94%; p_{trend}<0.001 and ages 75-84:CCS0:0.62%,CCS1:0.75%,CCS$\geq$2:0.78%; p_{trend}=0.001) but not ages 85-99 (CCS0:0.48%, CCS1:0.57%, CCS$\geq$2:0.61%, p_{trend}=0.23). The proportion of biopsies with a result of invasive cancer did not vary significantly by CCS in any age group ([ages 66-74: CCS0:28.4%, CCS1:25.5%, CCS$\geq$2:30.8%; p_{trend}=0.93]; [ages 75-84:CCS0:37.2%,CCS1:36.0%,CCS$\geq$2:32.0%; p_{trend}=0.15]; [ages 85-99:CCS0:46.8%,CCS1:43.5%,CCS$\geq$2:43.8%; p_{trend}=0.60]).
Conclusions: Proportion of screens followed by biopsy and the proportion of screens with a benign finding increased with comorbidity burden among women ages 65-74 and 75-84 years, highlighting potential harm from high rates of benign findings among older women undergoing screening mammography.

Socioeconomic differences in depression among breast cancer survivors

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Purpose: Socioeconomic status (SES) affects access to quality health care and morbidity in breast cancer survivors, but little data exists if survivors from lower SES groups experience greater psychologic distress. Our analysis examined how SES affects depression occurrence in a cohort of survivors.
Methods: We studied 8,717 insured female ($\geq$ 18 years) breast cancer survivors from Kaiser Permanente Southern California diagnosed from 2010-2012 (stages 0-IV) and followed through December 2017. Data elements were identified from comprehensive electronic health records. Depression diagnoses post-breast cancer were identified using ICD9/10 codes. Geocoded median household income quartiles were used to determine SES based on the 2010 census. We calculated the association between SES and depression using odds ratios and 95% confidence intervals.
Results: Depression post-breast cancer by SES varied within each race/ethnic group. Compared to Black women in the top 25% SES group, Black women in the lowest 25% SES group were 67% more likely to have depression (OR 1.67, 95% CI: 1.05-2.65) as were those in the middle SES group (>25-50% OR: 1.72, 95% CI: 1.04-2.83). In non-Hispanic White women, those in the lowest SES group were 32% more likely to have a depression diagnosis than those in the top 25% SES group (Lowest 25% OR: 1.32, 95% CI: 1.11-1.58).

Conclusion: Even in this insured population, survivors in the lowest SES group were generally more likely to have depression than those in the highest SES group. Our next steps include conducting multivariable analyses to disentangle the effects of SES, race/ethnicity and clinical factors.

Race/ethnic disparities in depression occurrence in a diverse cohort of breast cancer survivors

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Purpose: For many of the 3 million U.S. female breast cancer survivors, approximately 5-20% experience major depression following diagnosis, but sparse data exist about psychosocial distress in minority patients. The goal of this study was to explore whether race/ethnicity is associated with depression occurrence in breast cancer survivors.
Methods: We conducted a nested cross-sectional analysis within a cohort study of 8,717 breast cancer survivors. Subjects were identified from the Kaiser Permanente Southern California health plan. Inclusion criteria: Women 18 years and over, diagnosed from 2010-2012 (stages 0–IV), followed through December 2017 for depression occurrence post breast cancer diagnosis. Demographic, clinical and tumor characteristics were identified from the cancer registry and electronic medical records. Depression was identified using ICD9/10 codes and examined percentages and odds ratios by race/ethnicity.
Results: Overall, depression occurrence was 33.3% in survivors, but varied substantially by race/ethnicity, with the lowest occurrence in Asian/Pacific Islander (PI) (1.95%). White women had the highest odds of depression (OR 3.49 [95% CI, 2.93-4.15]), followed by Hispanic (OR 3.02 [95% CI, 2.50-3.65]) and Black (OR 2.05 [95% CI, 1.66-2.53]) compared to Asian/PI women.
Conclusions: An implication is that depression occurrence is similarly high in Hispanic and Black as in White women compared with Asian/PI women. Reasons for lower depression occurrence in the Asian/PI group is unclear; possibly more culturally sensitive assessments are needed. Promoting awareness may help the group to appropriately identify and manage depression. Next steps include conducting multivariable analyses to determine associations with depression in the different race/ethnic groups.

Cardiovascular and Chronic Disease

Diabetes prevalence among U.S. adults with disabilities: National Health and Nutrition Examination Survey, 2013-2016

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Purpose: Research indicates a higher prevalence of self-reported diabetes among U.S. adults with disabilities compared to those without. We estimated the prevalence of self-reported diagnosed and total (diagnosed and undiagnosed) diabetes by disability status to inform care.
Methods: We analyzed the 2013-2016 National Health and Nutrition Examination Survey data for noninstitutionalized U.S. adults aged 18 years and older. This study included 5,471 adults without and with self-reported disabilities (cognition, hearing, mobility, vision, independent living, or self-care). Diagnosed diabetes was self-reported diagnosed diabetes, and total diabetes was defined as diagnosed and undiagnosed diabetes by the American Diabetes Association criteria of fasting glucose/A1c/2-h plasma glucose. We compared the prevalence of diagnosed and total diabetes by disability status, types, and demographics.
Results: Prevalence of diagnosed diabetes was 20.9% (95% CI: 18.7, 23.2) and 6.9% (95% CI: 6.1, 7.9), respectively, in adults with and without disabilities. Prevalence of total diabetes increased to 30.7% and 12.4% among adults with and without disabilities, respectively. More than 9% of adults with disabilities had undiagnosed diabetes. The estimated prevalence of total diabetes was highest among adults with at least two types of disabilities (53.7%; 95% CI: 49.3, 58.0) followed by those with only mobility disability (17.5%; 95% CI: 14.3, 21.1).
Conclusions: We found that 9.8% and 5.5% of adults with and without disabilities, respectively, had undiagnosed diabetes. These results highlight the importance of