Devices is increasing; reduced functional performance and altered strategies for undertaking ADL could soon be routinely tracked to augment

Falls in Older Adults With Cancer: Evaluation by Oncology Providers

Citation: Journal of oncology practice / American Society of Clinical Oncology, Nov 2015, vol. 11, no. 6, p. 470-474 (November 2015)

Abstract: Falls in older adults are common. Screening for falls is quick, simple, and important because falls increase the risk of morbidity and mortality in older patients with cancer. The aim of this study was to evaluate oncology providers’ recognition of and response to falls in older patients with cancer. From a sample of older patients with cancer who completed a geriatric assessment blinded to oncology providers, we identified patients who self-reported falls within the past 6 months. Their history and physical and/or clinic notes completed by an oncology provider were reviewed for the following: documentation of falls, gait assessment, referral to geriatrics or physical and/or occupational therapy, and measurement of 25-hydroxy vitamin D level. In our sample of older patients with cancer who reported at least one recent fall (N = 125), the average age was 72 years (range, 65 to 93 years), 78% were female, and 62% had a breast cancer diagnosis. Chart reviews showed that 13 (10%) had falls documented, 25 (20%) had a gait assessment, eight (6%) were referred, and 21 (17%) had vitamin D level measured. We found that only 10% of older patients with cancer who self-reported a recent fall had appropriate medical record documentation. Oncologists are often the primary care providers for older patients and are largely unfamiliar with the frequency and impact of falls in this population. There is a need to increase awareness of falls prevalence and consequences among oncology providers in order to provide timely interventions to reduce the risks associated with falls. Copyright © 2015 by American Society of Clinical Oncology.

Source: Medline

A Falls Wheel in a Large Academic Medical Center: An Intervention to Reduce Patient Falls With Harm

Citation: Journal for healthcare quality : official publication of the National Association for Healthcare Quality, Nov 2015, vol. 37, no. 6, p. 374-380 (2015 Nov-Dec)

Abstract: This article presents an evaluation of a multifaceted fall prevention initiative. The main element of this initiative was the implementation of a Falls Wheel—a visual communication tool of a patient’s fall injury risk for all care team members placed on every patient door throughout the hospital system. The Falls Wheel allows for patient categorization along two dimensions simultaneously: risk of fall and risk of injury from a fall. During the yearlong implementation, the rate of falls with harm dropped by almost 50%. A process audit revealed that there was high fidelity to the intervention components, including displaying the wheel correctly 96% of the time, and the Falls Wheel was updated to match the risk level in the electronic health record 70% of the time. The goal of this article was to share the experience of one health system and encourage others to adopt and rigorously test the Falls Wheel. Replication and extension of this program at other hospitals and health systems will enable staff and empower patients to reduce falls with harm and their unintended consequences.

Source: Medline

New Methods to Monitor Stair Ascents Using a Wearable Pendant Device Reveal How Behavior, Fear, and Frailty Influence Falls in Octogenarians

Citation: IEEE transactions on bio-medical engineering, Nov 2015, vol. 62, no. 11, p. 2595-2601 (November 2015)

Abstract: To investigate if the stair negotiation by older people during activities of daily life (ADL) can be accurately identified using a freely worn pendant device. To investigate how usual stair-ascent performances during ADL relate to clinical assessments and prospective falls. ADL were recorded for 30 min by 52 community-dwelling older people (83 ± 4 years) using a small pendant device. Classification accuracy was assessed using annotated video and four-fold cross validation. Correlations between sensor-derived stair-ascent features (comprising intensity, variability, and stability) and a battery of clinical tests (comprising physiological, psychological, health, and follow-up falls) were investigated. Accurate identification of stair events (99.8%, Kappa 0.92) was possible in both “frail” and “athletic” participants by scaling the barometer threshold to stair cadences. Cautious double-stepping strategy could be identified remotely. Stair-ascent performance was correlated with ascent strategy (r = -0.67), age (r = -0.44), concern about falling (r = -0.43), fall-risk scores (r = -0.41), processing speed (r = -0.38), and contrast sensitivity (r = 0.32). Follow-up falls were correlated with ascent stability (r = -0.35). Remote analysis of stair ascents is feasible. In our healthy older people, outcomes appeared more related to mental rather than physiological factors. The ascent strategies we observed in some older people may have reflected an appropriate behavioral response to increased concerns about falling. Given acceptance of wearable devices is increasing; reduced functional performance and altered strategies for undertaking ADL could soon be routinely tracked to augment
Reliability and validity of the Falls Efficacy Scale-International after hip fracture in patients aged ≥65 years

Citation: Disability and rehabilitation, Nov 2015, vol. 37, no. 23, p. 2225-2232 (November 2015)

Author(s): Visschedijk, Jan H M, Terwee, Caroline B, Caljouw, Monique A A, Spruit-van Eijk, Monica, van Balen, Romke, Achterberg, Wilco P

Abstract: To assess the measurement properties of the Falls Efficacy Scale-International (FES-I) in patients after a hip fracture aged ≥ 65 years. In a sample of 100 patients, we examined the structural validity, internal consistency and construct validity. For the structural validity a confirmatory factor analysis was carried out. For construct validity predetermined hypotheses were tested. In a second sample of 21 older patients the inter-rater reliability was evaluated. The factor analysis yielded strong evidence that the FES-I is uni-dimensional in patients with a hip fracture; the Cronbach’s alpha was 0.94. When testing the reliability, the intra-class correlation coefficient was 0.72, while the Standard Error of Measurement was 6.4 and the Smallest Detectable Change was 17.7 (on a scale from 16 to 64). The Spearman correlation of the FES-I with the one-item fear of falling instrument was high (r = 0.68). The correlation was moderate with instruments measuring functional performance constructs and low with instruments measuring psychological constructs. Reliability and structural validity of the FES-I in patients after a hip fracture are good. The construct validity appears more closely related to functional performance constructs than to psychological constructs, suggesting that the concept measured by the FES-I may not capture all aspects of fear of falling. Implications for Rehabilitation The Falls Efficacy Scale-International (FES-I), which is commonly used to measure fear of falling in community-dwelling older persons, can also be used to assess fear of falling in patients after a hip fracture. The reliability and the structural validity of the FES-I for these hip patients are good, whereas the construct validity of the FES-I is not optimal. The FES-I may not capture all aspects of fear of falling and may be more closely related to functional performance than to psychological concepts such as anxiety.

Definitions of Sarcopenia: Associations with Previous Falls and Fracture in a Population Sample

Citation: Calcified tissue international, Nov 2015, vol. 97, no. 5, p. 445-452 (November 2015)

Author(s): Clynes, M A, Edwards, M H, Buehring, B, Dennison, E M, Binkley, N, Cooper, C

Abstract: Sarcopenia is common in later life and may be associated with adverse health outcomes such as disability, falls and fracture. There is no consensus definition for its diagnosis although diagnostic algorithms have been proposed by the European Working Group for Sarcopenia in Older People (EWGSOP), the International Working Group on Sarcopenia (IWGS) and the Foundation for the National Institutes of Health Sarcopenia Project (FNH). More recently, Binkley and colleagues devised a score-based system for the diagnosis of “dysmobility syndrome” in an attempt to combine adverse musculoskeletal phenotypes, including sarcopenia and osteoporosis, in order to identify older individuals at particular risk. We applied these criteria to participants from the Hertfordshire Cohort Study to define their prevalence in a selected cohort of UK community-dwelling older adults and assess their relationships with previous falls and fracture. Body composition and areal bone mineral density were measured using dual-energy X-ray absorptiometry, gait speed was determined by a 3-m walk test and grip strength was assessed with a Jamar hand-held dynamometer. Researcher-administered questionnaires were completed detailing falls and fracture history. The prevalence of sarcopenia in this cohort was 3.3, 8.3 and 2.0 % using the EWGSOP, IWGS and related definition of FNH, respectively; 24.8 % of individuals had dysmobility syndrome. Individuals with dysmobility reported significantly higher number of falls (last year and since the age of 45 years) (p < 0.01) than those without it, but no increased fracture rate was observed in this group (p = 0.96). Those with sarcopenia as defined by the IWGS reported significantly higher falls in the last year and prevalent fractures (falls in the last year; OR 2.51; CI 1.09-5.81; p = 0.03; fractures OR 2.50; CI 1.05-5.92; p = 0.04) but these significant associations were not seen when the EWGSOP definition was applied. The IWGS definition of sarcopenia appears to be an effective means of identifying individuals at risk of prevalent adverse musculoskeletal events.

Recommendations for assessing and preventing falls in adults of all ages with rheumatoid arthritis

Citation: British journal of community nursing, Nov 2015, vol. 20, no. 11, p. 529-533, 1462-4753 (November 2015)

Author(s): Stanmore, Emma K

Abstract: Rheumatoid arthritis (RA) is a debilitating disease that affects younger as well as older adults. It is associated with a high risk of injurious falls due to problems such as lower-limb muscle weakness, balance impairment, swollen and tender joints, pain, and fatigue. Falls are typically associated with older people; however, many professionals do not recognise the risks for younger persons with diseases such as RA. Falls can lead to devastating consequences, such as fatalities, hip fractures (with 50% of those affected never regaining their previous level of mobility and 30% dying within 1 year), or loss of independence and confidence. Research has shown that many people are either unaware or deny their risk of falling. Therefore, it is important that health professionals, such as community nurses, are aware of the risk factors, methods of assessment, and evidence-based preventative measures, so that falls can be avoided in this population. This article presents research and practice implications for community nurses to enable them to assess, treat, and appropriately refer adults with RA who are also at risk of falls.
Outcome of in-patient falls in hospitals with 100% single rooms and multi-bedded wards

**Citation:** Age and ageing, Nov 2015, vol. 44, no. 6, p. 1032-1035 (November 2015)

**Author(s):** Singh, Inderpal, Okeke, Justin, Edwards, Chris

**Abstract:** Falls in hospital account for almost two-fifths of the patient safety incidents reported to the National Reporting and Learning System in UK. Studies have suggested an increased incidence of falls in single-bedded hospitals, compared to the outcome of in-patient falls occurring in units with 100% single rooms (SRs) and multi-bedded wards (M-BWs). SAMPLING DESIGN AND METHODS: An observational study. Retrospective standard incident reporting data (DATIX) on in-patient falls and associated injury were obtained from both sites over 18 months each. There was no change in demographics, size and characteristics of population except change in the geography of new hospitals. The total number of in-patient fall incidents reported over the 3 years was 1,749. The mean age of patients on M-BW and SR sites was 81.0 ± 2.4 (51.3% females) and 80.3 ± 10.3 (50.7% females), respectively. The mean incidence of falls/1,000 patient-bed days on M-BW and SR sites was 5.44 ± 4.76 and 15.82 ± 19.56, respectively (P < 0.01). Overall fracture incidence/1,000 patient-bed days on M-BW and SR sites was 0.07 ± 0.48 and 0.36 ± 1.52 (P < 0.01), respectively. The hip fracture incidence/1,000 patient-bed days on M-BW and SR sites was 0.04 ± 0.38 and 0.15 ± 1.00 (P < 0.01), respectively. One-year mortality from the date of first incident fall was lower in M-BWs (41.1%) compared with SRs (47.1%), but this is not significant (P = 0.12). This observational study shows a significantly increased incidence of falls and fracture in a hospital design with SRs compared with a multi-bedded facility. Consideration should be given to increased incidence of falls and falls-related injury in SRs when deciding on the percentage of single-room provision in new hospitals to admit frail older adults. © The Author 2015. Published by Oxford University Press on behalf of the British Geriatrics Society. All rights reserved. For Permissions, please email: journals.permissions@oup.com.

Source: Medline

Pain and falls and fractures in community-dwelling older men

**Citation:** Age and ageing, Nov 2015, vol. 44, no. 6, p. 973-979 (November 2015)

**Author(s):** Munch, Troels, Harrison, Stephanie L, Barrett-Connor, Elizabeth, Lane, Nancy E, Nevitt, Michael C, Schousboe, John T, Stefanick, Marcia, Cawthon, Peggy M

**Abstract:** Pain may reduce stability and increase falls and subsequent fractures in older men. To examine the association between joint pain and any pain with falls, hip and non-spine fractures in older community-dwelling men, a cohort study. Analyses included 5,993 community-dwelling men aged ≥65 years from the MrOS cohort. Pain at hip, knee and elsewhere (any) was assessed by self-report. Men reported falls via questionnaires mailed 3× per year during the year following the baseline visit. Fractures were verified centrally. Mean follow-up time for fractures was 9.7 (SD 3.1) years. Logistic regression models estimated likelihood of falls and proportional hazards models estimated risk of fractures. Models were adjusted for age, BMI, race, smoking, alcohol use, medications use, co-morbidities and arthritis; fracture models additionally adjusted for bone mineral density. One quarter (25%, n = 1,519) reported ≥1 fall; 710 reported ≥2 falls in the year after baseline. In multivariate models, baseline pain at hip, knee or any pain increased likelihood of ≥1 fall and ≥2 falls over the following year. For example, knee pain increased likelihood of ≥1 fall (odds ratio, OR 1.44; 95% confidence interval, CI 1.25-1.65) and ≥2 falls (OR 1.75; 95% CI 1.46-2.10). During follow-up, 936 (15.6%) men suffered a non-spine fracture (n = 217, 3.6% hip). In multivariate models, baseline pain was not associated with incident hip or non-spine fractures, any pain, knee pain and hip pain were each strong independent risk factors for falls in older men. Increased risk of falls did not translate into an increased risk of fractures. © The Author 2015. Published by Oxford University Press on behalf of the British Geriatrics Society. All rights reserved. For Permissions, please email: journals.permissions@oup.com.

Source: Medline

A balance retraining exercise program reduced injurious falls in at-risk older community-dwelling women

**Citation:** Annals of internal medicine, Nov 2015, vol. 163, no. 10, p. JC2. (November 17, 2015)

**Author(s):** Hirsch, Calvin

**Source:** Medline

**Full Text:** Available from EBSCOhost in Annals of Internal Medicine

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