

illustrate that a considerable proportion of older ED patients discharged with a prescription opioid have a high predicted probability for an overdose within 6 months.

PROTEIN INTAKE IN OLDER ADULTS WITH OBESITY DURING WEIGHT LOSS INTERVENTIONS: A LITERATURE REVIEW

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Background: Weight loss improves cardiometabolic and functional outcomes, but may worsen sarcopenia. Protein intake during energy restriction may preserve lean body mass (LBM). The amount, timing and source of protein may be important. No formal protein guidelines exist in older adults attempting weight loss. We evaluated the types of protein used in weight-loss interventions.

Methods: With a reference librarian, we conducted a PubMed search using the terms weight loss intervention, diet intervention, energy restriction, hypocaloric diets, protein, protein supplementation, obese, and older adults for the years ranging from 2003–2018. Systematic reviews on this topic were also reviewed. Our inclusion criteria consisted of randomized controlled trials of weight loss studies with subjects aged >60 and a body mass index (BMI) >30 kg/m². Studies entailed a comprehensive energy-restricted diet with protein from food or supplements, with or without an exercise component.

Results: Out of 158 citations, 13 trials met criteria. Sample size ranged from 11–148, age and BMI ranged from 65.2–70.3 years and 31–40 kg/m². Interventions lasted 4–52 weeks and all included protein above the current Recommended Dietary Allowance (RDA) of 0.8g/kg/day. LBM decreased when protein intake remained at the RDA. Increased protein intake was associated with improved function. Protein intake (>1.0–1.2g/kg or 20–30% of total calories) spread evenly throughout the day, with 20–30g at each meal, preserved LBM and function. Whey protein also exerted beneficial effects on muscle but somewhat inconclusive.

Conclusions: Current RDA may be inadequate to preserve LBM during weight loss in older adults.

PTSD AMONG ELDER ABUSE VICTIMS WITH DEPRESSED MOOD

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There is an increased recognition of the significant mental health needs of elder abuse victims (Sirey et al., 2015; Acierno 2018) and how concurrent distress can interfere use of elder abuse services and amelioration of mistreatment. But less is known about the range and severity of the needs of victims. This type of information is critical to design and implement effective services to target both the mental health and elder abuse needs. Our group has developed a brief therapy (PROTECT) for depression in elder abuse victims with capacity receiving mistreatment resolution services (Sirey et al., 2015). We have been concerned about the presence of post trauma symptoms and we re-examined the symptom reports to identify the rates Post Traumatic Stress Disorder (PTSD) among victims. Using the PCL symptom assessment (Blanchard et al., 1996) to evaluate DSM-V criteria of PTSD according to the National Center for PTSD, 53% of victims

met criteria for PTSD. There were no differences associated with race, ethnicity or age. Victims with PTSD reported significantly higher suicidal ideation (46.2% versus 9.5%). They were more likely to report multiple types of abuse (3 types). Higher rates of PTSD were reported among victims of emotional mistreatment (84.6% versus 52.4%) and physical mistreatment (46.2% versus 23.8%). After a course of PROTECT, 64.7% of victims demonstrated a clinically meaningful reduction in symptoms. These findings support the need for victims to be screened for PTSD as well as depression. The high rate of suicidal ideation and trauma symptoms may require focused treatments.

RISK PREDICTION FOR UNPLANNED READMISSIONS FROM HOME HEALTH USING MACHINE LEARNING

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Introduction: Utilization of home health (HH) services among older Medicare beneficiaries has increased significantly over the last 10 years. Yet, clinicians are largely unaware of risk factors for readmission from HH.

Methods: This was a secondary analysis of 2012 and 2013 Medicare claims for patients >65 years old discharged to HH following acute hospitalization. The primary outcome was unplanned readmission within 30 days of hospital discharge. A series of models were created based on a starting pool of candidate variables that HH clinicians would have accessible using a combination of backward selection (logistic regression) and a machine learning technique (GBM). The models were fit using logistic regression and relative performance was assessed based on the optimism corrected C-index and Brier score.

Results: The analytic sample (n=50,919) was, on average, 79.1 years old, a majority female and Caucasian, and had a 4-day hospital length of stay (LOS). Nearly 15% (n=7,409) experienced a 30-day readmission. The initial ‘full’ model included 54 candidate variables with a C-statistic of 0.64 and a Brier score of 0.12. An 8-variable predictive model had similar performance (c=0.64, Brier index=0.12) with Charlson score, LOS, surgical wound status, and multiple hospitalizations having greatest relative importance.

Discussion: The results are among the first to provide a quick and effective screening tool to identify older adults discharged to HH at high risk for readmission. This tool could be used to direct resources towards higher risk patients, and provide a framework for interventions needed.

SURVIVAL AFTER 100 YEARS OF AGE IN PORTUGUESE CENTENARIANS

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The group of individuals aged 80 and over is growing faster than other segment of the population, and within this group the number of centenarians has risen exponentially worldwide. This phenomena lead to an increasing number of centenarian studies, improving the knowledge about this

population, validating the idea of heterogeneity that characterizes this group. However, the factors influencing their aging survival remains understudied. The present study aims to identify factors associated with survival after 100 years old in a sample of Portuguese centenarians. After being included in a population-based study on centenarians (PT100–Oporto Centenarian Study), each participant was assessed by a telephone interview every 6 months in order to assess his/her health condition. Follow-up was considered as the time (in months) between 100th birthday and death or the last telephone contact. Survival analysis was performed to identify factors associated with survival after 100 years old. Sociological and medical factors were considered. 140 centenarians were assessed and 115 (82.1%) died. The median survival time after 100 years old was 38 months. Survival after age 100 was associated with acute disease (last month), self-perception of physical condition and drinking status. This study intends to identify factors that predict longevity in long-lived individuals. Findings recognize the importance of factors related with health status, self-perception of physical condition and life style (no alcohol consume) for survival. Further studies should explore the predictive value of these factors, as well as psychosocial aspects, considering living longer but also the quality of time beyond one hundred.

SWITCHING, ADHERENCE, DISCONTINUATION AND REINITIATION OF STATINS AMONG OLDER ADULTS: A NATIONWIDE COHORT STUDY

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The effectiveness of statin therapy is undermined by poor adherence. We examined statin adherence, switching, discontinuation and reinitiation among older adults. A total of 49,380 older adults (mean age, 73.4 years; 54.3% female) who initiated statin therapy between 1 January 2007 and 31 December 2015 were followed until death or 31 December 2016. Adherence was estimated via the proportion of days covered (PDC). Discontinuation (\square 90 days without statin coverage), reinitiation (statin dispensation between discontinuation and last follow-up) and switching (first change in statin or intensity) and their related factors were assessed using survival analysis. Among the cohort, 57.5% and 34.5% were adherent (PDC \geq 0.80) at 6-months and 9-years, respectively. Over a mean follow-up of 5.2 years, 63.6% (n=31,406) discontinued, of whom 60.4% (n=18,977) restarted. Moderate- and high-intensity statins were associated with higher discontinuation compared to low-intensity statins. Increasing age, female gender, dementia, malignancies and psychotic illness were associated with lower reinitiation. Diabetes was associated with higher discontinuation as was initiation by a general practitioner. Compared to maintaining the same statin and intensity upon reinitiation, switching statin plus down-titrating intensity (hazard ratio 0.90, 95% confidence interval 0.83–0.98), switching statin plus up-titrating intensity (0.87, 0.79–0.95) and switching statin plus maintaining same intensity (0.89, 0.84–0.95) reduced the likelihood of discontinuation. Changing intensity while maintaining same statin did not reduce the risk of discontinuation. In conclusion, statin adherence is low and

discontinuation is high. However, significant proportions of older adults who discontinue statins restart. Reinitiation with a different statin is associated with improved persistence.

SYSTEMATIC REVIEW OF NIRS STUDIES IN HUMAN ORTHONASAL OLFACTION

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Near-infrared spectroscopy (NIRS) is a noninvasive neuroimaging tool used to measure activation-induced changes in cortical hemoglobin concentration. Using this technique, changes in the optical absorption of light are recorded to estimate changes in oxyhemoglobin and deoxyhemoglobin concentrations resulting from local vascular and metabolic effects during brain activity. NIRS has been successfully applied for early identification of neurodevelopmental and neurodegenerative disorders. Likewise, decreases in olfactory ability indicate similar disorders. High cortical involvement in the olfactory system makes NIRS ideal for in-depth investigation of the olfactory and cognitive systems. Due to growing popularity and potential for enhancing research in both techniques, we aimed to identify activation patterns during olfaction, summarize the locations of hemodynamic change during olfactory stimulation, highlight developmental differences, and outline functional lateralization of olfactory processes in studies using NIRS. We searched Web of Science, PsychInfo, CINAHL, PubMed, and Science Direct for olfactory related studies using NIRS methodology. The literature search generated 578 records and 124 full text articles were reviewed. Thirty-two articles comprising 588 participants from Japan and Europe met eligibility. Olfactory stimulation consistently induces hemodynamic changes in the frontopolar (inferior frontal), orbito-frontal, and temporal regions, while trigeminal scents also activate the somatosensory cortices. Healthy individuals showed consistent hemodynamic patterns, and these patterns differed from individuals with anosmia, developmental disorders, cognitive decline, and cognitive load. Our findings suggest that NIRS can be used to investigate olfaction across the lifespan and may have potential as a diagnostic tool. However, longitudinal, well-powered studies are needed to establish disease-specific sensitivity and specificity.

TALKING ABOUT ATTITUDES TOWARDS THE END OF LIFE: WHAT DOES IT NEED?

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To individually plan end-of-life care, open communication about a person's preferences and attitudes towards death, dying and the finitude of life is required. It can facilitate dignity and quality of life in patients and relatives. To improve the process of communication, structured guided tools might serve as door opener for these conversations. Most tools focus on care preferences without assessing the person's underlying attitudes in detail. This study aimed at getting insight into specific requirements and conditions for communicating about the end of life in various end-of-life care settings. Four focus groups were conducted with health care professionals and volunteers