



PRACTICE-CHANGING UPDATES

ARTICLES

1

FULL ARTICLE ACCESS

[Antiarrhythmic Drugs in Atrial Fibrillation: Is There Still a Role for Rhythm Control?](#)

Rich MW.

J Am Geriatr Soc. 2019 Oct;67(10):2006-2007.

PMID: 31339171

>80% of atrial fibrillation (AF) occurs in those ≥ 65 years. Management considerations include stroke prevention vs. bleeding risk and choosing between maintaining sinus rhythm and rate control. Whilst AF is a risk factor for stroke, mortality and dementia, many trials fail to show benefit from rhythm control. The largest of these (AFFIRM study) revealed higher hospitalisation and mortality rates in the rhythm control group, thought to be 2° to antiarrhythmic drug toxicity at the time. Yet the Catheter Ablation Versus Antiarrhythmic Drug Therapy for Atrial Fibrillation trial showed no difference in all-cause mortality and did not evaluate overall quality of life between treatment arms- suggesting the merits of rhythm vs. rate control were inconclusive. Despite limitations, the study by Dalgaard et al. provides strong evidence antiarrhythmic drugs (particularly amiodarone) increase risk of injurious falls and syncope compared to rate-lowering therapy- boosting current US guidelines which advocate avoiding amiodarone as 1st line therapy for rhythm control due to its toxicity profile.

TECHNOLOGY AND MEDICINE

ARTICLES

1

[The MedSafer Study: A Controlled Trial of an Electronic Decision Support Tool for Deprescribing in Acute Care](#)

Emily G. McDonald, Peter E. Wu, Babak Rashidi, Alan J. Forster, Allen Huang, Louise Pilote, Louise Papillon-Ferland et. al

J Am Geriatr Soc 67:1843–1850, 2019

PMID: pending

Polypharmacy is common, costly and harmful in hospitalised older patients. This non-randomised, controlled, before-and-after study sought to leverage medication reconciliation in older adults by pairing with MedSafer- an electronic decision support tool for deprescribing. 1066 patients ≥ 65 years and taking ≥ 5 home medications received medication reconciliation as standard care- with those in the intervention arm having an additional “deprescribing opportunity report” (generated by MedSafer) provided to their medical team. 82% of patients had deprescribing opportunities (equally common in both study arms). 7.8% more patients with ≥ 1 potentially inappropriate medication (PIM) were identified in the intervention group compared to control. The study demonstrates the potential of an electronic decision support tool in PIM deprescription, reducing medication overload and possibly preventing adverse drug events.



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GERIATRICS

ARTICLES

1 **[Unexplained Anemia in the Elderly.](#)**

Ershler WB.

Clin Geriatr Med. 2019 Aug;35(3):295-305.

PMID: 31230731

Anemia prevalence increases with age and despite thorough investigation, approximately 1/3 are classified "unexplained." Unexplained anemia (UA) is typically hypoproliferative, normocytic, with low reticulocyte count and lower serum EPO levels than expected for the degree of anemia. Chronic inflammation, low testosterone levels, malnutrition, and possibly nascent myelodysplasia are contributing factors. There is no clearly beneficial treatment strategy, but the association of UA with many adverse outcomes stresses need for research on UA.

2 **[The effect of intravenous iron on erythropoiesis in older people with hip fracture.](#)**

Moppett IK, Rowlands M, Mannings AM, Marufu TC, Sahota O, Yeung J.

Age and Ageing, 2019 Sep;48(5):751-755

PMID: 31127269

Anaemia post-hip fracture is common and associated with worse outcomes. Intravenous (IV) iron is a potential non-transfusion treatment found to reduce transfusion rates in previous observational studies. This assessor-blinded, randomised, controlled trial of 80 patients with primary hip fracture and no contraindications to IV iron, examined the impact of IV iron on erythropoiesis post-hip fracture. The intervention group received 3 doses of IV iron on 3 separate days. primary outcome was reticulocyte count at 7 days and secondary outcomes included haemoglobin (Hb) concentration, complications and discharge destination. Results showed significantly greater reticulocyte count in the iron group vs. control at 7 days, but not final Hb concentration or transfusion rates. Functional and safety outcomes between groups were similar. Findings suggest although IV iron stimulates erythropoiesis post-hip fracture in elderly, the effect is too small and too late to affect transfusion rates.

3 **[Prospective Associations of Diet Quality With Incident Frailty in Older Adults: The Health, Aging, and Body Composition Study.](#)** [FULL ARTICLE ACCESS](#)

Hengeveld LM, Wijnhoven HAH, Olthof MR, Brouwer IA, Simonsick EM, Kritchevsky SB, Houston DK, Newman AB, Visser M.

J Am Geriatr Soc. 2019 Sep;67(9):1835-1842.

PMID: 31267522

Frailty is a clinical state of vulnerability with increased risk for adverse health outcomes. This prospective, cohort study of 2154 community-dwelling individuals aged 70-81 years, examined the link between diet quality indicators and 4-year frailty incidence. Diet quality was defined poor, medium and good based on the Healthy Eating Index, with energy and protein intake also considered. Patients were assessed at baseline and follow-up for frailty based on Fried's frailty phenotype and categorised as robust, pre-frailty and frail. It was found that poorer overall diet quality and lower vegetable protein intake may increase frailty risk with age. No association between energy intake, total or animal protein intake and frailty was noted.



4 [**The Attitudes Towards the Use of Restraint and Restrictive Intervention Amongst Healthcare Staff on Acute Medical and Frailty Wards-A Brief Literature Review.**](#)

Gunawardena R, Smithard DG.

Geriatrics (Basel). 2019 Sep 4;4(3), 50.

PMID: 31487923

Restraint is now often regarded as a rare last resort in non-psychiatric-based healthcare. It is considered a necessary evil for patient care and injury prevention. Its use may be underrecognized though, given indirect forms such as bed rails, tables or leaving mobility aids out of reach. Its adverse consequences range from physical to psychological (e.g. pressure sores, frustration). Although the reason for restraint is patient safety, it is often due to understaffing with inability to watch at-risk patients due to the large workload. Improving education on restraint-use and its alternatives allows for more ethical decisions and better patient care.

5 [**Subclinical Cardiovascular Disease and Fall Risk in Older Adults: Results From the Atherosclerosis Risk in Communities Study.**](#)

Juraschek SP, Daya N, Appel LJ, Miller ER, Matsushita K, Michos ED, Windham BG, Ballantyne CM, Selvin E.

J Am Geriatr Soc. 2019 Sep;67(9):1795-1802.

PMID: 31493355

Cardiovascular disease (CVD) is associated with greater fall risk, but it is unknown if pathways contributing to CVD are related to this increased risk. This prospective, cohort study of patients without history of coronary heart disease, heart failure or stroke found that after adjustment for confounding factors, raised high-sensitivity cardiac troponin T (hs-cTnT) and N-terminal pro b-type Natriuretic Peptide (NT-proBNP) have significant, independent associations with greater fall risk. Further research may determine if interventions lowering hs-cTnT or NT-proBNP may lower fall risk.

6 [**A Cluster Randomized Trial of Tai Chi vs Health Education in Subsidized Housing: The MI-WiSH Study**](#)

Lipsitz LA, Macklin EA, Trivison TG, Manor B, Gagnon P, Tsai T, Aizpurúa II, Lo OY, Wayne PM.

J Am Geriatr Soc. 2019 Sep;67(9):1812-1819.

PMID: 31116883

A cluster, randomised, controlled trial to determine if Tai Chi (TC) might improve physical function in older adults living in low-income housing facilities. 180 participants aged ≥ 60 years and able to walk independently were randomised to receiving TC classes 2X/ week or monthly health promotion educational classes and social calls. Primary outcome of physical function (measured by the Short Physical Performance Battery (SPPB)), as well as other secondary outcomes of physical and cognitive function, and falls were assessed. Interim analysis showed less improvement in SPPB scores in TC participants compared to control- meeting criteria for futility and recommended trial termination by the Data Safety Monitoring Board. Results indicate 6 and 12 months of TC classes did not improve functional health or demonstrate favourable differences with regard to secondary outcomes or adverse events, compared to control.



7 [Cross-Country Validation of the Association Between Oral Health and General Health in Community-Dwelling Older Adults.](#)

de Almeida Mello J, Tran TD, Krausch-Hofmann S, Meehan B, van Hout H, Turcotte L, van der Roest HG et. al

J Am Med Dir Assoc. 2019 Sep;20(9):1137-1142.e2.

PMID: 30979677

Oral health is associated with general health, but longitudinal relationships between indicators of the 2 have not been fully explored. Samples from 3 longitudinal databases over 14 countries were analysed. Patients aged ≥ 65 years and receiving long-term home care services were assessed for oral health (chewing difficulty, nonintact teeth and dry mouth), and the association with general health (activities of daily living (ADL) function, cognition, depression and health stability), at baseline and follow-up. It was found that dry mouth and nonintact teeth were significantly associated with almost all general health indicators, while chewing difficulty was significantly associated with poorer outcomes in all general health indicators. Results show poor oral health correlates with poor existing, and predicts poor future, general health- proving the need for oral health assessment and advice from oral health practitioners as part of multidisciplinary management.

8 [Advanced Glycation End Product Accumulation Is Associated With Low Skeletal Muscle Mass, Weak Muscle Strength, and Reduced Bone Density: The Nagahama Study.](#)

Tabara Y, Ikezoe T, Yamanaka M, Setoh K, Segawa H, Kawaguchi T, Kosugi S, Nakayama T, Ichihashi N, Tsuboyama T et. al

The Journals of Gerontology: Series A 2019 Sep 74(9):1446

PMID: 30329028

A study to identify a possible adverse association between advanced glycation end products (AGEs) and musculoskeletal (MSK) properties in a general population. 9203 patients of mean age 57.8 years were assessed for skeletal muscle mass, calcaneal bone mass and skin autofluorescence (SAF) AGE-accumulation. Patients ≥ 60 years were also assessed for upper and lower limb muscle strength and usual gait speed. Results showed the frequency of low skeletal muscle mass increased linearly with SAF-AGE quartiles and that this association was significant in the older subpopulation with an SAF-AGE in the highest quartile. Similar inverse associations were noted with grip-, hip flexion- and abduction- strengths, but not usual gait speed. Findings suggest AGE accumulation might be a deleterious factor for MSK properties.

9 [Multidomain Geriatric Screen and Physical Fitness Assessment Identify Prefrailty/Frailty and Potentially Modifiable Risk Factors in Community-Dwelling Older Adults.](#) FULL ARTICLE ACCESS

Tay LB, Chua MP, Tay EL, Chan HN, Mah SM, Latib A, Wong CQ, Ng YS.

Ann Acad Med Singapore. 2019 Jun;48(6):171-180.

PMID: 31377761

Frailty begins in middle life and manifests as declining functional fitness. This paper describes a model for community frailty screening, identifies factors associated with prefrailty and frailty as well as fitness measures distinguishing prefrail/frail from robust older adults. It also compares the FRAIL scale against the Fried frailty phenotype and FI. Community-dwelling adults ≥ 55 years old were designated robust, prefrail or frail using the FRAIL scale followed by a multidomain geriatric screen and physical fitness assessments. It was concluded that mood and nutrition are targets for frailty prevention, and physical fitness decline manifests differently between genders. The FRAIL scale may be a rapid screening tool, but studies are needed to evaluate its cut-off for frailty in Singaporean elderly.



SELF-LEARNING MODULES

Check out the Geriatrics [Self-Learning Modules](#) on the AMS website!

Unlimited attempts, with 5 CME points awarded on successful completion of each module.

