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John E. Morley

Treatment Strategies for Sarcopenia and Frailty 427
Yves Rolland, Charlotte Dupuy, Gabor Abellan van Kan, Sophie Gillette, and Bruno Vellas

Sarcopenia is the key feature of frailty in older people and a major determinant of adverse health outcomes such as functional limitations and disability. Resistance training and adequate protein and energy intake are the key strategies for the management of sarcopenia. Management of weight loss and resistance training are the most relevant protective countermeasures to slow down the decline of muscle mass and muscle strength. The quality of amino acids in the diet is an important factor for stimulating protein synthesis. Vitamin D deficiency should be treated, and new pharmacologic approaches for sarcopenia are currently assessed.

Chronic Heart Failure in Older Adults 439
Ali Ahmed

Assessment and management of heart failure (HF) in older adults may be simplified and structured by the mnemonic DEFEAT-HF: Diagnosis, Etiology, Fluid volume, Ejection fraction, And Treatment of Heart Failure. A clinical diagnosis and etiology of HF can often be established during history and physical examination. Fluid volume status must be assessed by estimating jugular venous pressure in centimeters of water by identifying the top of the jugular venous pulsation in the neck and estimating its vertical height from the right atrium. Left ventricular ejection fraction must be obtained to classify patients into systolic and diastolic HF and to guide evidence-based therapy.

Revitalizing the Aged Brain 463
Abhilash K. Desai

Optimal cognitive and emotional function is vital to independence, productivity, and quality of life. Cognitive impairment without dementia may be seen in 16% to 33% of adults older than 65 years, and is associated with significant emotional distress. Cognitive and emotional well-being are inextricably linked. This article qualifies revitalizing the aged brain, discusses neuroplasticity, and suggests practical neuroplasticity-based strategies to improve the cognitive and emotional well-being of older adults.

Nutritional Strategies for Successful Aging 477
Jean Woo

With increasing life expectancy in developed and developing countries, maintaining health and function in old age has become an important
goal, including avoidance or optimal control of chronic diseases; maintenance or retarding the decline of physical and cognitive function; optimizing psychological health; and maintaining independent functioning in tasks related to self-care and societal interaction. This article discusses all of these, as well as other components of successful aging such as social network and socioeconomic status.

Falls, Osteoporosis, and Hip Fractures

Lenise A. Cummings-Vaughn and Julie K. Gammack

Osteoporosis and falls are distinct conditions that share the potential clinical endpoint of fracture. This article explores the associations between osteoporosis and falls by examining the epidemiology, risk factors, risk prevention, and treatments. It outlines the evidence on falls prevention, osteoporosis diagnosis, and fracture risk assessment. It includes several studies that challenge the common view on the use of fall prevention tools, dual energy X-ray absorptiometry testing, and postfracture bisphosphonate treatment. By understanding the evidence, it becomes clearer how to target populations at risk, interpret screening methods, and promote disease prevention and treatment.

Late-Onset Hypogonadism

Nazem Basil

Late-onset hypogonadism is a clinical and biological syndrome associated with advancing age and characterized by typical symptoms and a deficiency in serum testosterone levels. It is a common condition but often underdiagnosed and undertreated. The main symptoms of hypogonadism are reduced libido/erectile dysfunction, reduced muscle mass and strength, increased adiposity, osteoporosis/low bone mass, depressed mood, and fatigue. Testosterone replacement therapy is only warranted in the presence of both clinical symptoms suggesting hormone deficiency and decreased hormone levels. It improves libido and sexual function, bone density, muscle mass, body composition, mood, erythropoiesis, cognition, quality of life, and cardiovascular disease.

Hypertension: How Does Management Change with Aging?

Milta O. Little

Hypertension is a significant risk factor for cardiovascular morbidity and mortality in people older than 60 years. Isolated systolic hypertension and widened pulse pressure appear to be more important than diastolic hypertension. Very low blood pressure and orthostatic hypotension are associated with increased mortality, and should be checked for at every visit. Best evidence suggests that adjusting hypertension goals with age, and starting therapy when blood pressure is greater than 160/90 leads to improved outcomes. Therapy should start with a thiazide diuretic (best evidence) or an angiotensin-converting enzyme inhibitor.
Incontinence 539
Alayne D. Markland, Camille P. Vaughan, Theodore M. Johnson II, Kathryn L. Burgio, and Patricia S. Goode

Urinary incontinence is a common problem among older women and men. Older adults are reluctant to seek treatment, and health care providers should inquire about symptoms. Treatment of urinary incontinence includes multiple, office-based modalities, such as behavioral approaches, medications, and devices. Older adults may also consider surgical options to improve urinary incontinence. Special consideration should be given to older adults with cognitive impairment and incontinence.

The Evaluation and Management of Delirium Among Older Persons 555
Joseph H. Flaherty

This article reviews the pathophysiology, prevalence, incidence, and consequences of delirium, focusing on the evaluation of delirium, the published models of care for prevention in patients at risk of delirium, and management of patients for whom delirium is not preventable. Evidence on why physical restraints should not be used for patients with delirium is reviewed. Current available evidence on antipsychotics does not support the role for the general use in the treatment of delirium. An example of a restraint-free, nonpharmacologic management approach [called the TADA approach (tolerate, anticipate, and don’t agitate)] is presented.

Weight Loss in Older Persons 579
Ian M. Chapman

Weight loss is common in older people. It is associated with increased morbidity and mortality, particularly when unintentional, excessive (>5% body weight), or associated with low body weight (body mass index <22 kg/m²). It is often unrecognized, the associated adverse effects not appreciated, and underlying causes not addressed. Intentional weight loss by overweight older people is probably appropriate only when functional problems have resulted from the excess weight. It is important to include, wherever possible, exercise in weight-loss measures to preserve skeletal muscle mass.

Medical Care in the Nursing Home 595
Debbie Tolson and John E. Morley

With the advent of the graying of the baby boomers, there is an urgent need to enhance care in the nursing home. This article focuses on the areas where high-quality care can improve outcomes.

Diabetes and Insulin Resistance in Older People 615
Adie Viljoen and Alan J. Sinclair

Diabetes is a common condition in older people. Diabetes significantly lowers the chances of successful aging, and notably increases functional limitations and impairs quality of life. Diabetes in older persons represents significant medical, human, and socioeconomic burden. Multiple
interventions are now available to treat patients with diabetes. Clinicians have to weigh the risks and benefits of the treatments available to prevent these complications. This article discusses the pathophysiology, diagnosis, and vascular complications of diabetes and summarizes the various risk factors that are the focus of clinical care.