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UNINTENTIONAL WEIGHT LOSS

Unintentional weight loss in older adults is associated with increased morbidity and mortality. More than a 5% reduction in body weight within 6 to 12 months is the definition of unintentional weight loss. It occurs in 15% to 20% of older adults, and up to 50% to 60% of residents in aged care facilities. Unintentional weight loss should be considered a marker for serious illness as it can lead to loss of function, increased hip fracture in women, increased in-hospital morbidity and increased overall mortality. Medication use and polypharmacy can contribute to unintentional weight loss.

Etiology

Body composition changes with age. Lean body mass begins to decrease around 30 years of age, with gains in fat mass that continue until 65 to 70 years of age. Total body weight usually peaks at 60 years of age with small decreases of around 0.1 to 0.2kg per year considered normal after 70 years of age. Other physiological changes considered part of normal ageing include:

- Decreased bone mass
- Decrease in basal metabolic rate
- Changes in smell and taste
- Slowed gastric emptying
- Reduced efficiency of chewing
- Early satiation

Cachexia (loss of skeletal muscle rather than body fat) can contribute to adverse outcomes through increased rates of infection, poor wound healing, pressure sores, reduced responses to treatment and increased risk of mortality. However, it is important to recognise that weight loss is not a normal part of ageing.

Medical history

Evaluation of unintentional weight loss in older people should start with an appropriate history, focusing on sense of smell, food intake, swallowing, dental pain, and symptoms of depression. Physical examination should focus on oral-cavity examination.

Causes

Causes of unintentional weight loss can be classified as physiological or psychosocial. The most common causes are due to malignancies, non-malignant gastrointestinal disease and psychiatric conditions such as depression and dementia. Physiological factors include disease-related issues, medication-related issues, functional problems, and intake-related issues. Underlying frailty is also a cause - weight loss is one of general frailty diagnostic criteria. The mnemonic **MEALS ON WHEELS** is useful to recognise the many causes of unintentional weight loss:

M edication effects
E motional problems
A norexia nervosa, alcoholism
L ate-life paranoia
S wallowing disorders

O ral factors
N o money

W andering and other dementia-related behaviours
H yper-and hypo-thyroidism, hyperparathyroidism, hypoadrenalism
E nteric problems
E ating problems
L ow salt, low cholesterol diet
S tones, social problems

Another list of causes of weight loss in the elderly uses the 9 Ds:

- Depression
- Dementia
- Disease
- Dysphagia
- Dysgeusia
- Drugs
- Diarrhoea
- Dentition
- Dysfunction

Medication-related causes

There are many potential medication-related causes of weight loss. Medication reviews and appropriate deprescribing are important for managing medication-related weight loss. Factors related to medication causes include:

continued over

- Anorexia
- Nausea and vomiting
- Dysphagia (difficulty or discomfort in swallowing)
- Dysgeusia (distortion of the sense of taste)
- Dysosmia (alteration or distortion of the perception of smell)

Many medicines commonly used in older people may cause anorexia, including, antibiotics, digoxin, opioids, SSRI antidepressants, anticonvulsants, antipsychotics, metformin and benzodiazepines. Most of these medicines also contribute to nausea and vomiting, which if prolonged, can lead to weight loss: antibiotics, bisphosphonates, digoxin, dopamine agonists, levodopa, metformin, opioids, SSRI and tricyclic antidepressants. Altered or loss of taste or smell is often an insidious and under recognised cause of reduced food intake. Loss of smell occurs more frequently than loss of taste. In about 40% of older people the ability to smell is significantly reduced. People may confuse "flavour loss" with "taste loss". Flavour loss occurs as a result of smell impairment, whereas taste loss is impaired ability to sense sweet, sour, salty, bitter or savory (umami).

ACE inhibitors, calcium channel blockers, propranolol, spironolactone, iron supplements, opioids, allopurinol, griseofulvin, and metronidazole may contribute to altered taste or smell. Dysphagia (difficulty or discomfort in swallowing) is relatively common among residents in aged care facilities. Bisphosphonates (alendronate, risedronate, zolendronic acid), some antibiotics, levodopa, gold, iron supplements, NSAIDs and potassium supplements are associated with dysphagia.

Perhaps the most common cause of medication-related weight loss is dry mouth or xerostomia. Symptoms and clinical signs of dry mouth include sticky, dry feeling in mouth; burning feeling or sensation in mouth; cracked lips and sores in corners of mouth; bad breath; dry, rough tongue; mouth sores and ulcers; susceptibility to oral thrush infections; altered sense of taste; difficulty speaking or swallowing; increased plaque, tooth decay and gum disease; and poorly fitting dentures.

Medicines with anticholinergic activity are often associated with dry mouth. It is often the cumulative burden of multiple drugs with anticholinergic activity that clinically presents as a problem. Regular as well as prn medicines should be considered. Some over-the-counter medicines such as cough and cold products and complementary medicines also have anticholinergic activity. Medicines with high anticholinergic activity include tricyclic antidepressants, antihistamines, cough and cold preparations, antispasmodics, skeletal muscle relaxants, antidiarrheals, antiemetics, travel sickness drugs and some anti-parkinson drugs. The Anticholinergic Cognitive Burden Scale (ACB) is a tool to quantify the severity of the anticholinergic burden. Higher scores are associated with an increase in emergency department visits, hospitalisations (all-cause and fracture-specific) and incident dementia. A score of 3 or more is associated with an increase in cognitive impairment and mortality.

Management of unintended weight loss

The most important management strategy for unintended weight loss is to identify and treat the underlying causes or illness. Optimal management often includes referral to a dentist, dietitian or speech pathologist. A medication review to identify medicines whose side effects may contribute to weight loss is important.

If depression or anxiety is one of the underlying causes, appropriate assessment and either non-pharmacological and/or pharmacological treatment should be sought. Mirtazapine in low daily doses can increase appetite and lead to weight gain, as well as having beneficial effects of mood. Nutritional and pharmacological interventions are of limited value. Megestrol, cannabinoids, nutritional supplements, enteral or parenteral feeding and use of multivitamins have been trialled with varying success.

References

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