Webstercare Continuing Education

Consultant Pharmacist Continuing Education Series | August 2021

UNPLANNED WEIGHT LOSS

Unplanned, unexplained or unintentional weight loss in older adults is associated with increased morbidity and mortality. Unintentional weight loss occurs in 15-20% of older adults, and 13- 30% of aged care residents experience unplanned weight loss.

Unplanned weight loss should be considered a marker for serious illness as it can lead to loss of function, increased hip fracture in women, poor wound healing, increased in-hospital morbidity and increased overall mortality.

Unplanned weight loss is usually defined as loss of at least 5% of usual body weight over 6 to 12 months. Sudden weight loss requires immediate medical attention. From 1 July 2021, unplanned weight loss is a quality indicator, as part of the National Aged Care Mandatory Quality Indicator Program (QI Program). Significant unplanned weight loss is measured by the loss of 3kg or more over a 3-month period. Consecutive unplanned weight loss is the loss of any amount of weight every month over 3 consecutive months.

Weight loss is associated with many chronic conditions. Medication use and polypharmacy can contribute to unplanned weight loss.

Age-related weight loss

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.

Assessment

Evaluation of unplanned weight loss in older people should start with an appropriate medical and dietary history, focusing on sense of smell, food intake, swallowing, dental pain, and symptoms of depression. Physical examination should focus on oral and dental assessment. Assessment of functional ability, for example ability to ear and drink, and what assistance is required with meals, is also important.

Causes

Causes of unplanned weight loss can be classified as physiological or psychosocial. The most common causes are due to malignancies, non-malignant gastrointestinal disease and psychological conditions such as depression and dementia. Dementia can cause cognitive, behavioural and physical changes that can contribute to weight loss. Physiological factors include disease-related issues, medication-related issues, functional problems, frailty and intake-related issues.

There are many causes of weight loss in the older persons.

A useful summary is the 9 Ds:

- Depression
- Dementia
- Disease (acute and chronic)
- Dysphagia
- Dysgeusia
- Drugs
- Diarrhoea
- Dentition
- Dysfunction (functional disability)

Medication-related causes

Many commonly prescribed medications can contribute to weight loss, due to side effects including anorexia, nausea and vomiting, dysphagia, dysgeusia (distortion of the sense

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of taste) and dysosmia (alteration or distortion of the perception of smell).

Anticonvulsants such as topiramate (Topamax) and bupropion (Zyban SR, Contrave) can cause weight loss as a result of appetite suppression.

Metformin can cause weight loss due to dose-related common side effects, such as nausea, vomiting, anorexia and diarrhoea. Newer classes of medicines for treating type 2 diabetes are associated with significant weight loss. SGLT2 inhibitors (dapagliflozin, empagliflozin, ertugliflozin) may cause modest weight loss (2-3kg) in people who are overweight or obese. GLP-1 analogues (dulaglutide, exenatide, liraglutide, semaglutide) commonly cause nausea and vomiting, especially when commenced. This class of medicines can also cause significant weight loss (2-5kg over about 30 weeks) in those who are overweight or obese.

Anorexia

Many medicines commonly used in older people may cause anorexia, including, antibiotics, digoxin, opioids, SSRI antidepressants, anticonvulsants, antipsychotics, metformin and benzodiazepines.

Nausea and vomiting

Certain antibiotics, bisphosphonates, digoxin, dopamine agonists, levodopa, metformin, opioids, and SSRI and tricyclic antidepressants may contribute to nausea and vomiting, which if prolonged, can lead to weight loss.

Dysphagia

Dysphagia or difficulty or discomfort in swallowing is relatively common among residents in aged care homes. Bisphosphonates (alendronate, risedronate, zolendronic acid), some antibiotics, levodopa, gold, iron supplements, NSAIDs and potassium supplements are associated with dysphagia.

Taste and smell

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.

Dry mouth

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 often cause a dry mouth. 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’s drugs.

Management of unintended weight loss

The most important management strategy for unplanned weight loss is to identify and treat the underlying causes or illness. Optimal management often includes referral to a dentist, dietitian and speech pathologist. Residential Medication Management Reviews (RMMR) can identify medications associated with weight loss.

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, medicinal cannabis, and use of multivitamins have been trialled with varying success. Nutritional supplements should be used to supplement rather than replace regular meals.

References

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