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 0.2 kg 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:

- Medication effects
- Motional problems
- Anorexia nervosa, alcoholism
- Late-life paranoia
- Wallowing disorders
- Oral factors
- No money
- Wandering and other dementia-related behaviours
- Hyper-and hypo-thyroidism, hyperparathyroidism, hypoadrenalism
- Eating problems
- Low salt, low cholesterol diet
- Tonics, 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:
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.

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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