Abnormal Weight Loss

Unintentional weight loss is a decrease in body weight that is not voluntary. Weight loss is a very nonspecific symptom but may be indicative of a serious underlying pathology. Weight loss will occur with inadequate food intake, malabsorption, increased metabolism, or a combination of factors.

Aetiology

There are many causes of abnormal weight loss, including:[1]

- **Loss of appetite and conditions that prevent food consumption** - for example:
  - Dysphagia.
  - Painful mouth sores.
  - Newly applied orthodontic appliances, or loss of teeth.

- **Persistent vomiting** - for example:
  - Pyloric stenosis.
  - Hiatus hernia.

- **Malabsorption** - for example:
  - Coeliac disease.[2]
  - Chronic pancreatitis.
  - Crohn's disease.
  - Gastrointestinal infection.
  - Gastrointestinal fistulas.
  - Carcinoid disorders.
  - Intestinal hypermotility.
  - Hepatobiliary disease.
  - Food intolerance.

- **Medication** - especially polypharmacy in the elderly.[3]

- **Endocrine** - for example:
  - Diabetes mellitus.
  - Hyperthyroidism.
  - Addison's disease.
  - Gut hormone tumours (eg, VIPoma).

- **Malignancy** - for example:
  - Lymphoma.
  - Leukaemia.
  - Carcinoma.
  - Sarcoma.

- **Systemic disease** - for example:
  - Heart failure.
  - Chronic respiratory disease.
  - Chronic kidney disease.
  - Liver failure.
  - Rheumatoid arthritis.
  - Systemic lupus erythematosus.

- **Acute infection.**
- **Chronic infections and infestations** - for example:
  - Tuberculosis.
  - HIV (one in ten in one study).\[^4\]
  - Parasitic infections.

- **Drug abuse, heavy smoking.**
- **Malnutrition, social isolation.**
- **Psychological** - for example:
  - Stressful life events.
  - Depression.
  - Anorexia nervosa.
  - Psychoses.
  - Manipulative behaviour, food phobias.

- **Parkinson's disease.\[^5\]**

### Presentation

- Patients may realise themselves that they have lost weight or this may be brought to their attention by friends or family.
- A clinician may note that the patient has dramatically lost weight or notice that their clothing is loose-fitting.
- The clinical assessment includes both consideration of possible physical causes as well as careful evaluation of possible psychological causes such as depression. It is very important to avoid inappropriate, unnecessary and potentially harmful investigations.
- The presentation will depend on the underlying cause.
- A thorough history and examination are essential in establishing the underlying cause and identifying appropriate investigations.
- Associated symptoms may include:
  - Gastrointestinal symptoms.
  - Lethargy, weakness.
  - An underlying condition - eg, respiratory, neuromuscular.
  - Alcohol or drug abuse.
  - Dementia - mental state assessment may be indicated.
  - Anorexia nervosa.

### Differential diagnosis

Severe generalised muscle wasting is also seen as part of a number of degenerative neurological and muscle diseases and in cardiac failure (cardiac cachexia).

### Investigations

- **FBC:** reduced haemoglobin may occur with chronic disease, malabsorption, chronic kidney disease, liver failure.
- **Raised erythrocyte sedimentation rate (ESR):** nonspecific indicator of disease, malignancy, infection, connective tissue disorder.
- **Renal function and electrolytes:** may indicate chronic kidney disease, Addison's disease.
- **Fasting blood glucose:** diabetes mellitus.
- **LFTs, clotting screen:** liver failure.
- **TFTs:** thyrotoxicosis.
- **CXR:** malignancy, tuberculosis.

Other investigations will depend on the context of the weight loss. Possible further investigations may include HIV serology, endoscopy and autoimmune disease screen.
Management

- Any suspicion of cancer as the underlying cause should prompt urgent referral for further assessment in secondary care. [6]
- Management is otherwise directed at the cause of weight loss and may include physical, psychological and social (eg, ‘meals at home scheme’, respite care) interventions.
- The elderly are particularly at risk and nutritional evaluation should be part of any routine geriatric assessment. [7]

Complications[1]

- Elderly patients with unintentional weight loss are at higher risk of infection and depression.
- Abnormally low body weight is a predictor of increased mortality.

Further reading & references


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