A 2-step procedure determined diagnosis in patients with unexplained weight loss

Lankisch PG, Gerzmann M, Gerzmann JF, Lehnick D. **Unintentional weight loss: diagnosis and prognosis. The first prospective follow-up study from a secondary referral centre.** J Int Med. 2001 Jan;249:41-6.

QUESTION

In patients hospitalized with unexplained weight loss (≥ 5% of usual body weight), what are the relative frequencies of different causes?

DESIGN

Cohort study with a mean follow-up of 22 months.

SETTING

A secondary referral center in Lüneburg County, Germany.

PATIENTS

158 patients who were ≥ 18 years of age (mean age 68 y, 56% women) and had a weight loss of ≥ 5% of usual body weight ≤ 6 months before hospitalization. Exclusion criteria were weight loss from a known cause or voluntary weight loss. Follow-up was complete.

DIAGNOSTIC STRATEGY

A 2-step diagnostic procedure was followed. While in the hospital, all patients received the first step: history and physical examination, chest radiography, electrocardiography, abdominal ultrasonography, standard laboratory tests, and tests for hyperthyroidism and occult blood in the feces. Patients undiagnosed after the first step received secondary diagnostic tests determined on the basis of results from the first step: Tests included gastroscopy, colonoscopy, fecal weight and fat estimations, and for cause of malabsorption (duodenoscopy, secretin-pancreozymin testing, and enteroclysis when necessary) where indicated.

MAIN OUTCOME MEASURE

Diagnosis from the 2-step procedure.

MAIN RESULTS

During hospitalization, the 2-step procedure achieved a diagnosis for 132 patients (84%) (Table). During follow-up, causes were determined for 7 of the 26 patients without a diagnosis from the 2-step procedure: hyperthyroidism (n = 2), diabetes (n = 2), depression (n = 2), and voluntary weight loss (1 patient who had denied dieting at study inception).

CONCLUSION

In patients hospitalized with unexplained weight loss, a 2-step procedure provided a diagnosis in 84%.

Source of funding: Not stated.

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Diagnosis from a 2-step procedure in 158 patients hospitalized with unexplained weight loss

Diagnosis	Patients
Total malignant diseases	24%
Gastrointestinal tract	12.7%
Respiratory tract	4.4%
Malignant lymphoma	2.5%
Cancer of unknown primary syndrome	1.3%
Prostatic carcinoma	1.3%
Breast carcinoma	0.6%
Ovarian carcinoma	0.6%
Bladder carcinoma	0.6%
Total somatic disorders	49%
Gastrointestinal diseases	19%
Endocrine diseases	11.4%
Cardiopulmonary diseases	10.1%
Alcohol-induced malnutrition	5.1%
Rheumatic diseases	2.5%
Other	0.6%
Total psychological disorders	11%
Total unknown cause	16%

COMMENTARY

In this study of a differential diagnosis for unexplained weight loss, Lankisch and colleagues are to be commended for exploring a clinical condition that has not been extensively covered in the medical literature. Despite attempts to develop evidence-based protocols and algorithms for the most cost-effective and efficient diagnostic and therapeutic management of other common presenting problems, unexplained weight loss has not been well studied.

Although some of the conclusions of the study are not surprising, the transferability of the findings from a German population to other populations needs further substantiation. In many locales, it is routine to check all patients with unexplained weight loss for infection, obtain a computed tomographic image of the abdomen to exclude occult malignancies, and evaluate for depression. However, such diagnostic tests as secretin-pancreozymin are rarely done. Stratifying patients by age might have given a better indication for cause because unexplained weight loss tends to have different causes in different age groups.

Establishing a cause-and-effect relationship between the findings and the weight loss can be difficult for some disorders, such as cancer of the prostate, although not in others, such as gastrointestinal diseases. The authors also note that, independent of the diagnosis, most surviving patients (96%) did not continue to lose weight. It is not obvious what to make of this observation, considering that it excludes the 50 (32%) patients who died in follow-up. Regardless of the shortcomings, the study by Lankisch and colleagues provides some direction in evaluating patients with a common presenting problem in primary care settings.

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