

Chapter 5

Constitutional Symptoms***Overview***

Advanced HIV disease is characterised by a range of constitutional symptoms that compromise physical performance and a sense of well-being in many patients. The most common symptoms are fever, weight loss, fatigue, and sweating. A variety of aetiologies may contribute to these symptoms, including HIV disease, opportunistic infections, malignancies, and drug-related toxicities.

Aggressive symptom management can improve quality of life, particularly in the late stages of HIV disease. To ensure optimal patient care, clinicians should combine interventions to control uncomfortable constitutional symptoms with HIV-specific and other palliative interventions.

As in management of all HIV-related symptoms, attempts should be made to diagnose and, where possible, treat the underlying causes. However, options may be limited and symptoms may be caused by the side effects of treatment itself. In many cases, antiretroviral therapy (ART) will alleviate some symptoms. But even patients on ART may experience these symptoms as a result of pre- or co-existing morbidities or toxicities related to the drugs themselves. In the latter case, an effort to treat these symptoms may result in better treatment adherence.

Although constitutional symptoms are not usually life-threatening in themselves, they may be significant factors eroding a patient's comfort and quality of life. Addressing the aetiologies but also relieving these symptoms throughout the course of HIV disease is an important component of comprehensive patient management. As in all palliative care, the possible benefits and burdens of treatments for constitutional symptoms should be weighed. Where life expectancy is short and maximising quality of life is an important goal, the possible long-term side effects of treatment become less relevant.

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At a Glance

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Suggested Resources

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Constitutional Symptoms

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Weight Loss and Wasting

Assessment

Weight loss is an extremely common symptom in HIV infection. The wasting syndrome, an AIDS-defining diagnosis, is defined as loss of >10% of baseline body weight together with fever or diarrhoea for more than 30 days. Several factors may contribute to weight loss and malnutrition in HIV infection (see Table 5.1 and Figure 5.1).

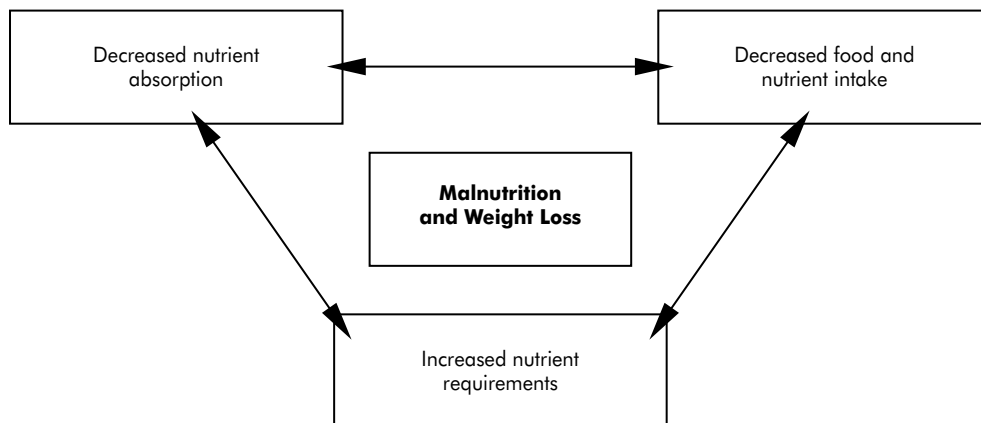
Determine which factors have caused the weight loss in order to intervene appropriately. A patient suffering from inadequate food intake because of food scarcity or poverty has very different needs than a patient with disease-related weight loss.

Rapid weight loss tends to accompany opportunistic infections (OIs), whilst progressive weight loss occurs more typically in advanced HIV and may be more suggestive of underlying gastrointestinal pathology.

Table 5.1: Possible Causes of Weight Loss and Malnutrition in HIV Infection

Factor	Possible Causes
Decreased intake of nutrients	Socio-economic factors such as insufficient resources to procure food Dysphagia or odynophagia resulting from: Candida infection Cytomegalovirus infection Herpes simplex virus infection Aphthous ulceration Anorexia, nausea, or vomiting resulting from: Infection Malignancy Drug side effects Pain Emotional factors (depression, loneliness or grief) Dementia
Excessive nutrient loss	Chronic infections Malabsorptive or drug-related diarrhoea
Metabolic dysregulation leading to increased nutrient requirements	Hypogonadism Relative growth hormone deficiency Alterations in cortisol mechanism

Source: Adapted from Grinspoon, 1996.

Figure 5.1: Factors That Contribute to HIV-Related Weight Loss and Malnutrition

Note: Decreased food and nutrient intake may be caused by socioeconomic issues such as poverty, lack of food security, or low social status in the family.

Management

Treating Reversible Causes

Address potentially reversible causes of inadequate intake and nutrient loss, such as infections (see other clinical chapters), drug side effects (see Chapter 11: Pharmacology) and food scarcity (see Chapter 19: Nutrition and Chapter 24: Financial and Legal Issues).

If available, ART will reverse the weight loss and malnutrition in the majority of cases, but in a significant proportion of patients there may be unrelenting wasting despite good therapy (Wanke, 2000).

Non-Pharmacological Symptom Control

Increase caloric intake: The first step in managing HIV-related weight loss is to work with the patient and family to increase the patient's caloric intake, especially energy and protein intake to maintain body weight and lean body tissue (muscle bulk) in the face of increased metabolic demand (see Chapter 19: Nutrition). This may involve assisting the family to obtain food supplements, if the food supply is inadequate, or working with the patient to identify ways increase his or her intake.

Manage symptoms: Address symptoms contributing to weight loss (see Table 5.2).

Encourage exercise and mobility as appropriate: Exercise may be useful to enhance appetite, increase lean body mass, and improve the sense of well-being.

Address depression: Listening and providing practical assistance with the patient's real problems may help (see the chapters in Part 3, Psychosocial/Spiritual and Traditional Care). Actively looking for and aggressively treating depression may alleviate some of the symptoms such as appetite, weight loss, and fatigue.

Table 5.2: Strategies for Management of Symptoms Causing Weight Loss

Symptom	Dietary Advice
Loss of appetite	<p>Drink high-energy drinks (e.g., milk or sour milk — maas and mageu in South Africa; bongo in Uganda).</p> <p>Eat small, frequent meals.</p> <p>Use alcohol in moderation preceding a meal (Caton, 2004).</p> <p>Encourage exercise if possible.</p> <p>See also Chapter 19: Nutrition.</p>
Nausea and vomiting	<p>Eat small, frequent meals.</p> <p>Restrict intake of fluids after meals.</p> <p>Eat cold foods or food at room temperature.</p> <p>Avoid excessively fatty meals.</p> <p>Avoid lying down after eating.</p> <p>Use locally available herbal remedies.</p> <p>See also Chapter 7: Gastrointestinal Symptoms.</p>
Sore mouth/throat	<p>Eat soft moist foods, (e.g., mashed potato, minced meat).</p> <p>Use margarine, butter, or gravy to moisten cooked food (if diarrhoea not present).</p> <p>Avoid sticky foods, (e.g., peanut butter).</p> <p>Avoid dry, rough foods, (e.g., raw vegetables).</p> <p>Avoid citrus fruits (e.g., pineapple, tomato) and spicy foods.</p> <p>Eat foods either cold or at room temperature.</p> <p>See also Chapter 8: Mouth Care.</p>
Diarrhoea	<p>Eat small, frequent meals.</p> <p>Drink plenty of isotonic fluids.</p> <p>Decrease/avoid milk and dairy products.</p> <p>Fermented dairy products may be tolerated, (e.g., maas).</p> <p>Decrease high-fat foods, (e.g., vetkoek).</p> <p>Include foods high in soluble fibre, (e.g., bananas, oats).</p> <p>Avoid caffeine, (e.g., coffee).</p> <p>See also Chapter 7: Gastrointestinal Symptoms.</p>

Pharmacological Symptom Control

Corticosteroids can improve appetite, reduce nausea and vomiting, and improve mood and overall quality of life (see Box 5.1). Use lowest effective dose, and once benefit is obtained, reduce dose to the minimal level that will maintain the beneficial effect (short-term side effects may include hyperglycemia, fluid retention, and psychosis). Corticosteroids are best reserved for patients with short life expectancy and severe symptoms. Options include:

dexamethasone: initiate at 4–16 mg/day PO or SC in 1 to 2 doses

prednisolone: initiate at 20–80 mg/day PO

Box 5.1:

Use of Corticosteroids to Treat Constitutional Symptoms

Corticosteroids are effective in alleviating many of the constitutional symptoms of HIV disease. They can improve appetite and food intake and reduce pain, nausea, vomiting, and fatigue whilst improving mood, performance status, and overall quality of life. These beneficial effects are temporary. Also, the serious side effects from corticosteroid usage increase with time (gastrointestinal bleeding, adrenal insufficiency, myopathy, immune suppression). Therefore, it is prudent to generally prescribe short-course therapy and to reserve prolonged use for patients with short life expectancy and severely distressing symptoms.

Despite the benefits of corticosteroids, many clinicians hesitate to use them in patients with HIV. It is feared that they will exacerbate the immunosuppression caused by HIV disease, possibly leading to OIs or the exacerbation of TB. However, anecdotal experience of HIV palliative care experts indicates that a short course of corticosteroids can improve the patient's quality of life without leading to complications, and that low doses can increase appetite and weight. In fact, with advanced HIV disease, some patients develop adrenal insufficiency without accompanying positive laboratory test results. In this situation, a 3–4 week course of corticosteroids is especially appropriate.

Fatigue

Assessment

Fatigue is a very common symptom and often is a presenting complaint at all stages of HIV infection. A frequent cause of inability to work, it can severely compromise quality of life by decreasing physical performance and causing psychological distress. Fatigue is usually multifactorial and aetiologies may include anaemia, coexistent infections, medication side effects, wasting, depression, insomnia, organ failure, malignancy, or simply advancing HIV infection.

Management

Treating Reversible Causes

Define specific aetiologies and treat them where possible. For example, if specific deficiencies are shown to be present, anaemia may be treated by correcting the deficiency directly (e.g., with iron, B12, or folate).

Non-Pharmacological Symptom Control

Use caffeine (found in coffee, tea, and cola drinks) as a stimulant. Recognize and treat any depression (see Chapter 10: Neuro-Psychiatric Problems). Treat insomnia and poor sleep patterns to decrease daytime fatigue. Embark on an exercise program appropriate to the patient's condition, such as a daily walk.

Pharmacological Symptom Control

When non-pharmacological interventions are insufficient, alternative strategies include the use of corticosteroids or, if available, psychostimulants.

Corticosteroids: Corticosteroids have been shown to temporarily improve fatigue and well-being in cancer patients. Advanced patients with disseminated *Mycobacterium avium* complex (MAC) who have had progressive disease despite antimycobacterial therapy have shown rapid decrease in fever, fatigue, and night sweats on low-dose dexamethasone therapy. For dosing see section above on Weight Loss and Wasting.

If available, consider psychostimulants:

Methylphenidate is used to treat fatigue or depression in palliative care with advanced disease (Rozans, 2002). It is especially useful where rapid onset of action is required due to limited life expectancy. In frail patients commence with 2.5–5 mg PO in the morning, increasing to twice daily in the morning and at noon. Maximum daily dosage is 60 mg/day, avoiding dosing after mid-day. The drug should be used with caution in patients with anxiety, delirium, agitation, or tachyarrhythmias.

Fever and Sweats

Assessment

Fever and sweating may be another unpleasant symptom accompanying late-stage HIV disease, although malaria is also a common cause. Fever may be caused by opportunistic infections (especially tuberculosis), HIV infection, HIV-associated malignancies, and drugs (cotrimoxazole), to name a few. Whilst fever is usually accompanied by sweating, both symptoms can occur independently of each other.

Management

Treating Reversible Causes

If possible, identify and treat the underlying aetiology of fever and sweats, such as malaria.

Non-Pharmacological Symptom Control

Cooling measures include fans and moist, cool cloths to maintain body temperature in a comfortable range. Keep a patient warm and dry to help to reduce chills and shivering. Increase liquid intake to maintain hydration (see Chapter 7: Gastrointestinal Symptoms for more on rehydration fluids).

Pharmacological Symptom Control

Antipyretics: Paracetamol is the most commonly used antipyretic. Non-steroidal anti-inflammatory agents (NSAIDs) are especially useful in patients in whom fevers are related to malignancies or an inflammatory process (ibuprofen, diclofenac). In severe unremitting fever, paracetamol may be added to NSAIDs and given alternately 3 hourly. Corticosteroids may be tried in refractory cases. Options include:

paracetamol 650–1000 mg PO or PR 6 hourly around the clock
diclofenac 25–50 mg 3 times/day or 100 mg PR nocté
ibuprofen 200–600 mg PO 6 to 8 hourly

NSAIDs are especially useful when there is an underlying malignancy. Reduce GI toxicity by giving with antacids or cytoprotective agents.

If available, consider the following:

Anticholinergics: Where sweating is troublesome and otherwise difficult to control, agents such as scopolamine (0.2–0.6 mg SC 1–4 hourly) or hyoscyamine (0.125–0.25 mg PO 1–4 hourly) may be tried especially where sweats are unrelated to fever. Alternatively, glycopyrrolate, an anticholinergic with minimal central nervous involvement (1–2 mg PO once daily, up to 3 times/day), or cimetidine (400–800 mg PO 2 times/day) can also be tried.

Parenteral rehydration: If sweats cause electrolyte and fluid loss then the clinician should weigh up the benefits and burdens of aggressive rehydration in the face of prognosis and patient wishes.

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Suggested Resources

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