

Chapter 3

Principles of Clinical Assessment

Overview

Assessment of a patient's clinical status is a complex process typically carried out by health professionals. However, perhaps other health care workers (HCWs) should be taught this skill given the scope of the HIV/AIDS pandemic and the need for the most effective use of limited resources and professional skills. Development of assessment skills among a broader number of health professionals and other HCWs would enhance their effectiveness, heighten their professional fulfilment, and reduce staff 'burn out'.

This chapter describes a general approach to clinical assessment that is appropriate for holistic palliative care. The specific process of assessing patients is addressed in the relevant chapter for each body system. Ordinarily, assessment can be streamlined according to the context and patient situation, avoiding an exhaustive 'laundry list' approach at each visit. However, the needs of a patient at the end of life change as body systems change. Here each domain requires attention at repeated visits (see Box 3.1).

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New Roles for Health Professionals

In sub-Saharan Africa, where three quarters of the world's people with HIV/AIDS live, new strategies are essential to deal with this growing health care challenge. Ideally it is the doctor who assesses the patient and prescribes the necessary medication. There are, however, too few doctors in Africa to cope adequately with the needs of all the patients with HIV/AIDS. Already, nurses and nurse practitioners assume much greater responsibility for assessment and treatment, especially in rural areas (see Chapter 25: Role of the Nurse in Resource-Limited Settings).

Expanded roles in patient care are also being played by other health care workers (HCWs) such as clinical officers and physician assistants. The part that can be played by Community Health Workers, community volunteers, and workers who give out tuberculosis (TB) medications (Directly Observed Therapy [DOTS] supporters) is also under review.

There are some challenges, however, to the expanded role of these HCWs in doing assessments. One issue is varying amounts of training and experience across HCWs. Other concerns relate to ensuring that HCWs have a sense of accountability in doing assessments, maintain patient confidentiality, and provide continuity of care regardless of assessment results. The chain of command and authority across different HCW disciplines requires clarification. Part of this entails strengthening trust and confidence between the various professions working at the primary care level.

In embarking upon expanded roles for various HCWs in conducting assessments, a common 'clinical language' as well as a common approach to clinical reasoning and problem solving are needed. This can help ensure the best use of scarce human resources, drugs, laboratory tests, and X-rays.

Making effective care available at the point of first contact is a key aspect of ensuring the best use of a limited health budget. HCWs at the primary level must be good clinicians, able to assess and manage a patient's health problems.

Box 3.1:

Guide to Assessment* in Palliative Care

Physical	Psychosocial
<p>History Ask patient to describe symptoms Pain assessment: P: <i>precipitating</i> and alleviating (palliating factors) Q: <i>quality</i> of pain description e.g., sharp, shooting pain; gnawing pain R: <i>radiation</i> of pain S: <i>site & severity</i> of pain T: <i>time</i> (duration of symptoms) Meaning of pain for patient, patient's morale or mood</p> <p>Nutritional assessment: Adequate intake of essential food groups Adequate fluid intake</p> <p>Functional ability: Symptom impact on activities of daily living Time patient spends in bed Assistance patient requires</p>	<p>Narrative Overall: Listen to patient's story and encourage narrative. (What provides enjoyment in patient's life? What causes distress to patient?) Emotional issues: identify losses, anxiety, fear, guilt, anger, sorrow Coping mechanisms: how has patient coped with stressful incidents in the past Genogram: useful tool to discuss family relationships and identify close supportive relationships, conflictual relationships, unfinished business Financial issues: income or other financial support Food security: Can your patient access food?</p>
	Spiritual
<p>Examination</p> <p>Overall: weight, cachexia, weakness, general colour, lymph nodes, swelling or oedema, tenderness, temperature</p> <p>Eyes: sunken, red, inflamed</p> <p>Mouth: redness, white plaque of thrush, leukoplakia, redness of throat, swelling of tonsils, dryness of lips</p> <p>Skin: dryness, flakiness, swelling, discolouration, ulceration, fungation</p> <p>Chest: movement of chest, ease and rate of respiration, change in percussion of chest (air, fluid, solidity of lung parenchyma), breath sounds</p> <p>Heart: feel for apex beat, listen to heart sounds</p> <p>Abdomen: distention of abdomen, tenderness, masses, enlarged liver or spleen, fluid in abdomen</p> <p>Genitals: ulceration, discharge</p> <p>Nervous system: neck stiffness, weakness or paralysis (unilateral or bilateral), loss of sensation, abnormal sensations</p>	<p>Spiritual Assessment Tool†</p> <p>F: <i>Faith</i> or beliefs: Do you have faith or belief? I: <i>Importance</i> and influence: What importance does your faith or belief have in your life? C: <i>Community</i>: Are you part of a spiritual or faith community? A: <i>Address/Action</i>: How can HCWs address spiritual issues with/for patient?</p> <p>† <i>Adapted from Puchalski 2003.</i></p>
<p>Relevant Special Investigations Why do I need this test? Is it going to change the management plan? Can we (the health care system or the patient) afford it?</p>	

* *First assessment visit may not cover all domains. Critical domains should be prioritized at the first assessment.*

Complexity of the Task of Assessment

Unpredictable Course and Presentation of HIV/AIDS

Opportunistic infections and life-threatening complications usually occur in HIV disease as the immune system becomes exhausted. The greater the damage to the immune system, the more likely it is that the presentation of common illnesses may be atypical. For example, extra-pulmonary TB is seen in patients with CD4 cell count <200. As HIV attacks many different parts of the body, the person living with HIV/AIDS may present with a variety of symptoms, such as diarrhoea, cough, headache, or a skin rash. The severity of a symptom is not always a reliable indicator of the seriousness of a condition. For example, a mild headache and CD4 count <100 could indicate cryptococcal meningitis.

Subjective Nature of Assessment

Sound Clinical Judgement

Many complaints have few accompanying objective physical findings, especially in the early stages of HIV disease. Being able to sort out the dangerous from the simply bothersome requires sound clinical judgement.

Proper assessment is more dependent on the history than the examination findings or the laboratory investigations. For example, a patient with early *Pneumocystis carinii* pneumonia (PCP) may have a chronic dry cough and minimal dyspnoea but a normal chest X-ray.

It may at first seem that the objective clinical signs found on examination will be less likely to be misinterpreted than the patient history or laboratory results. However, it is easy for a clinician to overlook or to over-emphasise equivocal clinical findings. (See Common Diagnostic Errors.)

The Patient's Perspective

In trying to describe what he or she feels, the patient is putting into words a story that will help the clinician assess the nature of the problem. Many people find this task rather difficult. Their fears about the cause of the problem and their expectation as to how it should be managed may cloud the issue.

Different people will tolerate symptoms for varying periods of time before they seek help. The clinician may start out wondering if the patient visit is appropriate or not. On one hand, the anxious person who presents with multiple unexplained physical symptoms is any clinician's nightmare. On the other hand, the patient who wishes to please the clinician and not appear ungrateful may downplay the presence or severity of a symptom. For the clinician, the difficulty of sorting out the person's story is increased by the numerous possible causes there are for any particular symptom.

The Influence of Culture and Language

The words used to describe symptoms are very important. The same word may be used for different symptoms, or different words may mean the same thing. The problem is compounded when the clinician uses an interpreter. When translating from one language to another a certain amount of 'interpreting' takes place. An interpreter may add his or her own meaning. The clinician needs a good working knowledge of the local language and of the words used for symptoms. When there is any doubt, it is best to acknowledge one's ignorance and seek clarification from the patient.

Different Strategies Used in Assessment

Fear of missing the diagnosis haunts most clinicians. In an effort to prevent this, various strategies are adopted, some more useful than others:

Traditional Inductive Approach (History and Physical)

In this approach, the clinician takes a detailed history followed by a thorough physical examination. Whilst HCWs are often taught this approach when first learning to assess patients, it is not always the best strategy. 'Thoroughness is not a good predictor of diagnostic accuracy' (Bordage, 1999).

Hypothetico-Deductive Approach (Patient-Guided Assessment)

In the patient-guided approach, information-gathering follows the patient's cues. This may be more productive than following the rigid list of preset questions that most medical and nursing students are taught. Bordage suggests we should put the cart before the horse and start with the diagnosis. It helps a great deal if the clinician can work out, early in the assessment process, what the 3 or 4 most likely diagnoses are. The rest of the process now becomes a matter of confirming or excluding these possibilities. (See Hypothetico-Deductive Reasoning, below, under Process of Assessment: How?).

The clinician's role is one of gathering enough evidence until there is a strong enough case for the diagnosis. This is very similar to the work of a police detective. Whilst there may be an element of guesswork in the beginning, making a diagnosis is a process of carefully gathering and assessing the right kind of information (Greenhalgh, 2002). The emphasis is still on attention to detail, but with the focus on relevant areas and issues. Thus, appropriate information-gathering works better than thoroughness for its own sake.

Patient-Centred Approach

In the patient-centred approach to assessment, the patient's concerns and context are addressed in addition to the disease itself. It is very useful to find out the patient's own assessment of the situation. Allowing the patient to tell his/her own story is often worth more than a large number of laboratory investigations. A useful way to remember this is to think of the acronym ICE (Ideas, Concerns, and Expectations) and check the patient's own perceptions.

A Three-Stage Assessment

Proper assessment is more than making a diagnosis of the physical problem. The clinician needs to assess the:

- Illness
- Person (including his/her emotional response and spiritual needs)
- Person's context (how is this illness affecting the whole family)

This 3-stage assessment enables the clinician to deal appropriately with the whole person.

Purpose of Assessment: Why?

A consultation may have any of the following objectives.

To Make a Diagnosis

- Gather enough relevant information to differentiate between possible alternatives.
- In most cases focus on the common, the probable and the treatable.
- Remember to exclude a less common but dangerous condition that may present in a similar way.
- If still puzzled, consider the 'hidden agenda' of the person who for various reasons is unable to openly discuss his/her real problem or the atypical presentation of a familiar condition. (See Coping with Uncertainty.)

To Guide the Management Plan

- When the patient comes for an expert assessment and opinion, use the assessment to help the patient choose the most acceptable management plan. This involves a process of negotiation between the clinician and the patient.
- Focus the plan on the patient's agenda while at the same time being guided by the assessment.
- When appropriate, get the approval of the whole team (the patient's family and other health providers), ensuring that the plan is appropriate for the patient's physical and emotional needs, as well as his/her social and economic circumstances.
- In the end, the comprehensive plan should list all the identified problems (physical, emotional, social, and spiritual), each with a corresponding treatment option.

To Assess the Response to Treatment

- This occurs at a follow-up visit: assess the person's progress and enquire about any new complaints, including any side effects of prescribed medication. Consciously individualise each encounter to avoid professional boredom and 'production line' care.
- When assessing adherence to (or compliance with) the prescribed drug regimen, use tact to get a reliable response. Phrase the question in a non-confrontational way:

'Many people struggle to take their pills correctly. How are you managing?'

'What do you do if you forget to take your pills?'

'Tell me about your usual day and how you take your pills'.

'How would you help someone else to remember to take their pills properly?'

Other strategies that may also help adherence:

Ask the patient to bring all the medication containers to each visit.

Review previously agreed adherence strategies.

Focus on positive aspects and praise all efforts and successes.

Make a written contract with the patient that clearly states roles and responsibilities.

• Evaluate current health status:

Determine weight and performance (see Table 3.1: Palliative Performance Scale), which are especially helpful when CD4 counts are not available.

Ask about mood, thoughts, and even dreams to understand how the patient is coping.

- Check for complications, especially asymptomatic ones such as cervical cancer.
- Is there a need to adjust the plan?
- Is help needed from a social worker or spiritual counsellor?

To Assist in Building the Therapeutic Relationship

- The richness of the relationship between the ill person and the clinician is one of the rewards of caring for the sick and even the dying. This relationship is therapeutic to both the patient and the clinician. Acknowledging this mutual benefit helps maintain a healthy balance in a relationship that will face many difficult situations.
- The relationship is often built up over many encounters. A clear understanding of the roles and responsibilities of each party deepens the relationship without over-dependency or unhelpful paternalism.
- When things are going well there is growing confidence and trust; however, there are many potential pitfalls and causes of misunderstanding.
- Where antiretroviral drugs (ARVs) are not available, great skill is required to prevent the resulting frustration (for the clinician as well as the person with HIV/AIDS) from damaging the therapeutic relationship.
- Hidden agendas, language barriers, and differing cultural perspectives are likely to occur. Anticipate, acknowledge, and discuss these issues before they cause suspicion and a breakdown in the relationship.
- The complexity of the relationship highlights the need for developing good communication skills (see Chapter 14: Communicating with Patients and Their Families).

To Help to Understand the Prognosis

- The ill person and the family have many fears, especially when the illness is potentially fatal. An assessment will help to answer the following questions:

‘What’s going on?’

‘What does this mean?’

‘What has caused this problem?’

‘Who is responsible?’

‘How much longer have I got to live?’

Such questions provide a useful opportunity for the clinician to explore hidden concerns.

- A person’s activity level is one of the best indicators of prognosis. Check how the patient functions in activities of daily living and his or her quality of life. The Palliative Performance Scale (see Table 3.1), although developed for cancer patients, may be a useful tool. If the patient’s CD4 count and viral load are available, they may also help in determining prognosis. (See Assessing Clinical Progress, below.)
- Exercise great caution around the issue of prognosis. Accept the reality of uncertainty and the difficulty of providing accurate estimates for a particular patient. It is far more helpful to find out the reason behind a patient’s enquiry about prognosis. What are the patient’s or the family’s concerns? (See Chapter 16: Spiritual and Cultural Care.)
- Give a clear explanation, appropriate reassurance, and constructive advice so that there can be planning and preparation for the future.
- Some patients cope better by denying the reality of their condition. It is seldom necessary to confront such denial, unless it prevents the patient from accessing appropriate care. However, continue to listen for cues from the patient indicating a desire to explore end-of-life issues.
- Breaking bad news and explaining the failure of treatment is never easy. Even in the face of a very limited prognosis, the dying person and the family should not be left without hope. Focus hope on short-term goals and improving symptom control. Tying up loose ends and preparing for any eventuality will often help the person face an uncertain future with a greater sense of peace. (See Chapter 13: End-of-Life Care.)

Table 3.1: Palliative Performance Scale Version 2 (PPSv2)

Percentage Scale	Ambulation	Activity and Evidence of Disease	Level of Self-Care	Nutritional Intake	Consciousness
100	Full	Normal activity; no evidence of disease	Full	Normal	Full
90	Full	Normal activity; some evidence of disease	Full	Normal	Full
80	Full	Normal activity with effort; significant disease	Full	Normal or reduced	Full
70	Reduced	Unable to do heavy work inside or outside the home; some evidence of disease	Full	Normal or reduced	Full
60	Reduced	Unable to do light work inside the home; significant disease	Occasional assistance necessary	Normal or reduced	Full or confusion
50	Mainly sit or lie	Unable to do any work; extensive disease	Considerable assistance required	Normal or reduced	Full or confusion
40	Mainly in bed	Unable to do most activities	Mainly assistance	Normal or reduced	Full or drowsy ± confusion
30	Totally bedbound	Unable to do most activities	Total care	Reduced	Full or drowsy ± confusion
20	Totally bedbound	Unable to do most activities	Total care	Minimal sips	Full or drowsy ± confusion
10	Totally bedbound	Unable to do most activities	Total care	Mouth care only	Drowsy or coma ± confusion
0	Death	-----	-----	-----	-----

Source: Victoria Hospice Society, 2001. PPSv2 copyright Victoria Hospice Society 2001. Adapted with permission for minor wording changes under PPS 60% and 70% activity columns. For more information, visit www.victoriahospice.org

Process of Assessment: How?

Diagnostic Strategies

Although there are many ways to make a diagnosis, experienced clinicians use three main strategies:

Traditional Inductive Approach

- This consists of careful and comprehensive information gathering. (Summarized well in Wilson, 2002.) This approach is useful for complex, atypical, or new conditions that do not fit known or familiar patterns.
- Only once there has been an exhaustive search and all possible facts are known are conclusions drawn (inductive reasoning).
- This approach, however, is slow and of variable accuracy (Bordage, 1999; Fraser, 1999). There is also the danger of 'information overload' and of being misled by spurious results from the special investigations. This process is also more costly because of the numerous special investigations that tend to get carried out and may also result in a prolonged delay before effective treatment is started.

Example: A patient presenting with vague history of tiredness, headache, backache, palpitations, shortness of breath, and insomnia is likely to test any clinician's clinical skill. These symptoms could be due to any one of several serious physical illnesses, but they could also be due to severe depression or they may be a cry for attention from someone overwhelmed by the problems of daily living. It would be very unwise for a clinician to jump to conclusions before gathering enough evidence.

Hypothetico-Deductive Reasoning

- Early in the process of listening to the patient's story, the experienced clinician will recognise pivotal symptoms amongst the less important details.
- A small number (3–6) of possibilities (or diagnostic hypotheses) will then be thought of, based on the clinician's knowledge and previous experience.
- Some clinicians find it helpful to make a short mental summary of the condition at the end of the history taking. This summary can then be compared to original possibilities considered and then it is used to focus the examination.
- The clinician then sets about checking for exclusion and inclusion criteria.
- Reasoning from the available, sometimes limited, facts (deductive reasoning), the clinician arrives at the most likely diagnosis.
- Observation or further diagnostic tests may be needed to confirm or refute this diagnosis.

Example: If a middle-aged man presented with a productive cough, chest pain, and fever, the possible causes would include pneumonia, influenza, and pulmonary tuberculosis. If the symptoms had been present for only a day or two and there was no weight loss, the clinician would be favouring the diagnosis of pneumonia or influenza and would look for signs of consolidation on auscultation of the lung and the typical picture of pneumonia on a chest X-ray. If the patient had been ill for several weeks and in addition had night sweats, weight loss, and haemoptysis, a sputum microscopy for acid-fast bacilli would help to prove a diagnosis of TB.

Pattern Recognition

- The experienced clinician is able to rapidly recognise conditions that have been encountered before.
- With experience the clinician may also learn to recognise a pattern even when there is a variation from the usual textbook description of the illness.
- This method is both rapid and fairly accurate.

Example: Most clinicians would have no difficulty recognising the diagnosis when a young adult presents with a two-day history of pain radiating down one leg, followed by clusters of vesicles along the distribution of L4 dermatome. One glance would confirm the diagnosis of herpes zoster even though involvement of the leg is less common than, for instance, involvement of the chest or face.

In reality, most experienced clinicians use a combination of all three approaches and select the approach most suited to the circumstance. At the same time the modern clinician is constantly reassessing his/her approach in the light of published evidence.

Common Diagnostic Errors

Making a diagnosis is a complex process and all clinicians make mistakes at times. Being aware of the following common errors in clinical reasoning helps to avoid them.

Data Twisting

A common error is to focus too early on a single possibility. The information gathered is then distorted to fit this favoured hypothesis. Variations of normal may be exaggerated or pathological signs overlooked. In this way the diagnosis is made to fit the chosen hypothesis.

Premature Closure of Hypothesis Generation

Here the clinician chooses the first possibility that fits the signs and symptoms instead of keeping the diagnostic options open. No further effort is made to consider other possibilities, resulting in having a small number of rather vague diagnoses that are used repeatedly.

Rule-out Syndrome

This is the converse of premature closure. Here the clinician is so concerned about missing the diagnosis that endless special investigations are done to rule out highly unlikely possibilities. These possibilities often include rare conditions, especially ones recently described in prestigious medical journals.

'IGBO' (I Got Burnt Once)

Having made a major error in the past, the clinician is afraid of repeating the same mistake. Any patient presenting with similar symptoms is immediately diagnosed as having that condition.

Distraction of Novelties

Uncommon conditions, especially those with impressive-sounding names, are considered before more obvious common illnesses.

Coping With Uncertainty

Uncertainty is an Inevitable Part of Medical Care

This is thoroughly covered in the earlier section, Complexity of the Task of Assessment.

Reducing Uncertainty

A number of simple strategies can be employed to reduce uncertainty:

- Use of time (follow-up and review): Some conditions need urgent, definitive treatment, but many more can be safely observed for awhile to see if the diagnosis becomes more apparent. Even the smallest rural clinic has its own 'CAT Scan' (come again tomorrow).
- Use of checklists/'sieves'/pathological classifications: By considering the various anatomic structures and organ systems or the possible pathological processes systematically, less obvious possibilities will not be overlooked (Fraser, 1999).

- No one knows everything. Consulting the experts and the rest of the health care team may help to throw new light on the problem. Don't forget to check the patient's own ideas!
- Appropriate use of special investigations: Trying to eliminate all uncertainty also has its problems. It is extremely costly to do numerous unnecessary investigations, 'just in case'.

The clinician needs to ask the following questions before ordering a laboratory test:

'Why do I need this test?'

'Is it going to change the management plan?'

'Can we (the health care system or the patient) afford it?'

Helping Patients to Understand Diagnostic Uncertainty

Stories may be a very effective way of explaining the reason for uncertainty. For example, one could discuss how one would go about catching a thief who is stealing one's chickens. The importance of getting enough evidence before accusing the suspect is then easy to understand.

Assessing Clinical Progress

Clinical Staging

The WHO Clinical Staging System, introduced in 1990, allows clinical evaluation of immune function using standardized criteria (see Table 3.2 for the criteria and Table 3.3 for a more convenient reference system for staging patients).

Clinical staging is especially useful in the absence of CD4 counts and viral loads. The system is not as reliable as the laboratory tests and often does not correlate well with the actual health state of the infected person. However, it does have a role to play in resource-limited settings.

Laboratory Tests

The full blood count (FBC) is helpful for staging and making treatment decisions. (See Figure 12.2 in Chapter 12: Integration of Palliative Care with Antiretroviral Therapy.)

If available, the viral load (number of detectable virus particles) and the CD4 count are the most useful tests. The first measures the strength of the virus while the latter measures the strength of the body's immune response. The higher the viral load and the lower the CD4 count, the worse the patient's prognosis. (See Chapter 12: Integration of Palliative Care with Antiretroviral Therapy for more detail.)

Table 3.2: The World Health Organization Clinical Staging System

WHO Stage 1	Sero-conversion illness Asymptomatic infection Persistent generalised lymphadenopathy Performance status 1 (fully active and asymptomatic)
WHO Stage 2	Less than 10% weight loss Herpes zoster Minor mucocutaneous manifestations Recurrent upper respiratory tract infections Performance status 2 (symptomatic but near fully active)
WHO Stage 3	More than 10% weight loss Chronic diarrhoea for >1 month Prolonged fever Oral candida, chronic vaginal candidiasis Oral hairy leukoplakia Severe bacterial infections Pulmonary tuberculosis (TB) Performance status 3 (in bed <50% of normal daytime)
WHO Stage 4 (AIDS)	Extrapulmonary TB PCP Cryptococcal meningitis Herpes simplex ulceration >1 month Oesophageal candidiasis Toxoplasmosis Cryptosporidiosis Isosporiasis Cytomegalovirus (CMV) HIV wasting syndrome HIV encephalopathy Kaposi's sarcoma (KS) Progressive multifocal leukoencephalopathy Disseminated mycosis Atypical mycobacteriosis Non-typhoid Salmonella bacteraemia Lymphoma Recurrent pneumonia Invasive cervical carcinoma Performance status 4 (confined to bed >50% of normal daytime)

Source: WHO, 1990. Reprinted with permission.

Table 3.3: WHO Clinical Staging by Feature

Feature	Clinical Stage			
	1 Sero-conversion	2 Early	3 Intermediate	4 Late
Activity level	Normal	Rests occasionally	Rests for <50% of day	Rests for >50% of day
Weight loss	No	<10%	>10%	Wasted/cachetic
Fever	Mild & short-lasting in 50% of patients	Occasional	Unexplained, intermittent >1 month	Unexplained, constant >1 month
Diarrhoea		Occasional	> 1 month	>1 month
Respiratory infections		Upper respiratory infections Pneumonia	Recurrent pneumonia Chronic otitis media	<i>Pneumocystis carinii</i> pneumonia
Pulmonary TB			Miliary TB Lower lobes Mediastinal nodes	Extensive bilateral Drug resistant
Other TB		Pleural effusion (endemic areas)		Pericardial Peritoneal Spine/bone Tuberculous meningitis
Skin		Single dermatome herpes zoster Herpes simplex Dry skin Itchy papules Tinea corporis	Multi-dermatome herpes zoster Pellagra Stevens-Johnson syndrome Vaginal thrush	Disseminated herpes zoster Persistent mucocutaneous ulcers >1/12
Mouth		Aphthous ulcers Reiter's syndrome Gingivitis	Oral thrush Progressive gingivitis	Oesophageal thrush
CNS	Bell's Palsy Guillain-Barré syndrome (occasionally during this stage)			Persistent painful feet Paraplegia Dementia in 25% of patients Cryptococcal meningitis Toxoplasmosis
Cancer				Kaposi's Sarcoma Invasive cervical carcinoma Lymphoma
Lymph nodes	Generalised lymphadenopathy*	Generalised lymphadenopathy*	Generalised lymphadenopathy*	Generalised lymphadenopathy**

* Lymph nodes > 1cm diameter in >1 extra-inguinal site

** Lymph nodes may also subside almost completely as the immune system becomes overwhelmed

Source: Cameron, 2005. In *Oxford Handbook of Palliative Care* edited by Watson et al.
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