

Measurement of symptom improvement and survival in cancer

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Introduction

In developed countries approximately one in three individuals will develop a malignancy during their lifetime; approximately 50% of cancer patients will die of their disease. Until the latter half of the 20th century, a diagnosis of cancer was accepted as inevitably fatal. Treatment was palliative. Physical measures such as radiotherapy and surgery were aimed at managing local tumour-associated complications. Essentially, however, the focus of care was on dealing with symptomatic discomfort and prolonging survival wherever possible, without causing undue distress to the patient and his or her family. This remains the fundamental approach for most forms of cancer despite advances in our knowledge of causation and biology of cancer, and availability of newer drugs and other therapeutic agents.

Chemotherapy for cancer promised much but has, in reality, made an impact on survival and curability in relatively few specific tumour types. Combinations of chemotherapy with radiotherapy and stem-cell transplantation techniques have similarly resulted in long-term survival and cure in few clinical situations. Such gains and overall clinical experience have been achieved at the expense of significant treatment-related toxicity. Much effort in the past 25 years has also been in the field of managing and limiting the unpleasant side effects of the more intense and toxic chemotherapy and radiotherapy treatments. Significant success has been achieved, for example, in the development of effective anti-emetics and marrow growth factors.

It is perhaps unsurprising that initial research into cancer treatment moved from palliative intent to more determined efforts at tumour eradication with outcome assessments of tumour response, 'disease-free' survival and treatment-related mortality. Some assessments of treatment morbidity and toxicity were also considered and studied. Efforts to prolong survival assumed this was the sole objective. Quality-of-life (QoL) benefits for the patient were assumed and not measured in any systematic way, other than the use of determinants such as 'performance status' (e.g. the Karnofsky scale (Karnofsky & Burchenal 1949)) as a treatment outcome assessment; improved performance status was generally taken to imply a gain in QoL.

Measuring duration of survival in malignant disease is straightforward. Similarly, symptomatic improvement can be assessed quite easily by means of questionnaires on specific symptoms. Such information is important in assessing outcomes, but does

Bone pain: the evidentiary basis of current management strategies

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Introduction

Metastatic bone pain is a significant burden for many patients with advanced cancer. It is a feature of the common cancers arising in breast, lung and prostate, together with less common sites in the thyroid and kidneys; and on occasions can be associated with most other primary sites. Management is based on both non-specific pharmacological manipulation of the pain process and specific oncological treatment of the bone metastasis using radiotherapy, chemotherapy, hormone therapy and surgery. The bisphosphonates have in addition provided a major new treatment option for patients with metastatic bone pain. An overall schema for the management of metastatic bone pain is shown in Figure 7.1.

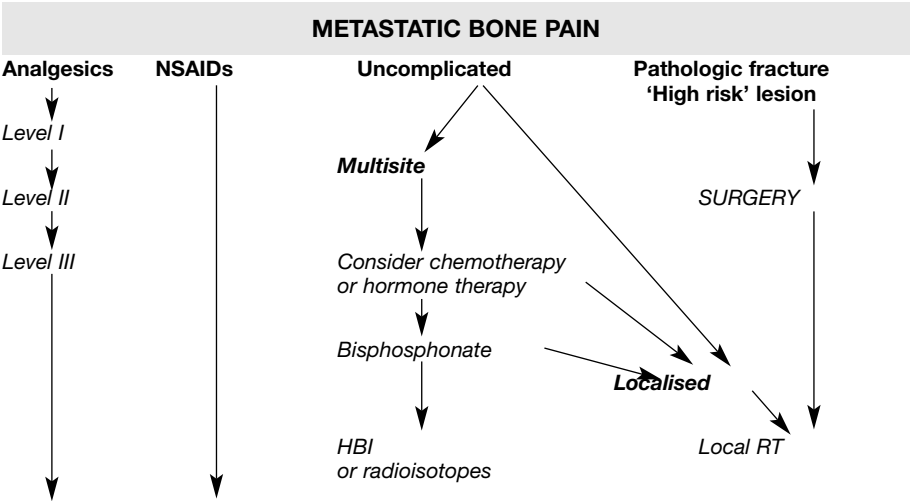


Figure 7.1 Overview of the management of metastatic bone pain

Analgesics and non-steroidal anti-inflammatory drugs

As with any cancer pain scenario, the fundamentals of analgesic use in metastatic bone pain should follow the World Health Organization (WHO) analgesic ladder escalating from level I, through level II to level III analgesia, on a regular basis. Level

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