

## 50. MALIGNANT DISEASE (CANCER)

50.1	Contents	Paragraph
	Introduction	50.2
	General	50.3
	Treatment and its Effects	50.4
	Care Needs	50.5
	Mobility Considerations	50.6
	Care and Mobility Needs Arising as a Result of Treatment	50.7
	Duration of Need	50.8

### 50.2 Introduction

**50.2.1** Malignant disease, cancer and neoplasia are all general terms used to describe the uncontrolled multiplication of cells that have become insensitive to the normal growth control mechanisms. This growth (tumour) expands and invades and destroys adjacent tissues causing local effects that vary according to the site of the tumour. Cancer can also spread to distant areas of the body where further tumours (metastases) develop. These will produce additional effects depending on their site.

**50.2.2** Malignant disease can develop in any organ of the body including the blood cells and the skin. Metastases (secondary deposits) can occur anywhere although some organs, notably the liver, lungs, brain and bones are particularly affected.

**50.2.3** For most cancers the diagnostic label given describes the type of cancer and where it has come from. In clinical medicine this is obviously important. Here, the significance of the diagnosis is to indicate that a person is suffering from a form of cancer. Specifying the type of cancer is not so important, although it can be useful in pointing out what local symptoms can be expected.

**50.2.4** Tumour forming cancers usually have a name ending in -OMA. Some of these indicate the general type of tissue giving rise to the tumour. They are usually qualified in some way to indicate the specific site of origin. **Carcinoma** arises from skin or membranes such as those lining the gut or lungs. Hence bronchial carcinoma is a tumour arising in the large air passages of the lungs and gastric carcinoma is a tumour arising from the lining of the stomach. **Sarcoma** arises from connective tissue, bone and cartilage, **osteosarcoma** from bone and **chondrosarcoma** from cartilage. Lymphoma develops in the lymphatic system. Other names ending in -OMA indicate the specific type of tumour. **Melanoma** is a tumour of the cells that produce skin colour, **mesothelioma** develops in the membrane covering the lung.

**50.2.5** Cancers of blood cells usually affect the white blood cells and are called **leukaemias**. They are usually qualified by the type of cell affected and their

speed of onset. Thus acute myeloid leukaemia is of sudden onset and affects myeloid cells and chronic lymphatic leukaemia is of much slower onset and affects lymphocytes.

**50.2.6** Cancer can occur at any age but, in general, its frequency increases with age. Nevertheless, it is still the second most common cause of death amongst children. Accidents are the commonest cause.

### **50.3 General**

**50.3.1** Malignant disease is progressive and, untreated, results in death in most cases. Even with treatment many people still die from the effects of their cancer although certain tumours are now very amenable to treatment. Treatment of leukaemia and lymphoma in particular is now so successful that many people can be considered to be cured. For large numbers, however, there is a relentless deterioration in health leading to severe disability and death. For some this may take many months or years but for others death occurs within weeks of the first symptoms being reported.

**50.3.2** Most of the harmful effects of a malignant tumour are caused by its local effects on surrounding structures. The consequences of these local effects are entirely dependant on where the tumour is situated in the body. In some instances, because of the reserve capacity of many organs, the presence of a tumour is quite compatible with apparent good health until the cancer is so advanced that it is untreatable. In others, a tumour can cause symptoms very early in its development because of damage to vital structures adjacent to it.

**50.3.3** Tumours may also give rise to profound generalised disturbances either directly by producing large quantities of biologically active substances such as hormones or indirectly by damaging or infiltrating other organs, causing for example liver failure or profound anaemia. Advanced cancer is also associated with a generalised state of ill-health called cachexia. This is usually associated with advanced disease and is characterised by loss of appetite, loss of weight, anaemia and a general feeling of ill-health. This state is extremely debilitating but can go on for many months.

**50.3.4** Cancer can spread to other parts of the body, the effects depending on the particular part of the body involved. The most common sites are:-

(i) **Brain:** the needs for help may be similar to a person who has had a stroke or suffers from epilepsy or dementia - indeed, all three of these may occur.

(ii) **Lung:** causing extreme breathlessness.

(iii) **Bones:** this causes severe pain (requiring very potent pain killers) and spontaneous fractures.

(iv) **Liver:** leading to jaundice and extreme weakness.

## **50.4 Treatment of Cancer and Its Effects**

- 50.4.1** The treatment of cancer includes surgery, radiotherapy (X-ray treatment) and chemotherapy (drug treatment). Treatment may be directed towards a cure or to control symptoms and relieve distress (palliative treatment). This will depend much on the type of cancer, its site in the body and how far it may have spread.
- 50.4.2** Curative surgery involves removal of the cancer and repairing damage to adjacent structures. It may be prolonged and involve complex reconstructive surgery. Although debilitating in the immediate post-operative period it can, if successful, lead to a cure or a long period of remission from the disease. Other treatments (see below) may be used in conjunction.
- 50.4.3** Radiotherapy involves the use of X-rays to destroy a tumour. Modern treatment is designed to do this with the smallest possible dose of radiation but people still suffer side effects, notably burning of the skin, nausea and vomiting. However, these should soon settle when a course of treatment is finished. It may be used alone or in conjunction with surgery or chemotherapy.
- 50.4.4** Chemotherapy involves the use of potent cytotoxic (cyto= cell) drugs to kill the cells of a cancer. It is particularly used in the treatment of leukaemia and lymphoma or when a cancer is widespread. These drugs attack normal cells as well as cancer cells although to a lesser extent. Side effects are common and include nausea and vomiting, anaemia and loss of hair. The drugs are usually given as a course over a few days with two or three weeks rest in between. Side effects are often severe when the treatment is being given but usually subside between courses.
- 50.4.5** Palliative treatment is designed to alleviate the symptoms resulting from a cancer when it is clear that curative treatment is not possible because of the advanced stage of the disease. Sometimes surgery may be needed to relieve obstruction or to set a fracture caused by a deposit of cancer in a bone. More often the problem that needs to be dealt with is severe pain caused by the pressure of a large tumour or by infiltration of structures by the tumour. This treatment may involve the use of radiotherapy to shrink a large tumour but more often it involves the use of strong pain-killing drugs derived from morphine. These may be given as tablets, as intermittent injections or by pumps that inject a continuous small dose of the drug.

## **50.5 Care Needs**

- 50.5.1** The needs of people suffering from cancer vary enormously. They depend on the site and size of the primary tumour, on the site, size and number of metastases (secondary tumours) and on the generalised effects of the cancer. The effects of treatment also influence care needs even though this may be intermittent or of short duration. Depending on the particular combination of

these factors in an individual case, disability can vary from none to total disablement.

**50.5.2** Although attention needs are usually predominant, involvement of the brain, either by the primary cancer or its secondary spread, may result in the development of epilepsy, behavioural change or a tendency to fall. These problems may well give rise to a need for supervision.

## **50.6 Mobility Considerations**

**50.6.1** Generalised weakness or severe pain will make walking extremely difficult for many people. Secondary deposits in the spine, causing damage to the spinal cord, may lead to total paralysis of the legs.

## **50.7 Care and Mobility Needs Arising as a Result of Treatment**

**50.7.1** As stated above treatment of cancer is by chemotherapy, radiotherapy and surgery. A person may be getting one of these treatments or a combination of them. The drugs and radiotherapy used in the treatment of cancer often produce side effects of severe nausea, vomiting, loose bowels and a feeling of extreme tiredness, leaving the patient feeling generally very ill. These symptoms come on shortly after treatment and can last from a few days to a few weeks. It may be helpful to find out how often the person is having treatment. Initially it may be a couple of times a week and then gradually there are longer periods between treatments. A person will be severely incapacitated during the treatments and may need help with bodily functions day and night and the mobility will also be severely impaired.

**50.7.2** If the person's general condition is already poor, due to the underlying cancer, recovery from surgery is much longer than usual, and the need for help with care and mobility is then likely to be present.

**50.7.3** Extremely potent pain relieving drugs (morphine or its substitutes) are given and these often cause a degree of drowsiness and confusion. This can lead to dangers as the person may be prone to falls and in these cases supervision is appropriate.

**50.7.4** In children there is the added component of emotional needs ie being separated from other siblings and their friends. The carer also has to be meticulous with procedures that involve giving medication other than by mouth, to prevent any infections.

## **50.8 Duration of Need**

**50.8.1** Treatment of leukaemias and lymphomas is very intensive and adds considerably to the disability caused by the disease itself. However, for many the treatment is successful, sometimes in a matter of months, and long periods of remission from the disease can be expected. In these cases it can be difficult to judge how long help will be needed in an individual case.

- 50.8.2** For most other forms of cancer a similar situation arises after curative surgery. There may be considerable disability immediately after the operation but if the cancer does not recur recovery can be expected to be fairly rapid. For some people, particularly those with other disabilities, there may be a continuing need for help. For example, help may be needed with a colostomy following bowel surgery. Surgery for breast cancer can lead to loss of effective use of the arm.
- 50.8.3** In other cases a need for a significant amount of help indicates advanced disease whose progress is unlikely to be halted by any form of treatment. In this situation, which may develop rapidly, once the need for help has been established it will be continued.