

What is cancer?

It is only when we ask this question that we realise how difficult it is to answer. When my wife Bernadette was diagnosed as having cancer I found myself asking myself 'what is cancer really?' Of course I had some conception of what it was. But what actually was it? I was confident that I knew the answer and then as I groped for some image of cancer I realised I only knew the word. I didn't know the reality that it applied to. I suddenly found I knew nothing. What is cancer, really?

Two answers

Doctors and other health professionals usually give one of two answers. One answer is that cancer is not one disease but a general name for a group of up to two hundred diseases all of which are characterised by rapid and irregular cell growth. Another characteristic is the spread of the disease from one site to another. That, in brief, is the first answer. The other answer is that cancer is really a disease of the whole body, one of the symptoms of which is rapid and irregular cell growth in one or more sites.

At first sight there doesn't appear to be much difference between these two answers. But there is a crucial difference. Is the area of rapidly dividing cells the disease itself or only a symptom of the disease? Is it one disease or two hundred?

So, let us return to the question. What is cancer? It is very important that we answer this question correctly. How we define the disease affects how we treat the disease. So we must ask ourselves: is the tumour the disease or is it a symptom of the disease? Do we concentrate on attacking the tumour or do we try to heal the body?

Orthodox modern western medicine considers the cancerous tumour to be the disease itself. How or why it arose they have no idea. But having arisen, it must be attacked. It must be surgically removed. Or it must be irradiated. Or it must be killed with highly toxic chemicals. Or it must be defeated with the aid of some sort of immunological vaccine. Or some combination of these.

So-called 'alternative' medicine, on the other hand, posits that the tumour-symptom will disappear once the root cause disappears. And the root cause, some say, is the fact that the body as a whole has been poisoned and is not getting the right kind of nutritional and/or natural support.

To put it another way, there are those who believe that cancer cells have something wrong with them, that they are deviant cells and because they are deviant they must be destroyed. The other view is that cancer cells are essentially normal cells forced to live in and accommodate themselves to an abnormal tissue environment. The problem is not the cells per se but the surrounding environment.

Who is right?

We are so used to right-wrong polarities that it seems easy to ask this question and it seems as if there must be an answer: one or the other. But potential patients - and we are all potential patients - must be very wary of taking a 100 percent position. Perhaps we need to embrace the question with both hands and suggest that there may be an element of right on both sides.

It is certainly true that some people have been diagnosed with cancer, have undergone surgery with or without radiation and chemotherapy and have gone on to live long and happy lives. This is true

of my own mother who had breast cancer eleven years ago and who has had no further problem after having had surgery and radiation treatment. It is also true that what appears to work for one type of cancer will not work for another - and therefore it makes sense to talk of different types of tumour. So on these grounds we have to accept that the orthodox medical approach has some merit.

It is also undoubtedly true that some people have utterly rejected these therapies and have cured themselves of cancer by doing no more than drinking a particular herbal tea, or even by simply mentally rejecting the cancer. One case is that of Dr Benjamin Spock who in his early eighties was diagnosed as having a bone cancer in his spine. Being so old he had no desire to undertake any burdensome treatment. He knew in any case that cancers grow slowly in elderly people. He decided therefore simply to refuse to believe he had the cancer. A few years later tests showed that he no longer did have any cancer.

Some people have problems with anecdotal evidence of that sort. I don't. In this case we presumably can check Dr Spock's medical records. But what often happens in cases like this is that sceptics call into question the original diagnosis of cancer. How can we know that he really did have cancer? they ask. But they don't call into question the cases that respond to their orthodox treatments.

What is cancer? In a sense there is no right answer to the question in any objective sense. The answer we choose for ourselves depends on the model - or paradigm - of medicine that we choose to follow. What is important is that we know there is a question and that there is no simple black and white answer.

Basic cancer facts

Before proceeding with the discussion of cancer treatments it is best to describe some basic facts.

A tumor is a growth that contains both normal and abnormal cells. The abnormal cells divide faster than the normal cells. The rate of division varies. Some tumours grow very slowly while others are more 'aggressive'. Tumours are not always cancerous. The classic division is between tumours that are benign and those that are malignant. What do these terms mean?

A benign tumour generally has limited growth potential – though there are cases even today of tumours weighing 30 to 40 lbs being removed from a person. Most, however, soon stop growing. They do not grow rapidly and they do not destroy normal cells while they are growing. Another feature is that they do not spread. The technical term for this process of spreading is metastasis. Since the benign tumour does not metastasize it remains localised in one site. It grows in an orderly fashion and does not produce serious side effects unless it is pressing against an organ like the brain in a limited space.

By contrast, a malignant tumour will keep on growing relentlessly and does not keep to the normal organ boundaries that the other cells keep to. It is capable of sending particles away from the main tumour which can then travel to distant parts of the body to develop other tumours. Frighteningly, this can happen many years later.

Malignant cells vary to differing extents from the original cells normal to that tissue. Confusingly, doctors use the term 'undifferentiated' to describe cells that are very different from the normal tissue cell. The reason for this is that normal cells are differentiated (i.e. specialised) according to the tissue they belong to. From time to time these cells are worn out or die and are replaced. They are replaced from stem cells that do not have a specialised appearance. So when the stem cell produces a new cell

the new cell goes through a series of changes before it can become a differentiated functioning tissue cell. It is believed that cancer occurs when something goes wrong with this differentiating process. The earlier the error occurs, the greater the problem. This explains why cancers of the heart and nervous system are extremely rare in adults. These tissues are noted for their very low tissue replacement rate. For this reason, damage to heart and nervous tissue is generally permanent. This also explains why most cancers

Tumours are classified according to the type of tissue involved.

- **Carcinomas:** the most common form of cancer, arising, unsurprisingly, from the tissue that divides most often: the surface cells of organs or the cells that form the linings of the body and its organs: egg skin, lung, intestinal, uterine and breast cancers.
- **Sarcomas:** these arise in the muscle and connective tissue. They attack bone, and muscle.
- **Myelomas:** these attack the blood plasma cells in the bone marrow.
- **Lymphomas:** Lymph is a water-like fluid that bathes and cleanses all the cells of the body. It originates in small bean-sized nodes and glands. Lymphomas attack these lymph organs.
- **Leukemia:** cancer of the blood forming tissue and blood cells characterised by the over-production of white blood cells.

They are also classed according to the stage of their development:

Stage 1: small tumour with no signs of spread

Stage 2: some local spreading has occurred

Stage 3: more widespread local metastasis is detected

Stage 4: the cancer has spread to different sites.

What are the symptoms of cancer?

Unfortunately, it is rare for any symptoms to become evident before a cancer has reached a fairly advanced stage. X-rays, for example can only detect lumps of about half an inch in diameter.

The American Cancer Society issues the following warning signs.

- Unusual bleeding or discharge from any orifice.
- A solid lump
- A sore that doesn't heal.
- Changes in bowel or bladder habits
- Persistent hoarseness or coughing
- Indigestion or difficulty in swallowing
- Any change in a wart or mole

Cancer doesn't necessarily kill!

It is not inevitable that a cancer left untreated will proceed to a terminal stage – some cancer tumours simply disappear of their own accord. This is usually associated with a deep-seated change in the emotional life of the patient, but may be connected with placebo cures, or even dietary changes that have been assumed not to be therapeutic. The incidence of this is usually quoted as being anywhere between one in 10,000 and one in 40,000, but there is some evidence that it may in fact be much more common.

Other patients appear to be able to live in a static, symbiotic relation with untreated cancer tumours that grow neither bigger nor smaller. Professor Michael Baum of King's College Hospital, London, estimates that 30 per cent of all breast cancers are self-limiting – i.e. they need no treatment at all.