

Summary of Standard Orthodox Treatments for Common Cancers

This information was true as of 1997. Some changes may have occurred since then. The best place to seek information on orthodox procedures is the 'PDQ' files (see links page for contact details - or just type 'PDQ' in your search engine). The figures given are for Britain.

Bladder cancer

This is one of the top ten cancers in terms of incidence. It occurs 3-4 times more frequently in men than women and the main cause is smoking. It generally strikes late in life. Blood in the urine is the most common symptom.

Treatments

Surgery: Most common. this involves removal of the bladder. As one expert puts it, this removal: "will bring about quite a major change in your life style and it is important that you are prepared as well as possible for it." A radical operation will affect the patient's sex life. Five year survival 50-90% depending on age.

Radiotherapy: used sometimes as an alternative to surgery but the results are not so good.

Chemotherapy: No demonstrable impact has been discerned from the use of chemotherapy.

Brain cancer

approximately 4,000 cases a year: two groups most affected: children and middle-aged

Treatments

Surgery: this is the main treatment and has the aim of removing as much tumour tissue as possible - radiation does not have much effect and chemotherapy which is increasingly being used to treat brain cancers in children, is not showing much success. In the words of one oncologist: "The chemotherapy of brain tumours has consistently been among the most disappointing failures in clinical oncology, achieving at best only a short term palliation." Five year survival is nearly 60% for children and 26% for those under 45.

Breast Cancer

Every year, 30,000 women in Britain are diagnosed with breast cancer. Professor Michael Braun suggests that, even without any form of treatment, probably 30% of breast cancers will not proceed but will be self-limiting - that is, even without treatment, they will not pose a threat to the woman's health. High tendency to spread

Treatments

Surgery: Lumpectomy with radiation has as good results as mastectomy. In Austria some success is being achieved with the injection of Wobe-mugos enzymes along with lumpectomy (without radiation).

Radiation: Lumpectomy with radiation appears to have better results than without radiation but

there are the risks associated with radiation. Doctors downplay risks but no figures are available.

Chemotherapy: 230 trials up to 1994 round the world on chemotherapy for advanced breast cancer have been conducted. None provide evidence that survival is prolonged. More aggressive chemotherapy regimes are associated with reduced survival rates. Survival rates in the 1950s seem to have been better than survival rates after the introduction of chemotherapy. Recent reports of a 5% improvement in survivability generally since the introduction of chemotherapy as a standard post-operative therapy appear to be correct - but no-one is sure whether this is due to chemotherapy or some other cause. Critics say treatment of breast cancer has gone from too much surgery to too much chemotherapy with little impact on survival. One interesting idea that is being tried out in some hospitals is to use chemotherapy before surgery - this takes advantage of the short term shrinking effect to reduce the size of the tumour being cut out. The benefits of this approach will not be known for some time.

Hormone treatment: One interesting early success with breast cancer was to reduce the amount of hormones around the cancer by chemical means but this is not much done nowadays. . Hormone treatment with tamoxifen seems to be associated with slight benefits. Unfortunately it has been associated with uterine cancer of the endometrium.

Cervical and Uterus Cancer:

In Britain, 9,000 women a year are affected. Most cancers in this area are slow growing but about 1 percent are very aggressive.

Treatment

Surgery: hysterectomy is generally advised. This has a 30% complication rate.

Radiation: If surgery is not an option then radiation is the only orthodox option available. The risk of damage is very high given the number of organs in this area. Almost certainly the upper vagina will atrophy or be scarred making sexual relations difficult or impossible. It will bring on menopause.

Chemotherapy: No significant survival advantage has been reported for the use of radiation and chemotherapy combined. An immediate response rate has been shown but the tumour almost always returns.

Colon Cancer

About 6% of all cancers in UK are in the colon. approx. 20,000 men and women are affected - and another 12,000 having cancer of the rectum . High fibre diets help to protect against these cancers.

Treatments

Surgery: Colon: half the colon is typically removed. Rectum: radiation to reduce the size of the tumour prior to surgery allows the sphincter muscle to be retained in 85% of cases. However if the tumour is low down this is not possible and the entire rectum is removed. There is a high incidence of impotence and problems to the urinary system (estimated 25-40%)

Radiation: has not proved to extend survival

Chemotherapy: In some studies, treatment with 5-FU and levamisole has shown a 30% improvement in three-year survival rates for grade III colon cancers - but not for grade II or grade IV. An odd result. Levamisole however is extremely toxic and is considered to be a long term poison. Given alone it substantially decreases survival by about half. Early supporters of 5-FU and levamisole are backtracking. There has been no improvement in overall survivability of all colon cancer cases. No other chemotherapy regime works.

Kaposi's Sarcoma

An otherwise rare cancer, it is an almost inevitable consequence of AIDS. It is a disease that causes lesions in a wide variety of places internally and externally. Lesions on the lung have a poor prognosis while lesions in the digestive tract cause little problem

Treatment

It is not considered to be curable but it can be managed. The lesions are sensitive to small doses of radiation which are not too uncomfortable. The big problem with using standard chemotherapy, even if it were shown to work, which it hasn't, is that it would almost certainly depress the immune system which could not benefit someone with AIDS or HIV. However, highly dilute injections of chemotherapeutic agents into each specific lesion appear to have some benefits without depressing overall immune levels. Biological agents such as alpha-interferon have also had some success.

Kidney & Ureter

Smoking is a high risk factor. In the UK about 4,400 new patients are diagnosed. Five year survival is 20-60% depending on age and sex, elderly women patients fare worst.

Treatment

Surgery: removal of the affected kidneys and possibly surrounding tissue

Radiation: No benefits have been demonstrated.

Chemotherapy: There may be, at best, a 5-10% effect in producing a complete regression.

Biological therapy: interferon alpha reduces tumours in 10-30% of patients. Interleukin-2 with patients' own LAK or TIL cells has had some success.

Leukaemia

There are four main types of leukaemia, two are acute and progress rapidly while two others are chronic, developing slowly. All are cancers of the white cells in the bone marrow or the lymph nodes. The chronic leukemias tend to effect the middle-aged and older. Taken together there are approx. 7,000 new cases a year

Treatment

Type 1: Chronic Lymphocytic Leukaemia: (CLL)

Often this is left untreated at first but later may be treated with **steroids** and **chemotherapy**. Cures unlikely but can be controlled by medication for periods of time.

Type 2: Chronic Myelogenous Leukaemia (CML)

Chemotherapy is the first line of attack followed by **bone marrow transplantation** from a member of the family. 20% of patients undergoing this procedure die as a direct result of the operation. However, this is the only standard treatment that offers a chance of a cure.

Type 3: Acute Lymphoblastic Leukaemia: (ALL)

This is the leukaemia that attacks young children. Children with this condition have a good chance of recovery with **chemotherapy** - but there are serious side effects that need to be put into the equation. This leukaemia has the best prognosis with 5 year survival rate of 30-73% depending on age.

Type 4: Acute Myeloblastic Leukaemia (AML)

Intensive chemotherapy and **bone marrow transplantation** can achieve 3-year survival of 20% of patients with this condition.

Liver cancer

Symptoms - abdominal pains, fevers, nausea - are often missed. Only 1,500 cases a year in UK.

Treatments

Surgery: If the cancer tumour is restricted to one of the liver's two lobes it can be removed - if not, surgery is not advised unless it is for a liver transplant.

Radiation: Sometimes used after surgery - but is not advised as it is very damaging to normal liver cells

Chemotherapy: There is no evidence that chemotherapy has any beneficial effect.

Investigational treatment: cryosurgery: in which the cancer cells are frozen. No information is available as to efficacy.

Lung cancer (small cell)

A 20-25% of all lung cancer cases. Also known as oat cell carcinoma of the lung. Less than ten percent of patients obtain long term remission. In UK there are 45,000 new lung cancer cases a year.

Treatments

Surgery: No benefit

Radiation: Heavy radiation doses are required to the chest and occasionally to the brain because of frequent metastases there. Radiation of the brain does not prolong survival.

Chemotherapy: This has a proven effect on survivability - people taking chemotherapy live for a few weeks or months longer on average - but not years. There is disagreement over whether radiation alone or in combination with chemotherapy shows the greater life enhancing benefits. Some patients die from the treatment.

Lung cancer (Non-small cell):

75-80 percent of all lung cancers are of this kind. Long term (5 year) survival is 8-10 percent.

Treatment

Surgery: This is the mainstay of treatment.

Radiation: This may be done instead of surgery

Chemotherapy: No study has shown chemotherapy to be more than marginally beneficial - and the regimes used are highly toxic.

Lymphomas: Hodgkins Disease

Only about 1,500 cases a year in the UK.. 75-80% can be cured with radiation and chemotherapy.

Lymphomas: Non-Hodgkins

7,000 cases a year in UK. Low grade lymphomas are considered incurable but average survivability is 6-12 years. Although the lumps respond readily to chemotherapy they usually return. This is not normally an aggressive cancer but it can take an aggressive form. Very early stage lymphomas may have prolonged responses to radiation. High grade lymphomas are 40-50% curable and best treated with chemotherapy

Malignant Melanoma

This accounts for 1-2% of cancer deaths. Five year survival with this cancer is better for women (75%) than men (52%). There are fewer than 5,000 cases in the UK each year.

Treatment

Surgery: surgical removal of tumour is generally done.

Radiation: melanoma cells are resistant to radiation but sometimes it is recommended to shrink a node

Chemotherapy: No proven long term beneficial effect of any sort from standard chemotherapy although temporary responses can be achieved.

Other: Vaccination with BCG and with specific anti-melanoma vaccine has had good results in the US.

Oesophagus Cancer

Risk factors are age, long term drinking and smoking and consumption of pickled vegetables. Contributing factors are diets deficient in vitamins B-2 & B-3, magnesium and zinc. Higher per-capita incidence in UK than US - about 6,000 cases a year UK (compared with 11,000 in US). Usually diagnosed late. Prognosis is poor. 5-year survival is less than 10%

Treatments

Surgery: removal of tumours in lower section of oesophagus. May involve radical surgery of

surrounding area. Only to be done in specialist centres as 5-10% of patients do not survive radical operation.

Radiation: may cure patients with very small lesions - otherwise used only to support surgery or to help reduce symptoms.

Chemotherapy: used mainly to shrink lesions before surgery.

Ovarian Cancer:

Ovarian cancer has a high incidence in most industrialised states but, interestingly, extremely low in Japan. It affects approx. 6,000 women a year in UK. It is not known what causes it. Unfortunately most women have advanced cancer at the time of diagnosis due to the absence of early symptoms. Five year survival rate is 15-44% depending on age.

Treatment

Surgery: removal of ovaries at early stage or 'de-bulking' of a large tumour. De-bulking usually requires radical surgery to neighbouring organs and tissues.

Radiation: Sometimes used instead of chemotherapy

Chemotherapy: This is standard. Good response rates (40-80%). There is some indication that chemotherapy may extend life by a year or so but there is no clear evidence of this effect. As with most trials it is common to find that reports state: "more intensive chemotherapy improves immediate response rates but does not lead to an increase in survival in most patients."

Pancreatic Cancer:

7,000 people a year get this cancer in UK. Five year survival is only 4%

Treatment

Surgery: 'Surgery is rarely curative but can be used for palliation' says one textbook - though radical surgery (called the Whipple procedure) may be feasible if the tumour is small and no lymph nodes are involved. This procedure is not often indicated but has a 22% five year survival record.

Radiation: This is sometimes recommended but carries a very high risk of damaging kidneys, spleen, liver, spinal cord and the bowel.

Chemotherapy: No evidence of positive effects from chemotherapy. Despite this, 30 percent of patients with this cancer receive chemotherapy.

Prostate Cancer

This affects 1% of men under 50 rising to half of men over 80 - but as it is generally a slow growing cancer there is little benefit gained from screening for it. Most men die without knowing they have had it. Five year survival is 43%. It is not related to the problem of an enlarged prostate. It is not caused by having too much sex. It appears to be an illness associated with age, with America (the US death rate is high compared with other countries) and with urban life. Approx 14-15,000 men are diagnosed with this cancer in the UK each year. PSA screening methods are of debatable value as they may be normal when cancer is present and abnormal with benign problems. PSA levels also

fluctuate wildly.

Treatment

Surgery: Often recommended and will cure cancer if it has not spread beyond prostate. However it leads to sexual impotence and may lead to urinary incontinence.

Radiation: This option has the same problems as surgery (impotence etc) with the added possibility of being left in permanent pain.

Chemotherapy: No beneficial effect

Hormone treatment: severe side effects. Does not cure but slows rate of growth.

Cryosurgery: the freezing of the prostate. Still experimental and the side-effects versus effectiveness question has not been answered.

Other options: Many patients choose to wait and see what happens. Many doctors approve of this.

Sarcomas

These cancers are rare and affect the muscle and bone tissues. They require very careful management. They tend to affect children, teenagers and young adults - though some attack older age groups (40-60). They are very aggressive. But survival has improved dramatically. One risk factor is exposure to radiation.

Surgery: If indicated, surgery is radical and often involves amputation - however, sophisticated prosthetic devices can help children who have this problem retain their limbs.

Radiation: Used before and after surgery

Chemotherapy: Children benefit better from chemotherapy than adults - but suffer severe side effects.

Skin Cancer (non-melanoma)

This is the most common cancer found in humans. In Britain, it comes second behind lung cancer. Incidence appears to be increasing. Half of men over 65 are believed to have at least one skin cancer. The cure rate is very high with a five year survival of around 97%. It affects fair skins exposed to the sun.

Treatment

Curettage and Electro-desiccation (C&E): a treatment involving a sharp-tipped instrument. Bleeding is controlled by an electrical instrument. Used on small lesions with distinct boundaries. Low risk.

Cryosurgery: this uses liquid nitrogen to freeze the skin. Low risk procedure.

Surgery: a procedure known as Mohs Micrographic Surgery is used to remove the skin in horizontal layers to remove the lesion. This is time consuming and requires expertise - it may require plastic surgery as a follow up. Surgery may also involve use of lasers.

Radiation: This involves a low-penetration radiation beam. Radiation should not be used on patients

under the age of 50 as treatment can cause new cancers to grow at radiation site. It also makes recurrences more difficult to deal with as radiation makes lesions more aggressive and more resistant. Leaves white blemishes. Treated areas will be inflamed for 4-6 weeks.

Chemotherapy: 5-FU may be given as a cream but this may produce deceptive results - the surface of the lesion may die but the internal base may continue. Up to 50% of lesions treated in this way come back

Stomach cancer

Once very common, the incidence of this cancer has declined over the last 50 years - for no known reason. Around 13,000 cases a year in UK. If caught early there is a 50% cure rate but otherwise prognosis is poor with 5-year survival being 10-11%.

Treatment

Surgery: Requires radical surgical removal of entire stomach with surrounding lymph nodes. Up to 15% of patients do not survive operation and complications are common.

Radiation: Not used to cure but may help to reduce symptoms. May be used before operation as a Japanese study showed this slightly improves success rate.

Chemotherapy: No benefits have been demonstrated although about ten percent are treated with chemotherapy.

Testicular Cancer

About 1,500 cases a year. It has a very good 5-year survival rate (90%+) . No known causes. It is a major cause of cancer among men aged 20-40.

Treatment

Surgery: Infected testis is removed. new techniques allow men to retain both potency and fertility

Radiation: commonly done but probably unnecessary

Chemotherapy: Possibly unnecessary in early stage cases. Combination chemotherapy is used with good regression rates.

Further Information

For those who wish to investigate the standard treatments for their cancers in detail, the following resources are recommended:

- 1 Everyone's Guide to Cancer Therapy, Malin Dollinger et al, Andrews & McMeel, 4900 Main Street, Kansas City Missouri 64112, USA [ISBN 0-8362-2427-2]
- 2 What You Really Need To Know About Cancer, Dr Robert Buckman, Macmillan, UK, [ISBN 0-333-61866-1]
- 3 Physicians Data Query (PDQ) System
- 4 This is the most up-to-date cancer information system available for standard orthodox and investigational treatments anywhere in the world. They have separate information for patients and doctors - although patients are free to access the information available to

doctors. The information is updated every month. It can be accessed on the internet by anyone with a computer and modem. Look for CancerNet. One third of people using this system do so from outside the US

- 5 You can e-mail for free information to: cancernet@icicc.nci.nih.gov Put the word HELP in the message heading and ask for the information required.
- 6 Or you can get in directly through on-line services like CompuServe.
- 7 You can use the CancerFax system. Users dial 1-301-402-5874 using the handset on the fax machine and then press the numbers on the dial following the voice prompts to receive the information desired. Service is available 24 hours a day. Or telephone 1-800-422-6237 to speak to a counsellor who has access to PDQ information.