Treatment of Cancer with Iscar

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Preface

In view of the fact that it is now possible to receive immune stimulating therapy with mistletoe in the US, Mercury Press thought it advisable to make available introductory material accessible to the lay person.

Dr. Richard Wagner, who with his wife Elizabeth, has a very active oncology practice in Germany, has also taken the time to write extensively about his experiences and investigations. In this book he shares with us 160 questions about treatment of cancer with the mistletoe preparation Iscar available in the US from Weleda, Inc. in Congers, NY. (Iscador in Europe) These questions were asked by his patients during his many years of practice and he shares with us his answers.

It is well to bear in mind that the views he expresses are the views of one very experienced physician who has treated and studied many patients, however, that does not mean that what can be read here is dogma. Treatment in anthroposophical medicine strives to be individualized treatment and this means that other physicians may choose to vary what is suggested here, in agreement with Dr. Wagner when he says that "immune stimulating therapy cannot be a 'schematic therapy'. Only individualized therapy brings the desired results."

For those to whom anthroposophical medicine is new there is appended a brief discussion to familiarize the reader with some of the ideas, methods and terminology of this human centered medicine initiated by Rudolf Steiner with the help of Dr. Ita Wegman.

Scientific literature regarding mistletoe preparations is available in the form of several compendia from Mercury Press, Spring Valley, NY.

Foreword to the Present Volume

During the last eighteen years I have collected the questions that patients have asked about my activity, first at the Filder Klinik in Stuttgart, then in the Lukas Klinik in Arlesheim / Basel and finally in my general practice in Stuttgart, and have attempted to answer them here in a generally understandable manner.

There were some considerations for presenting a book in this form. Even though there were already a whole series of comprehensive books and accounts about anthroposophical therapy with mistletoe preparations (referred to in the bibliography), I was, also as a result of discussion with many of my patients, of the opinion that it would be meaningful to publish a short account on therapy with Iscar. This book allows one to quickly inform oneself about particular questions, which is useful for patients as well as for physicians who are not yet familiar with mistletoe therapy.

One does not always have the time to study an extensive account, but for those interested, references are made here to those books. Those who want to understand the nature of anthroposophically extended medicine, which is especially focused on anthroposophical cancer therapy here, cannot avoid these more extensive discussions.

I hope that this little book can aid the understanding of therapy with Iscar and can help interested colleagues and afflicted patients on the often difficult path of cancer therapy.

General Foreword

Despite research and teaching about the causes of cancer and the possibility of treatment having been pursued for many decades, the resulting methods of contemporary oncology are only successful for a few types of cancer.

Among these are specific kinds of childhood leukemia, testicular carcinoma, specific subforms of mammary carcinoma and lung carcinoma as well as Hodgkin's disease and ovarian carcinoma. However, recent investigations show that, in the case of mammary carcinoma, only few patients benefit from chemotherapy in a healing sense. It appears that only the interval between an operation and the appearance of metastases is prolonged, but not the total survival time.

Yet, with many other forms of cancer one has the impression that the survival time of the patient cannot be significantly prolonged, either by an operation, or by the succeeding therapies, such as radiation or chemotherapy.

However, the survival period of the patient with a humane quality of life is, according to my view, the only parameter against which a therapy can be measured. It is unimportant that the patient shows reduced tumor manifestation if this is not directly connected to a lengthening of survival time.

Today we have indications that, even in epithelial tumors, chemotherapy has a therapeutic effect only in a few cases and that the survival period is in fact not lengthened.

The problems of modern medicine, in the form of side effects, have increased, so that a great number of patients leave their primary and secondary oncological therapy, and turn to alternative methods of treatment.

The field of alternative methods of treatment is immense and extends from thymic extracts, treatment with trace elements, various diets, ozone therapy, to mistletoe extracts.

It is important to the publisher, to the Weleda pharmaceutical company and to myself as author and editor of this series, to explain, in general, the contribution medicine can make if extended according to anthroposophical principles and, more particularly what contribution mistletoe therapy, which has grown out of this approach, can make to contemporary oncology.

It has to be stated clearly that this is not an alternative ontological therapy, but rather that anthroposophically extended medicine can only truly be an extension if it includes the medicine of natural science, while using other forms of therapy and other medications in addition or as a sole therapy.

For a description of anthroposophical medicine, its basic concepts and terminology please see the appendix.

- Richard Wagner

General Questions About Cancer

Is cancer really an illness of our time?

If one surveys the history of medicine, one can observe that every century has had its own unique challenge in the form of one or another severe illness. One can look back at centuries that suffered the consequences of such contagious diseases as the plague and cholera, but also to a time not so long ago in which tuberculosis claimed many victims.

One has the impression that in our time the occurrence of cancer is increasing dramatically, a fact that has been determined statistically. This is not merely an apparent increase in the sense that, through modern diagnosis, tumor illnesses are discovered in many living patients, where a hundred years ago they would not have been discovered or named until the patient had died.

Is cancer limited to a particular age group?

There are types of cancer that only appear in a particular age group. At least this was so in the past. One could for instance be sure that testicular cancer mostly appeared in the age group 30 to 35 and prostate cancer mostly after the age of 60. Here too things have changed. We encounter patients in practice who have testicular cancer at the age of about 80, and on the other hand there are patients who have prostate cancer at about the age of 35. One also has the impression that cancer is becoming ever more chaotic in

character. In other words, cancer with metastases already appears in the primary phase, without a prior period of latency.

Is cancer becoming more aggressive?

We encounter ever larger numbers of patients in practice who, already at the diagnostic stage of the illness, have metastases in life threatening areas, such as the liver or lungs. Thus one has the impression that, besides the increasingly chaotic nature of cancer, its aggressiveness has also markedly increased.

How does increased aggressiveness of the carcinoma affect treatment with Iscar?

With many cancer patients one does not have time to choose the right therapy at leisure. As one can see from questions that are addressed later, a trial period is necessary in order to establish which mistletoe therapy the individual patient reacts to best. Previously one had far more time to choose the right preparation after a cancer operation and to study its effectiveness on a patient.

Today there are increasing numbers of cancer patients for whom there is only one chance to find the correct preparation. Due to the fast progress of the illness the therapy simply has to work; there is no second chance. This is especially true of pancreatic carcinoma, but also of all carcinomas in the metastatic stage.

Is cancer treatment over once an operation and subsequent therapies such as radiation or chemotherapy have been administered?

In my opinion real therapy only starts once primary therapy has been concluded. By primary therapy we mean an operation and then, depending on the stage it is at and also depending on the type of tumor, the subsequent therapies, such as chemotherapy or radiation. These certainly are often necessary. However, they only serve to eliminate the tumor and other possible tumor manifestations. Contemporary clinical diagnosis cannot, however, detect micrometastases. Many of these therapies are thus only carried out because of the suspicion that there might already be micrometastases in the rest of the body, for example when a lymph node has been affected in breast cancer. Radiation and chemotherapy are then used to try and kill these off. Whether this is successful or not is often questionable. If it were to succeed in every case, no further metastasis would occur.

Furthermore, all these therapies deal only with the physical manifestations of cancer. They do not consider the circumstances that led to cancer. In our opinion it is essential that the causes of cancer are also treated, and not only the physical results.

What are the causes of cancer?

There are many causes for the appearance of cancer. Today we know that the development of cancer occurs in several stages, and that the foundation for such an illness can already be laid in the earliest childhood. It has for example been determined that cancer patients often lacked "nest warmth" in childhood, in other words that these people often had to do without the nurturing of their mother.

It is essential that, during childhood and youth, people should be able to develop their creativity by means of a specialized pedagogy. They should learn a healthy daily rhythm and, in their home

environment, and through the absorption of the emotional mood of their environment, learn to distinguish between right and wrong.

Children must furthermore be encouraged to develop their particular abilities and their personalities, so that they can meet the challenges life will offer them.

From these short explanations one can already see how manifold the possibilities for disturbance can be and also how important the early years of a child can be. During the adult years there are many triggering factors for cancer. Firstly there are the physical carcinogens, for example the triggering of lung cancer by cigarette smoke and tar products.

An unrhythmical lifestyle often leads to regulatory disorders on a cellular level, which after a while cannot be reversed. Rhythmic disturbances which are triggered by influences such as hormone therapy, excess nourishment, sleeping pills and other medications, lead to pre-cancerous conditions which can become carcinomas.

As a whole, there is a gradual disturbance of balance between biological regulation on the one hand and the degeneration of cells on the other.

Rudolf Steiner explained that there is a constant struggle for balance in the formative energies of the total organism, which is controlled by the hierarchically arranged higher aspects of being discussed in the appendix: the etheric body, astral body and spiritual Ego. Cell matter is formed and differentiated by these higher aspects of being into muscle, nerve or liver cells for example. These cells, which are equipped for their specific purposes become tissues, organs and finally humans during embryonic development. In the case of cancer the cells in predisposed areas withdraw from the guidance of the higher aspects of being, and follow their own growth patterns, which are alien to the human organism as a whole. In other words, the tumor has a life independent of the organism.

In conclusion one can say that cancer often begins in the earliest childhood and youth with a disturbance in the area of the spiritual-emotional being. The different aspects of being can then over time not fulfill their guiding role over the living body. Stress situations and blows of destiny, but also illnesses caused by the excessive consumption of refined food, have the same effect. This results in an overall weakness of the immune system, as well as a certain blindness to harmful influences, which are no longer noticed or reversible.

Control then lapses in a predisposed area of the body and an emancipation of the cells is experienced. In other words, a malignant tumor develops.

The weakening of the energies of formation on the one hand, and the increased aggressiveness of the ensuing process due to influences of the contemporary environment on the other, lead to the described cancer process. Thus, to sum up, this process begins on the spirit-emotional level and slowly invades the entire body.

What symptoms make possible the early detection of cancer?

Firstly, bodily elimination should be observed, for example bleeding, which should always be investigated. Furthermore, changes in the skin should always be monitored and inspected. Observing

the whole person, one has to determine whether the subject is a so-called pre-cancerous type, with a predisposition to cancerous illnesses. In a case history one has to especially note a lack of childhood illnesses, especially when no febrile conditions were attained.

Sleep, digestive and liver function disturbances with intolerance to certain foods, as well as constipation should be investigated, as should be hormonal disturbances, fatigue and very slow recovery from illness.

On an emotional level depression, difficulty in coming to terms with problems, difficulty in expressing one's feelings and difficulty in establishing contact with the environment, are significant. Lack of interest, lack of initiative and lack of self-confidence complete the picture.

Of course it is very hard to only connect these symptoms with cancerous illnesses, because fatigue for example is not only a symptom of cancer, but also of many other diseases.

It is nevertheless important to bear cancer in mind in the case of all these disturbances, because all those involved may not allow the scales to fall from their eyes until cancer has already erupted, only then to realize that cancer had already been building up for a long time.

Is it possible to treat a pre-cancerous person?

The concept of 'pre-cancerous' is vague.

Many doctors understand it to mean that the physical and psychological conditions have already changed. Orthodox medicine has a very precise definition that states that a true preliminary phase of cancer presents pre-malignant deformed cells.

If a pre-cancerous condition presents itself according to this definition, I would already begin treatment with Iscar.

Of course it does not makes sense to only begin a therapy once cancer has already manifested physically. In the case of a predisposition it sometimes makes more sense to start treatment earlier.

On the other hand, it must be said that every mistletoe therapy induces the production of antibodies. One has to imagine that every one of us has individualized albumen and that the body does not tolerate foreign albumen, but reacts to it by creating anti-bodies and eventually an allergy.

All mistletoe preparations contain plant albumen that can lead to such blockages, if not to allergies. In the worst case a patient could fail to react to a mistletoe preparation when it is most needed, i.e. when cancer occurs.

I would thus not recommend the use of mistletoe preparations for the mere improvement of immunity, or to overcome exhaustion.

Has mistletoe always been used for the treatment of cancer?

During the Middle Ages mistletoe therapies were used for depression, high blood pressure and epilepsy. Only through the indications of Rudolf Steiner did it become known that mistletoe could heal cancer. It was then developed as an injection, whereas in the Middle Ages it was used as drops or as a tea.

Can all doctors carry out treatment with mistletoe?

In principle treatment with Iscar can be carried out by all doctors. However, the treating doctors should familiarize themselves with the treatment. Nowadays there are unfortunately many doctors and therapists of every kind who begin a mistletoe therapy with patients without familiarizing themselves with the exact dosage instructions, or with the kind of mistletoe therapy.

A warning must be leveled against unmonitored mistletoe therapies, because the desired effect may not be achieved if it is not carried out according to specific regulations and criteria.

All doctors can however inform themselves of the possibilities of the therapy and its applications, and carry out treatment on the patient. Basic information is given in this book.

Does treatment with Iscar make sense with all kinds of tumors?

Treatment with Iscar should proceed with care in the case of primary brain and spinal tumors, as well as metastases in the brain. First the preparation should be taken orally, as drops. The dosage for this can be found in the guidelines for Iscar treatment of malignant tumors.

Experienced doctors can try to introduce treatment with injections, but the dangerous possibility of pressure on the brain due to improved circulation must be considered. Only doctors with experience should therefore try this treatment. For this reason brain carcinomas or metastases in the brain are included as contraindications in the guidelines for Iscar.

Furthermore, in the case of leukemia, excluding chronic-lymphatic leukemia, treatment should occur with utmost care. This treatment may only be carried out by an experienced doctor.

The same holds true for granulomatous lymphoma (Hodgkin's disease) and for non-Hodgkin lymphomas. Care should also be taken with myelomas.

Are there contraindications for treatment with Iscar?

In the case of a known allergy to Iscar, treatment can only commence after a very slow increase in dose. At temperatures higher than 100.4°F/38°C, treatment should be interrupted until the signs of inflammation have subsided. Further contraindications are active tuberculosis, hyperthyroidism with unbalanced metabolism, as well as primary brain and spinal tumors, unless an experienced doctor carries out the treatment.

So far no effects are known which indicate that Iscar should not be administered during pregnancy. Great care should be taken to administer Iscar strictly according to prescription. This would for example be applicable in the appearance of a mammary carcinoma during pregnancy. Because it is known that mammary carcinomas during pregnancy are one of the most malignant, I would already start with mistletoe therapy during pregnancy, after the third month at the latest.

Questions About the History of Mistletoe Therapy

Since when has therapy with mistletoe been known?

Mistletoe was already known in ancient times. Virgil described in the sixth book of the Aeneid how Aeneas, with the help of a golden twig similar to a mistletoe twig, crossed through the underworld unharmed.

Further mentions of mistletoe are found, in a description by Plinius, and also in the ancient Nordic song cycle, the Edda.

In the Middle Ages mistletoe was used for all kinds of complaints, such as epilepsy, high blood pressure, stenocardia, asthma, sterility, depression and sleep disorders. It was also against ghosts, and in the folk usage of some peoples it possessed a mystical use: it was supposed to protect against fire and illness, ensure a happy marriage for engaged couples and bring luck.

What is mistletoe?

Mistletoe is a plant that lives on other plants, mostly trees and bushes, as a semi-parasite. It draws water and mineral salts from its host, but can photosynthesize by itself for the creation of carbohydrates, and is therefore only a semi-parasite.

There are many hundreds of types of mistletoe, mostly in tropical and sub-tropical areas. They differ in form, leaves, blossoms and fruit.

In Europe there is only one type of mistletoe, the evergreen mistletoe with white berries (Viscum album). Botanically there are three types of mistletoe: deciduous, fir and pine mistletoe. Probably there are also different types of deciduous mistletoe, due to a variation in constitution.

Mistletoe has its own growth rhythms. The berries that ripen in November/ December are eaten by birds, mostly by the mistle thrush.

The seeds rapidly pass through the intestine of the bird, then to fall on a branch to which they stick.

The mistletoe seeds, which are contained in the berries and later stick to the branches, need light for their further development. Without light they lose their ability to germinate.

The growth of the mistletoe sprout is very slow. The first tiny leaves are only formed in the second summer, the buds only in the fifth to sixth year. The plant only bears fruit at the end of the sixth to seventh year. It takes seventeen months from the beginning of flower formation, for the berries to ripen, while the rose for example only needs five months.

How is mistletoe harvested?

The mistletoe for use in the preparation of Iscar is harvested twice a year, in June and in November/ December. Through a special process the juice is extracted. The summer and winter juices are mixed in a machine, so that the remedy contains extracts from all the parts of the plant: the leaves, stalks, berries, seeds and flowers.

The remedy is obtained only through the special manufacturing and mixing process of the prime substance.

Mistletoe is harvested from six different host trees: apple, oak, elm, poplar, pine and fir. A different preparation is made from each type of mistletoe.

Since when has the Iscar preparation been available?

The first Iscar guidelines are dated at July 1930. Dr. W.F. Daems had, however, determined from the WELEDA archives that there had been talk about an Iscar preparation since 1925.

Doctor Ita Wegman ordered the first mistletoe preparation, based on indications by Rudolf Steiner, to be manufactured by a pharmacy in Zurich in 1918/19. This was the preparation "Iscar".

On June 3rd 1907 Rudolf Steiner mentioned mistletoe for the first time. He explained that mistletoe was a remedy in the same way as poisons can be remedies.

How is Iscar manufactured?

As has been explained before, the various juices undergo a mixing process, a so-called machine process. Special machines had to be manufactured according to Rudolf Steiner's indications.

The first machine for the manufacture of Iscar was in operation in 1922. This machine was developed further by Karl Unger, E. Schickler and engineer P.E. Schiller. From 1933, A. Leroi also further refined the machine developed by Kaelin, in Arlesheim.

The problem that arose in developing a machine process involved the question of how the summer and winter juices should be mixed.

A machine that fulfilled these needs could only be built with the development of new materials. No further details about the machine process will be given here, as this can be studied further in the literature.

Mistletoe as Medicinal Plant

What substances does mistletoe contain?

It is known that mistletoe contains viscotoxins, lectins and so-called Vester's proteins, as well as amino acids, alkaloids, polysaccharides and vitamin C.

What are viscotoxins?

Viscotoxins are a group of at least five different proteins with basic characteristics, which in a cell culture show a cytotoxic, or cell poisoning effect.

Viscotoxins can attach themselves to nucleic acids, and are amazingly heat resistant.

They are toxic, resulting in cell death in high doses. In weaker doses in animal tests, hypertension, bradycardia and a negative-inotropic effect on the heart muscle were observed. The growth of human tumor cells is significantly inhibited.

What are lectins?

Lectins consist of a large number of substances which are found in most living beings. They are types of protein, which can specifically recognize and reversibly connect to particular free and cell membrane bound sugar types. The lectins have the characteristic that they agglutinate the cells to which they connect, for example erythrocytes, lymphocytes or malignant cells. This can result in a toxic or hormone-like effect, even with very weak doses.

The first observations about the existence of lectins in mistletoe were made in 1956. In the meantime three other lectins have been found. Mistletoe lectin I appears most frequently and is the most cytotoxic lectin.

The total molecule of mistletoe lectin I has a strong cytotoxic effect in cell cultures. It can however also stimulate the immunological character of certain cells. The increase of lymphocytes is thus stimulated and the immunomodulating characteristics have also been verified.

What can be said about the other constituents of mistletoe?

The so-called Vester's proteins are toxic for tumor cells, and have a cytostatic effect. They also lead to thymus enlargement, which has been verified by various investigations.

The alkaloids are also toxic for tumor cells, but their further meaning is not yet clear.

The polysaccharides may have an immune boosting effect, by the stimulation of the neutrophil granulocytes.

The amino acids, in this case for example arginine, are connected to immune stimulation and thymus enlargement.

The vitamin C found in mistletoe could also be immune stimulating.

As a whole mistletoe contains a rich mix of substances, and added to these are further substances which only come into existence during the preparation and fermentation processes.

Since when has mistletoe been investigated experimentally?

In 1906 Gaultier published a work about the blood pressure lowering effect of mistletoe. In 1930 Kaelin published a work about the treatment of cancer with Viscum. These works were the starting point for various investigators who explored mistletoe therapies. In 1932 Madaus showed that the application of freshly crushed mistletoe paste on a fresh wound prevents wound healing by retarding cell multiplication. In 1936 Havas published results about the effects of mistletoe extracts on the growth of plant tumors.

Koch found in 1938 that surface tumors in animals become necrotic when mistletoe is injected into and around the tumor. Plenosol was developed out of these experiments. In 1954 the Russian researcher Chernov published a work about the efficacy of mistletoe against tumors near the skin. Buhl showed the efficacy of Iscar in mice with tumors, when mice treated with Iscar lived longer than control mice that were not treated. Vester identified a protein complex in 1968, which had the highest tumor inhibiting and cytostatic effect to date. In 1961 Miller showed a polysaccharide with a strong tumor inhibiting effect. Franz and Luther showed the tumor inhibiting and immune stimulating effects of mistletoe lectins between 1975 and 1985. Khwaja could positively influence the survival time of tumor carrying mice through alkaloid-like substances in 1980.

In this overview only some of the researchers who have a strong connection to mistletoe have been given. Since then mistletoe research has become extremely extensive.

Have animal experiments been done?

Since 1938 (Koch) there have been numerous animal experiments on tumor carrying animals (mice, rabbits and guinea pigs). Currently an attempt is being made to use tissue cultures, so as to avoid animal experiments for ethical reasons.

For further accounts of the effects of Iscar on tumor carrying animals, reference is made to the literature.

Clinical Application of Mistletoe Therapy

What results does one see with the application: mistletoe therapy?

One sees a clear increase in the body's natural immunity in the sense of immune stimulation, and furthermore a stimulation of the warmth organisation. Many patients report a change in their warmth organism in the sense that they are no longer cold and sometimes manifest a slight febrile condition. Furthermore, there is an improvement in the general feeling of well being and in productivity. Appetite and sleep improve, even when the tumor cannot be reduced, or a further spreading of the tumor cannot be prevented. A definite lessening of tumor-related pain can also be observed. The main effect, however, lies in the inhibition of malignant growth, which is achieved without affecting healthy tissue.

What illnesses can be treated with Iscar?

All malignant and benign growths, as well as malignant illnesses and related disturbances of blood forming organs, excluding some which have already been discussed, can be treated.

Bone marrow activity can be stimulated, and formation of metastases can be inhibited. Defined pre-cancerous patients can also be treated with Iscar.

What does pre-cancerous mean?

The defined pre-cancerous condition is, for example, cervical dysplasia, craurosis vulvae, proliferative mastopathy stage III, papillomatosis of the bladder, or polyposis of the colon, as is found in ulcerative colitis. Another instance could be ulceration of the stomach.

Can sarcomas also be treated with Iscar?

Sarcomas are very malignant types of cancer. Of course they can be treated with Iscar, but should also be treated with Cetraria, which is made of Cetraria islandica, a type of Icelandic moss.

Can metastases also be treated?

Malignant primary tumors, and also metastases are the domain of Iscar treatment. The treatment is often successful in preventing the spread of metastases by stabilizing the process of metastasis.

It is understandable that every patient wants all metastases to disappear. However, this is often an unrealistic wish. Patients nevertheless often live longer with their tumor under treatment with Iscar than when extensive orthodox therapy is given. Such treatment reduces the size or number of the metastases, but taxes the immunity of the patient so much, that there is no strength for fighting advanced tumor growth. From the point of view of survival time, there is thus no advantage for the patient.

Containment of metastasis is often already a big achievement.

Are metastases treated in the same way as primary tumors?

Metastases are basically treated in the same way as primary tumors. That means metastasis of breast cancer in the liver is treated not as a liver carcinoma, but as breast cancer.

What Iscar preparations are available?

Iscar preparations from the following host trees are available:

a) Viscum mali (apple tree mistletoe) – Iscar M
b) Viscum pini (pine mistletoe) – Iscar P
c) Viscum quercus (oak mistletoe) – Iscar Qu
d) Viscum ulmi (elm mistletoe) – Iscar U

Why are metal additives used with Iscar?

Metal additives are included to achieve a stronger effect. It is known from anthroposophical and homeopathic medicine that metal additives can increase the effect on some organs.

What metal additives are used with Iscar preparations?

Silver carbonate, copper carbonate and mercury sulfate are used.

What concentrations of metal additives are used in Iscar preparations?

The metal additives are worked out at a dosage of 0.01 mg per 100 mg fresh plant extract. They are used as homeopathically prepared dilutions.

Can treatment with a mercury additive be carried out simultaneously with an amalgam elimination treatment?

The metal additives are used in a homeopathic dosage, and can never lead to a mercury accumulation in the patient. This preparation can thus be used simultaneously with amalgam elimination.

Why is Iscar packaged in a series?

Series packs were developed to make dosing easier.

Generally the same dosage should not always be used, since immune stimulation would decrease, because the organism becomes accustomed to the stimulus.

For this reason the Iscar series packs begin with relatively low concentrations, which are gradually increased, with the last three ampules being those with the highest concentration. After a break a lower concentration is started again. Series packs have proven themselves in practice.

Only experienced therapists should deviate from series packs.

What series packs are available for Iscar?

For Iscar M, P and Qu the series packs 0, I, II and III are available.

What concentrations do the Iscar liquid preparations for oral use contain?

The Iscar liquid preparations contain three percent each in Iscar M, P and Quercus. A one percent solution is also available for Iscar P.

What side effects are known?

A known side effect is the slight rise in body temperature. This rise in temperature is a desired effect. There may be an inflammatory reaction at the site of injection, which however may only appear with the higher concentrations.

This is not an allergy. This reddening is completely harmless and a sign that the patient is reacting to the dosage.

Can or should one do anything about the inflammation?

One should not do anything about the inflammation at the injection site unless the patient is in great discomfort. In that case one can apply compresses with Weleda Calendula Essence, Weleda Arnica Essence or with Merculialis perennis 10% ointment. In the case of pruritus (itching) Combudoron compresses have been helpful.

Are there any more serious side effects?

In the case of fever above 100.4°F / 38°C with a general feeling of illness, or in the case of local reactions greater than 2 inches / 5 cm in diameter, the subsequent injection should only be given after disappearance of the symptoms. The concentration of the next injection should also be halved. In unusual cases general allergic reactions can appear, such as generalized itching, blister formation, chills, asthma and shock. In these cases the preparation must, of course, be immediately discontinued and the reaction treated. Desensitization must then be started.

Has death occurred due to Iscar injections?

Such cases are not known. In my own practice I have not experienced any occurence of severe reactions in twelve years. At the most there was an allergic reaction with asthma and low pulse. This could be alleviated by treatment with calcium and anti-allergenic medications.

With the general increase of allergies one should, however, be more prepared for the incidence of an allergic reaction with the use of Iscar preparations. It would thus be prudent to do a preliminary test with a relatively small dosage.

It is furthermore important to adhere to the guidelines for therapy with Iscar and not to immediately begin with a high dosage.

If nodules form after injecting with Iscar, do these dissolve again?

A large number of patients develop swellings and nodules at the injection site after the first injections. After two or three series packages these reactions disappear. Only a few patients develop hardening of the subcutaneous tissue which dissolves very slowly. One must keep in mind that the injection site should be changed frequently, so that the stimulus is not always given at the same injection site.

What emergency facilities should a practice using Iscar be equipped with?

In the case of severe reactions a venous line must immediately be started in the patient. Plasma expanders, electrolyte solutions and adrenaline are indicated. Then it must be determined whether glucocorticoids have to be given intravenously, or whether calcium and antihistamines are sufficient.

The practice should thus have adrenaline, cortisone and antihistamines, and at the same time there should be the possibility to start an infusion. The practice should also be able to supply oxygen.

These measures are not different from the treatment of general allergic reactions that could arise from other medications. Every medical practice should thus be equipped with these items.

Can Iscar be administered at the same time as chemotherapy?

Treatment with Iscar can and should be administered during chemotherapy. During chemotherapy there is a decrease in white blood cells due to the therapy. Iscar has a stabilizing effect on this situation.

However, the dosage will possibly have to be increased during chemotherapy. There must, in other words, be stronger stimulation. The need for this has to be determined individually. Generally the tolerance to chemotherapy is improved by the simultaneous treatment with Iscar.

Can Iscar be administered in conjunction with hormone therapy?

Iscar can be administered in conjunction with all hormone treatments, both with oral medication, as well as medication which is injected subcutaneously or intramuscularly.

Care should be taken not to inject Iscar near hormone implants.

As many hormone therapies have a rhythm disturbing and temperature decreasing effect, the use of Iscar is recommended.

Can Iscar be administered during radiation therapy?

Often it is said that Iscar should not be administered during radiation therapy. This is not true. It is only important that Iscar is not injected in the actual area that is being radiated. The injection should be at least a hand's width away from the area of radiation.

Radiation therapy also has an immune depressing effect in the patient, which makes therapy with Iscar essential. The side effects of radiation, including excessive fatigue, can be lessened by the use of Iscar.

How should therapy with Iscar be administered?

There are two phases: an induction phase and a maintenance phase.

It is necessary to estimate the reaction of the patient to Iscar in the induction phase so as to avoid an initial reaction. One thus begins with a weak preparation. The course of events during the maintenance phase depends on the condition of the patient, what other therapies are being administered (eg. chemotherapy or radiation therapy) and to what degree the cancer has spread. During the induction phase one always begins with the dosage 0.01 mg and increases this very gradually until the individual dosage has been achieved.

One should always begin with series 0, if possible without metal additives. In the case of a definite reaction in the patient, series 0 should also be administered in the maintenance phase.

Patients who show no reaction to series 0 should go on to series I. Series I is usually the recommended dose.

The administration of series II or series III should only be attempted by experienced therapists and then only if there is definitely no reaction in the patient.

What is meant by 'reactions' is explained later.

If there is absolutely no reaction, even with series III, the type of Iscar should be changed.

How can one assess the individual reactions of the patients?

The individual reaction dosage can be assessed by:

1. the improvement of general well being and lessening of tumor related pain;

2. temperature reactions, in the sense of a slight increase in body temperature;

3. improvement of immunological status, which can be documented as an increase in the T helper cells and a reduction in the T suppressor cells, as well as an increase in the eosinophils and the absolute lymphocyte count;

4. local inflammatory reactions up to a maximum diameter of 2 inches / 5 cm.

What improvement in well-being can be achieved?

Improvement in well being is seen with an increase in appetite and weight, a normalization of sleep patterns, a feeling of warmth, increased productivity and a psychological improvement.

Many patients show an increased lust for life with the treatment, as well as improved social integration.

A decrease in tumor related pain can also be expected, and painkilling medication can be dramatically decreased.

Is it important to measure temperature?

In the early days of therapy with mistletoe, the measurement of temperature was the only reaction, besides the local reaction, which could be determined in patients. At the time it was a great undertaking even to carry out a differential blood count.

Measuring is however only meaningful if the initial temperature is measured in the morning before rising, and is monitored in the late afternoon at about 6PM, after lying down for half an hour. If this rest period is not adhered to it can easily be the case that movement temperature is measured, which bears no relation to Iscar. Physiologically, the evening temperature is somewhat higher than the morning temperature. The
temperature increase must therefore be at least 0.9°F / 0.5°C to really indicate a temperature reaction that is distinct from a mere reaction to physiological activity.

Patients who can adhere to these criteria should measure their temperature at the beginning of treatment with Iscar. It is important to take into account what medication is being taken concurrently. Most painkillers lower temperature, as do hormonal preparations.

Is it still meaningful to measure temperature?

In my opinion the measurement of temperature has lost its meaning. It is now possible to measure the immunological phenomena in the patient before and after therapy, which has more value than temperature ever had.

If the patient is thus being treated by a doctor with the necessary possibilities for monitoring, measurement of the temperature can be omitted.

What can be understood by immunological status?

There is an increase in leukocytes and a change in concentration of the individual leukocyte sub-populations in the case of improved immunological status. An increase of granulocytes has for example been noted, especially also of eosinophils. The immune system is very disharmonious in most patients: the T helper cells are exhausted; the T8 suppressor cells are massively increased; and the natural killer cells, which can directly kill off tumor cells, have been massively decreased. A harmonization of this aspect indicates an improvement in the immunological status.

For how long should Iscar be injected?

With most types of tumor one must take into account that 80% of the relapses and metastases appear during the first two years after primary therapy. It is therefore absolutely necessary that Iscar be administered for at least two years.

After two years of therapy the treating doctor should decide whether it is possible to introduce longer pauses between the series. This depends on the individual risk, on the tumor size and on the risk of possible metastasis.

How is treatment monitored?

Blood counts are obligatory. The examinations that should be carried out are discussed further below.

Are there critical phases in mistletoe therapy?

Critical phases in mistletoe therapy appear especially in conjunction with immune suppressing therapies, such as chemotherapy, radiation therapy and hormone therapy. Monitoring should be done more often in such cases and therapy should be adjusted according to the immune status of the patient.

At times when the emotions or body are burdened, for example with viral infections, the treatment should be intensified.

Therapy should be intensified in the case of loss of employment and all strokes of destiny that are not overcome.

It is important that the treating doctor has detailed knowledge about the circumstances of the patient to be able to assess the existing risks.

How often should Iscar be injected?

As a rule Iscar is injected three times a week. After every fourteen injections a week's pause is given.

In the case of a severe risk to the patient an injection can be given every second day, with a three-day pause after every seven injections.

In the case of a satisfactory course the pauses are increased over time. The pause of one week could thus be increased to two weeks in the second year, and to three to four weeks in the third year of treatment.

Treatment should not, however, go below ten series (seven ampules each) per year.

In special cases it might also make sense to administer Iscar daily without pauses, as in the case of an advanced illness. However, if the dosage is increased to such an extent, monitoring must be done regularly to avoid over-stimulation.

How does desensitization work?

In the desensitization treatment 0.1 ml Iscar, of the strength 0.001 mg of the type used, is injected, but without a metal additive. The dosage is then increased daily by 0.1 ml, to a total strength of 1 ml. It sometimes makes sense to divide this over a few injection sites.

It is important to keep in mind that this injection should not be administered subcutaneously, but intracutaneously. When the patient can tolerate 1 ml Iscar 0.001 mg, the next grade can be administered, in other words Iscar 0.01 mg. This again starts at 0.1 nil.

Can one inject oneself with Iscar?

It is often asked whether patients can carry out therapy at home, or whether it is necessary to come to the medical office.

There are different viewpoints on the issue.

For many patients it is completely impossible to appear at the medical office every second day, or three times a week. For others it is necessary to experience the therapeutic input of the doctor and to receive the daily injection at the office.

An individual decision thus has to be made, whether the patient carries out the therapy alone, or with the help of the doctor.

For normal therapy it has proven successful for patients to inject themselves at home. The patient then just has to come in regularly for monitoring. When injecting at home the patient should be careful to rest after the injection. When the patient goes to the medical office to be injected, it is frequently combined with going shopping, which does not, of course, enhance the absorption of the remedy.

Should one inject in the morning or in the evening?

Actually one should inject early in the morning, especially before ten o'clock, as the injection should be administered during the ascending temperature curve.

There are however many patients who are very restless in the morning, for example a wife with cancer who is restless due to the husband and children leaving in the morning, and who cannot find the tranquillity to inject early in the morning.

In this case it is better to inject in the evening when it is peaceful, and then to have a long period of rest afterwards.

In my practical experience one cannot assume that the efficacy of the evening injection is any less than that of the morning injection. Much more important is the period of rest afterwards, which should be about half an hour.

Are there special "tricks "for administering the injection?

The injection should only be administered subcutaneously. The preparation should not be mixed with other, not even homeopathic, medications, unless it is the indicated metal additive.

The injection site should be close to the tumor or to the endangered area. The distance should be 1-2 inches / 3 cm from the tumor and at least 4 inches / 10 cm from malignant melanomas. This holds true only for existing carcinomas that could not be removed by operation.

In the case of all other carcinomas one has to assume that the injection should be administered where it is most practical. It is not always advisable to inject at the operation site, because scarring or lymphostasis sometimes hinders absorption.

We thus always recommend that the injection be administered in the abdomen. Taking the belly button as the middle point of a circle, the patient should inject, a hand's breadth from the belly button, around the center. The skirt or trousers waistband area should, however, be avoided, to prevent local irritation. The thigh can be used as an alternative. The upper arm, especially in the case of operated mammary carcinomas, ought to be avoided if possible.

How should one inject?

Injections should only be subcutaneous, which is under the skin, at an angle of 45°. Many patients inject too superficially; in other words one can see a slight bump on the surface of the skin after the injection has been given. This results in the injection being too much in the region of the hypodermic, where there are sensitive nerves; this results in increased pain and also allergic reactions.

Can Iscar also be administered intravenously?

Only experienced therapists should administer an infusion therapy with Iscar. This can be carried out in the case of increased tumor pain or when there is advanced cancer, which cannot be arrested with the normal therapy.

An indication for mistletoe infusion is, furthermore, very low immunity, which, despite an increase in therapy, or change to another kind of Iscar, cannot be improved.

There are particular guidelines for Iscar infusion, which will not be discussed further here, because they are strictly for use by experienced therapists. A strong allergic reaction should always be expected in the case of an infusion, and therefore the treating doctor should be prepared for emergency treatment, which includes intubation.

Can Iscar be administered into the body cavities?

In the case of an effusion, such as in the pleural cavity, Iscar can be administered directly, for example after an aspiration. This should only be carried out after treatment with subcutaneous Iscar has already taken place. Iscar can also be administered intraperitoneally, for instance in the case of ascites.

There are particular guidelines for these applications, which should only be carried out by experienced therapists.

Why are mistletoe plants from different host trees used?

Rudolf Steiner gave indications for the use of mistletoe plants from different host trees in the treatment of different tumor types. Many other perspectives have arisen empirically. Until recently it was believed that it is merely an anthroposophical idea that there is a definite difference between, say, apple and oak mistletoe.

Today it can be verified by means of gas chromatography, and by various other means of analyzing the contents of mistletoe, that these two mistletoe types are quite different and contain different substances. The experience of the doctor is thus needed for finding the right preparation for the type of tumor.

Which host tree should be chosen?

Basically one should follow the scheme as contained in the guidelines for treatment of malignant tumors with Iscar.

According to this scheme Iscar Qu is especially used in men, whereas Iscar M is especially used in women. Metal additives are prescribed according to homeopathic and anthroposophical principles, and differ according to the type of tumor.

Iscar P should be administered in men and women according to the type of tumor.

It is up to the experienced therapist to change the host tree, which could, for example, mean using oak mistletoe in women; for this there are specific indications.

How should the host tree be changed?

The host tree should be changed when, despite an increase in dosage, for example from series I to II, or even III, there is no improvement in quality of life, metastasis or immunological status. One can then,

for example, change from Iscar P to Iscar Qu. One must also be careful to start again with series 0 or series I.

One can therefore not change from Iscar P series III to Iscar Qu series III.

Special tests have been developed to determine which preparation or host tree the patient reacts to best. This is necessary due to the few criteria in terms of which it is decided what preparation should be changed to, when, say, the efficacy of a preparation decreases over time. (Not yet available in the US.)

Should one administer therapy already before the operation?

Most patients unfortunately only arrive at therapy with Iscar after an operation. It is desirable to administer
two series of Iscar before surgery, as this stimulates the immune system. The operation could trigger a spread of malignant cells. This may happen, especially in the case of tumors that cannot be fully removed.

Is it advisable to postpone the operation for four weeks so that a course of Iscar injections can be administered?

This is an individual decision. One should bear in mind that a mammary carcinoma has already been developing for two to three years before it is discovered clinically. It is thus meaningless that some doctors fall into a state of panic and book an operation for the next day, when one can assume a long development period for the carcinoma.

The operation should, however, not be postponed for long, because a tendency for metastasis must be anticipated. I would advise a patient to undergo at least one series of Iscar injections, which takes 14 days. However, it is up to the individual to decide whether she/he can postpone surgery for that long with the knowledge of having carcinoma.

Should the tumor markers be determined before an operation?

By 'tumor markers' we mean particular substances found in the blood that are formed from possible tumor cells.

There is a rate of between 50 to 70 percent elevation with most tumor markers, which means there are significant numbers of tumor patients where the tumor markers do not indicate a possible cancer or metastasis. However, tumor markers are positive in many patients and should definitely be determined before an operation. If they decrease after the operation one can reliably assume that metastasis has not occurred, as long as the tumor markers remain within normal limits. If one had only determined the tumor markers after the operation, one would not be able to determine whether the tumor markers were indicative in the patient.

Can Iscar cause false positives in the case of certain tumor markers?

There are numerous tumor markers. Until now only the (rather outdated) tumor marker TPA has been shown to increase during Iscar treatment. This tumor marker is a so-called "tissue peptide antigen". As

tissue stimulation occurs relatively frequently at the start of Iscar therapy, this tumor marker can increase. This is however the only marker known to be elevated with mistletoe therapy. As the TPA marker no longer plays a role in the diagnosis of mammary carcinomas, this falsification is meaningless.

For how long should Iscar therapy be administered in the case of a mammary carcinoma?

As mammary carcinomas often only metastasize late, a long period of therapy is advisable. The minimum treatment period, I would say, is five years. If there has been no metastasis and the immune status is favorable, only seven series of Iscar injections should be given in the fifth year. The treating doctor should decide whether there are risk factors in the individual that require an increased period of therapy.

Are there carcinomas that have to be treated with Iscar throughout life?

As soon as a metastasis occurs, therapy with Iscar may not be stopped. The patient's response to the treatment has to be continuously monitored, and possibly the host tree or the dosage may have to be changed. In the case of malignant melanomas, skin and organ metastases have been described after a lapse of 40 years. In the case of this type of carcinoma, therapy should be continued for more than 20 or 30 years, and the frequency of therapy individually determined.

How are Hodgkin's disease and non-Hodgkin lymphoma treated?

For treatment of these conditions we recommend the preparation Iscar P with Mercurius viv. 6x series I. The dosage should not be increased unless the immune system absolutely needs it. In the case of this illness an increase of dosage should only be undertaken by an experienced doctor.

Colchicum Rh D5 ampules should also be injected subcutaneously twice a week as an additional treatment.

Is there a treatment for plasmacytomas?

In terms of reducing the expansion of the plasmacytoma, the results are not as successful as in the treatment of carcinoma. There are however very good long-term results regarding pain therapy. It is thus imperative to try Iscar P, possibly Iscar P with Mercurius vivus 6x, not however above series I, and especially not above series II.

Are there details available about Iscar M 5 mg Special or Iscar Qu 5 mg Special?

This is a new development in Iscar concentrations, with a defined and stable lectin content. The total lectin content is 250 ng/ml for Iscar 5 mg Special, and 375 ng/ml for Iscar Qu 5 mg Special.

A stable total lectin content in the preparations can be assumed, this is achieved and controlled by means of the selection and mixing of suitable mistletoe extracts.

Lectins are considered among the most interesting ingredients of mistletoe today and are being investigated by many scientists.

Do the new Iscar preparations replace the old Iscar preparations?

These new preparations can be considered as a further diversification of the available Iscar preparations.

There is no need for patients, who are using other preparations and are reacting well to them, to abandon these preparations.

What applications do you envision for Iscar M and Qu 5 mg Special?

In my practice I have generally found it effective to put my patients on the normal Iscar preparations. Exceptions are patients with tumors that need speedy treatment, such as those who have pancreas carcinomas that cannot be operated upon. These are immediately treated with Iscar Special.

A change to the Special preparation is only undertaken if it is not possible to treat the patient with the normal preparations, in other words if no improvement in quality of life or immunological status could be achieved.

It is also used for patients who complain of severe pain, for example due to bone metastases.

After observing more than one hundred patients in my medical practice we have arrived at the following guidelines: patients in whom metastasis has occurred during regular mistletoe treatment, as well as those who arrived for therapy with already existing primary metastases, are being treated with the Special preparations.

What results have been observed with the Iscar Special preparations?

Surprisingly there have been many patients who were treated with Iscar Special, where metastasis regression has occurred. Such regression, and also remissions of other kinds, could not previously have been expected with the other preparations, at least not to this degree.

It remains to be seen how this therapy will develop further.

Does the administration of Iscar Special differ?

Basically, before a first treatment with Iscar Special, one package of an Iscar series from one of the host trees should already have been administered, as the reaction to Iscar Special preparations can be quite pronounced.

Subcutaneous administration three times a week with 1 nil of a series package is recommended. If there is a good reaction, one can change to Iscar M or Qu 5 mg Special.

One ampule of Iscar M or Qu 5 mg Special should be injected two to three times a week. No breaks should be taken.

It is in addition advisable to adapt the necessary dosage to the reaction and the immune status of the patient.

This means that it is also necessary to monitor the improvement of well being, the temperature reaction, the immunological status and the local inflammatory reaction.

In the first year of treatment no pauses in therapy are necessary. From the second year a pause of one week can be taken after every 16 injections.

Do the Iscar Special preparations have any unusual features?

Unusual features include especially the improved immune stimulation, the reduction of existing tumor pain, as well as a clear improvement in the warmth organism.

Which types of tumor react well to Iscar?

Studies show a significant improvement of patient survival time due to treatment with Iscar in various stages of cervical, ovarian, vaginal, mammary, stomach, bronchial and other carcinomas. All the above mentioned carcinomas thus indicate the efficacy of Iscar treatment.

Unusual features exist in the treatment of Hodgkin's disease and non-Hodgkin lymphomas, as well as in the treatment of leukemia and plasmacytomas. This has already been discussed. Reference is made to the literature regarding trials that have been done. (Available from Mercury Press)

Questions About Immunology

What is to be understood by the regulation of immunity?

Essentially the purpose of the immune system is to ensure the integrity of the individual nature of the living organism. Without this assertion of individual characteristics against foreign information carriers positive development would be impossible. Evolution presupposes differences between individuals, which are maintained throughout life by means of an active immune system. In this context the regulation of immunological recognition and of defense mechanisms is of central importance. There are two areas of immunological regulation. On the one hand there is the auto regulation of the immune system, which includes all influences that are generated in the immune system itself. On the other hand there are regulatory influences that are generated in the other systems of the organism, but which act in a regulatory way on the immune system, such as hormonal or central nervous system influences, which emanate from the pituitary gland.

The immune regulatory mechanisms become understandable only by means of the developmental history of the participating cells, which can all be traced back to a hematopoietic stem cell and which develop specific functions by means of differentiation. The differentiation of the cells, their multiplication and their functional actions are regulated by many factors, which often includes a feedback mechanism that prevents an over-reaction.

Of central interest are the macrophages, the killer cells and B cells, which group themselves around the granulocytes and mast cells. Their interactions are regulated by cytokines, which are very differentiated.

What influence do emotions have on immune status?

Recently a new branch of research, namely psycho-neuro-immunology, has been developed. This science shows that the brain also participates in immune regulation. Previously it was already known that strokes of destiny, which could not be fully overcome, or depressive states, have a direct influence on the immune system. Today this can be demonstrated by an examination of nerve activity.

What tests are used to determine immune status?

Determining immune status is based especially on the differentiation of immune competent killer cells. The so-called T helper cells and the T suppressor cells are clinically of special interest, as are also the natural killer cells, which can work directly on tumor cells.

Where can such an immune status test be carried out?

An analysis of immune competent cells can be carried out in every large laboratory with the necessary facilities. Any doctor treating a patient can send a blood sample to such a laboratory for an immune status test. In the case of already manifest cancer being treated with immunomodulation, medical insurance would, as a rule, carry the costs.

What are helper cells?

T helper cells (characterized by the surface antigens T4) are understood to be cells that have the task of recognizing an antigen that is presented by a macrophage. The task of helper cells is also to activate B cells to form antibodies via plasma cells, to activate T8 (suppressor) cells and to activate macrophages to phagocytosis.

What are suppressor cells?

The task of suppressor cells, which are distinguished by the surface marker T8, is the recognition and dissolution of target cells, the presence of which is indicated by helper cells. Moreover, the task of suppressor cells is the suppression of immune responses, and to thereby counteract hyper-immunity. They also maintain tolerance of the "self' together with the helper cells.

What is the lymphocyte transformation test?

The lymphocyte transformation test is a test that determines whether immune cells are immunologically competent. Frequently, immunologically competent cells multiply due to unspecific stimuli or medication. In other words we find an increase of lymphocytes and T helper cells, with decreasing T suppressor cells. It is also necessary to determine whether or not the cells are actually active, that is whether they can recognize tumor cells and engage in anti-tumor activity. Unfortunately there is often only a stimulation of the cell count, without an increase in the aggressiveness of these cells.

The lymphocyte transformation test indicates whether activity is indeed possible, not only by counting the cells, but also by determining the development of aggressiveness in these cells.

This test should thus be done at intervals to establish whether the cell counts, which have been achieved by the therapy, are immunologically competent.

What clinical significance does immune status have?

Determining relative and absolute quantities of lymphocyte subpopulations is not only meaningful for the diagnosis of immunological illnesses, but also for therapy.

Defects in the defense system, determined in terms of the shift of concentrations within the lymphocyte subpopulation, can be diagnosed with this method.

Regular monitoring during treatment especially enables the doctor to draw further conclusions from the parameters of the findings.

Immune suppression is a notable symptom of tumor illnesses and is often indicated by an increase in T suppressor cells, a decrease in T helper cells and a relatively low number of natural killer cells.

Immune suppression such as this is often found after chemotherapy, radiation or cortisone treatment.

However, such changes can often already be observed before clinical diagnosis of a carcinoma, and such a test can thus already be implemented beforehand.

Frequently there is also a displacement of absolute cell count in the lymphocyte subpopulation. Especially after chemotherapy or radiation there is a decrease in the absolute lymphocyte subpopulation, besides the decrease in the total leukocyte count.

What immunological results are known in treatment with Iscar?

Effects on the thymus and spleen have been described in animal and other studies. There is, furthermore, a stimulation of the T lymphocytes and a harmonizing of the different lymphocyte subpopulations.

Investigations have also been done regarding the effect on B lymphocytes, in other words, on the humoral immune reaction. The effects on total lymphocyte counts, neutrophils and eosinophils have also been described. The influence on the activity of granulocytes and on the activity of macrophages has in addition been investigated, as has been the effect on basophils and mast cells.

Furthermore, there are investigations concerning the so-called peritumoral reactivity of the organism, in other words, concerning the change of the tissue around the tumor, in which clearly discernable inflammatory infiltrations can be positively evaluated.

How can the efficacy of Iscar be summarized in terms of immunological parameters?

In many studies it has been proven that Iscar increases the count of immune cells, which includes the total lymphocyte count, as well as the granulocyte count. This leads to improved immune competence. Iscar has a balancing effect by redirecting displaced immune cells, which should have a regulatory function. The cytokines especially regulate the stimulation or inhibition of the various cells involved in immune reaction, they become more efficient with Iscar treatment.

One can assume that Iscar has a stimulating and harmonizing effect on many cytokines. Overstimulation, which may also be due to tumor related factors, is evened out by Iscar.

In conclusion it can be said thatIscarheightens the immunological competence of the organism, so that the tumor is recognized as an enemy, and the dissolution of tumor cells can begin.

Often the tumor is masked, which means the immune cells can no longer recognize it as such.

What are natural killer cells?

In terms of developmental history, natural killer cells are older than T lymphocytes. As the name suggests, they have an important function in fighting tumors. They also regulate B cell differentiation and hematopoiesis, or blood formation.

What are macrophages?

Macrophages are the cells which provide the antigens that sensitize T cells. They destroy viruses and tumor cells by means of chemotaxis, enzymes or phagocytosis. They therefore play an important role in the cellular fight against viruses and tumors.

What are B lymphocytes?

B lymphocytes are plasma cells that produce antibodies. They are stimulated by antigens or degenerated cells. These antibodies serve as a defense against infections, and produce antibodies due to the antigen stimulus of tumor cells.

What are circulating immune complexes?

Circulating immune complexes come into existence due to the reaction of an antigen to an antibody. Antibodies are produced in tumor patients as a reaction against tumor cells. These antibodies, associated with a tumor, can, together with corresponding antigen substances, create circulating immune complexes. At a certain concentration these immune complexes are no longer disturbed by macrophages. They then gather around the tumor creating a barrier that prevents an active immunological reaction against the tumor cells. They also block the macrophage function, thus immobilizing any effective defense mechanism against tumor cells.

Methods for Testing the Efficacy of Iscar

How is therapy with Iscar tested?

There are completely different general criteria for the assessment of reactions to Iscar. First a fever reaction should be observed, and second a change in well being. Conclusions can also be drawn from the differential blood count, the reaction of the eosinophils and the behavior of the C-Reactive Proteins.

The Merieux Multitest and subcutaneous skin tests may also be used to indicate reactions to Iscar.

The so-called LGL cells (large granular lymphocytes) are particular immunological cells, which can be used to determine an immune reaction.

Determining immune status is the most conclusive way of evaluating a reaction to Iscar.

Is the measurement of fever sufficient?

Rudolf Steiner indicated that, without the appearance of fever, mistletoe therapy has not been effective. It is thus desirable to achieve a change in temperature in treatment with mistletoe. The problems that arise with the measurement of temperature have already been discussed.

When temperature is measured certain minimum criteria have to be adhered to.

There should be a temperature increase of at least 1.4°F/0.8°C, or even of 1.8°F/1°C. It is important to consider whether the patient is taking painkillers or other temperature lowering medications.

It is also important to start the measurement of temperature one week before treatment with mistletoe is commenced, so that there is a baseline temperature curve.

A temperature increase of at least 1.4°F/0.8°C, which has to be clearly distinguishable from the physiological temperature curve, can be evaluated.

The harmonizing of an otherwise chaotic temperature pattern should furthermore be determined. Many cancer patients have rigid or chaotic temperature patterns that can be harmonized with Iscar treatment.

What changes in well being can be achieved?

An improvement in sleep patterns, an increase in appetite, as well as a significant decrease in tumor pain have been reported.

An increase in physical activity related to an improvement of mood, as well as an improvement in mental activity, have also been reported.

Many patients no longer feel caught in the "stranglehold" of cancer, but instead try to lead an active life again.

One can however not assume that a sense of well being in a patient can be used as the only criterion for determining dosage. Many patients are, for example, undergoing concomitant therapy such as chemotherapy or radiation, which negatively influences quality of life to a great degree.

What are "epileptiform reactions"?

In his medical work Rudolf Steiner frequently describes the effect of mistletoe therapy on the human being, especially on the relationship between the etheric body to the astral body. (See appendix) Steiner elaborates that during certain mistletoe reactions the etheric body is too strong in relation to the physical body, and cramp-like reactions can occur. He even indicates that, precisely due to mistletoe therapy and the effect of mistletoe, a strange feeling of falling can occur.

An attempt has been made in various investigations to determine whether these reactions do in fact appear in patients. This reaction could, however, only be determined in three of 116 patients.

One should perhaps expand the observation by taking into account that many patients describe such a reaction as a circulatory problem, or as an effect of chemotherapy or hormone therapy, whereas the effect may be due to treatment with mistletoe.

However, this criterion seems to be too subtle to be used as a measure of efficacy.

What meaning does the differential blood count have?

Carrying out a differential blood count before starting therapy with Iscar, as well as during therapy, is seen as essential for diagnosis, and cannot be omitted.

Such a differential blood count should be carried out on every patient at the start of therapy. Based on this initial count, the strength of treatment is determined and adjusted in the course of therapy.

Dosage has to be chosen in such a way that the total leukocyte count increases during therapy. Leukocyte counts of at least 6000 are desirable, but not often achieved by tumor patients.

During therapy leukocyte counts should thus rise to at least 6000, after which a stable dosage can be implemented.

Tumor patients undergoing chemotherapy and radiation often have depleted leukocyte counts of 3000. An increase by 2000 would be necessary to assume efficacy of the mistletoe treatment.

Overstimulation occurs in some patients. If the Iscar series are increased too quickly, relatively high leukocyte counts can arise, which should be reduced again.

How can leukocyte counts be interpreted?

A count of about 2500 peripheral lymphocytes is desirable in cancer patients. However, it is important not to rely on the percentage value of the total leukocyte count. A value of 44 percent leukocytes sounds very good, but taking into account that 44 percent leukocytes are calculated in a total of only 2500 leukocytes, the absolute counts would be quite low.

The goal of 2500 absolute lymphocytes should also be arrived at in stages. Many cancer patients have lymphocyte counts of only 1000 to 1200 before treatment.

It is important not to stimulate too quickly. Therapy should be administered gradually over three months from series 0, to series I, to series II.

If the desired effect has not been achieved after three months, dosage should be changed, or a different Iscar type used.

What can be said about eosinophils?

Today eosinophils are considered potent cytotoxic effector cells that frequently appear in conjunction with allergic and tumor illnesses. New investigations indicate that they are important defense cells against tumors.

The functions of eosinophils are regulated by lipid and protein mediators, which originate from mast cells or lymphocytes.

The major basic protein of eosinophils is especially interesting for therapy, as it has a cytotoxic effect on tumor cells.

Eosinophile peroxidase, an enzymatic protein contained in eosinophils, is very important due to its toxicity to microorganisms and tumor cells.

An absolute count of 400 eosinophils is desirable to be achieved through treatment.

Is the stimulation of eosinophils a factor for prognosis?

Investigations of over 700 tumor patients have in fact shown that if eosinophils can be increased, patients achieve longer survival periods, despite advanced tumors. Tumor remission, that is a shrinking of the tumor mass, may even be achieved.

Only very few patients with good clinical results have not shown these effects.

In future special attention should thus be given to how the eosinophils react. This gives an indication of how closely a tumor patient needs to be monitored, and to what degree the patient needs to be immune stimulated.

Machine counting of eosinophils is often incorrect and can thus not be evaluated. One should make the effort to regularly count the eosinophils oneself, to gain an exact indication of whether stimulation is in fact taking place.

There have been cases where there was in actual fact an eosinophil count of ten percent, whereas the microscope counted only one or two percent.

Can C-Reactive Proteins indicate immune stimulation by Iscar?

C-Reactive Proteins are so-called acute phase proteins.

The cytokine interleukin I, which is produced by monocytes, stimulates the creation of C-Reactive Proteins. This occurs by means of the effect of interleukin I on the hepatocytes.

It would be ideal to determine interleukin I levels, but this is prohibitive due to costs.

The amount of C-Reactive Proteins formed can, however, serve as a measure for the formation of interleukin I. By means of this measurement it is thus possible to determine whether the patient's individually determined dosage is in fact stimulating the production of interleukin I, and thus the production of an immune regulatory substance.

An investigation of C-Reactive Proteins is relatively easy to carry out. However, higher C reactive protein concentrations are measured in the presence of bacterial infections, viral infections, non-infectious inflammatory illnesses, as well as with heart attacks, pregnancy and after operations.

If there is no infection in the patient, no surgery in the past three months and no pregnancy, C reactive protein levels can be used as a method of diagnosis.

Keep in mind that normal concentrations lie between 10 to 40 mg/l and in exceptional circumstances even up to 60 mg/l.

This is a relatively sluggish system, so an increase up to only 100 mg/l is actual proof that the patient is being immune stimulated through treatment with Iscar.

As C-Reactive Proteins can easily be determined in practice, it can be implemented as a parameter for immunity in infusion therapy.

A C-Reactive Protein (CRP) increase of only 50 mg/l is not a meaningful indicator for improvement.

What is your opinion on using the Mirieux Multitest for assessing efficacy?

Using the different skin tests to determine cell mediated immune reactivity is based on the fact that a typical skin reaction of the delayed type occurs after intracutaneous administration of antigens with which the immune system has already come to terms. This is intended to serve as measure for the actual functioning of cell mediated immune reactivity against the respective antigens.

In large studies one can prove that the Multitest values change depending on the stage of the tumor. The intensity of the skin reactions also correlates with the survival period of the patients.

Also here it is important to note that the system is relatively sluggish.

In our opinion the system cannot be used for determining whether Iscar is in fact having a stimulating effect. At the most one can determine how severely disturbed the immune status of the patient is.

Is it meaningful to determine the LGL (large granular lymphocyte) cells?

LGL cells are immune competent cells, which can be made visible by special coloring and measuring techniques.

LGL cells serve as a good parameter for determining the efficacy of Iscar dosages. The relationship of dosage to efficacy can be read clearly by means of LGL cells, during therapy with series I, series II and series III.

The difficulty lies in finding a laboratory that is able to make a reliable diagnosis. This is only possible in few laboratories.

What meaning does immune status have for treatment with Iscar?

Cellular immune deficiency could be determined in most of the patients. Depending on the stage of the illness and preceding chemotherapy or radiation, immune deficiency could be observed in the reduced numbers of the various lymphocyte subpopulations. Especially evident were the reduced numbers of T lymphocytes or natural killer cells.

In the case of patients who had undergone chemotherapy or radiation, B lymphocytes counts were also reduced.

Many tumor patients, or patients with metastases displayed increased numbers of activated T lymphocytes and natural killer cells, indicating that the immune system was still able to react in a meaningful way to the tumor condition.

Careful analysis of the study reveals that the initial immune status of patients is very varied.

In advanced tumor conditions the immune status can be poor, but it can also be highly stimulated, possibly because the organism seems to, "at the last minute", realize that it has to prevent further spreading of tumor cells.

One can thus not at the outset assume that a severely ill patient needs to be treated with a high dosage of Iscar, or a low dosage at the start of a tumor illness.

Individual decisions have to be made about what strength of treatment should be used for the individual patient.

It is important to know that every patient reacts differently to chemotherapy and/ or radiation. One can therefore never predict whether immune competence will be severely or minimally affected by the above mentioned therapies.

In conclusion it can thus be said that immune stimulating therapy cannot be a "schematic therapy". Only individualized therapy brings the desired results.

What cell counts should be achieved in immune status?

Immunity often clearly reflects the stage of cancer, and immunological tests during the course of cancer can give the experienced doctor indications for determining the dosage.

Generally the results aimed for in immune profile should be:

1. The total lymphocyte count should be about 2000.

2. The T4 helper cells should be between 42% and 46%.

3. The T8 suppressor cells should not exceed 23%.

4. The natural killer cells should lie between 7% and 10%.

Activity should also be observed. An improvement in the immunological status and in the results of the lymphocyte transformation test, indicate an improvement of prognosis. The lack of improvement in a poor immune system, or a worsening, indicate the beginning of metastasis or a progression of the tumor illness.

Results of Treatment with Iscar

Are there clinical results for therapy with mistletoe?

To date there are more than 40 clinical studies of the treatment of various tumors with Iscar. These are mostly retrospective studies, but there are also prospective, randomized studies.

In retrospective studies an analysis is made a few years after therapy, and the efficacy of the treatment is compared to data in the literature. In prospective, randomized studies a study goal is determined, therapy is established and the patient is randomized into a group. Neither the doctor nor the patient knows whether the treatment is a placebo or active.

Based on many years of experience, anthroposophical doctors are convinced of the efficacy of treatment with Iscar, and thus feel that it is unethical to withhold mistletoe therapy from patients.

It is therefore out of the question that a patient who appears for treatment should be refused such treatment, or be subjected to randomization.

This reduces the possibility of carrying out randomized, prospective studies.

Are randomized prospective studies necessary?

In my opinion such studies are not necessary, because ethically they can only be carried out with great difficulty. It makes far more sense to observe well-documented individual cases. This is done by creating so-called "matched pairs", which means finding patients with the same course of illness and the same starting point, and to document these cases.

A well-documented individual course of illness says far more about the curative possibilities of a preparation than big statistics in which many patients have to be excluded due to detailed regulations.

Furthermore, most orthodox medicines in use today were tested retrospectively.

What results are there for breast cancer in women?

Three studies were carried out at the Lukas Klinik in Arlesheim. In a first study carried out retrospectively, of the 319 patients who were adequately treated with Iscar, a higher number were still alive ten years later, than those who were not adequately treated with Iscar (e.g. the family doctor did not continue with treatment).

The figures for clinical stage I (breast cancer without lymph nodes effected) were 65 percent and 38 percent, and for stage II (breast cancer with lymph nodes effected) 33 percent and 17 percent.

A second study made a historical comparison between patients who were treated adequately and over a long time, and those who broke of treatment with Iscar after a short time.

The average survival time for patients who were adequately treated with Iscar was almost twice as long as for those who were treated inadequately.

A third retrospective study, also with recurrent and metastasizing late stages, showed similar results.

The efficacy of Iscar treatment in mammary carcinoma patients is clear in practice. In my own experience there are many patients who definitely profit from the treatment, who certainly live longer with metastasis than they would have without treatment.

What studies are available for other types of cancer?

Further studies have been done on ovarian carcinomas, cervical cancer, colon and rectal carcinomas, as well as on bladder cancer.

There are also studies on lung, stomach, and skin cancer, and on pleural carcinomatosis.

The studies have in common that patients treated with Iscar live longer. In studies where well being is central, a definite increase in well being was observed, especially in comparison to other therapies.

Recently there have been warnings about therapy with Iscar. What is the background to this?

As more information becomes known about the immune system, the resulting viewpoints diverge more and more.

Numerous immune stimulating substances, such as cytokines, are produced in response to Iscar treatment. Recently so-called cytokine receptors for different types of cancer have been found. For example, ovarian and kidney carcinomas have such cytokine receptors, as do other types of tumors.

Now the question is whether the increased cytokine production with Iscar treatment can also lead to the stimulation of malignant cells.

One must add that these effects have not been established in practice, neither in the various studies nor in the various anthroposophical clinics.

In fact, many patients treated for ovarian cancer showed a longer survival period than is possible by means of chemotherapy.

Especially patients in whom orthodox medicine had failed showed a longer survival period than is known in the literature.

There is thus absolutely no evidence that stimulation of malignant cells occurs due to mistletoe extracts.

As recent investigations show, mistletoe preparations have a harmonizing effect on the cytokines. This means that cytokine fractions, decreased due to the tumor illness, were clearly increased, while on the other hand the excess of excreted cytokines returned to normal.

One can thus assume that improved immunological competence can be achieved by means of this process. Stimulation due to the harmonizing process seems to be excluded as a possibility.

What are the results with malignant melanomas?

Malignant melanomas belong to a group of tumors that react very well to immunomodulatory therapies. Already in early years trials were done regarding immune stimulation with other medication, such as BCG.

A study at the dermatology university clinic in Basel, Switzerland, shows a clear prolongation of survival for patients who are treated with Iscar. This study is reinforced by other observations. A study on melanoma patients was carried out in our own practice. There is an across the board lengthening of survival period, and in the case of three patients there was even a regression of metastases.

In this situation individualized treatment, not schematic treatment as is carried out in studies, is important.

All patients are therefore treated individually according to their immune status, which is especially essential in the case of patients with malignant melanomas.

What are the results in the case of ascites with regard to the administration of Iscar?

There have been many attempts to administer Iscar intraperitoneally after ascites punctures (paracenteses) were carried out. The aim is to inhibit the malignant cells responsible for the production of ascites, and to limit the loss of energy in the patient due to frequent ascites puncturing (paracenteses).

The difficulty lies in the fact that the abdominal cavity is a relatively large area. The small quantities of Iscar that can be administered are obviously not enough to have a huge effect. Higher concentrations should not be applied, as this could lead to sub-ileus type reactions.

The administration of Iscar in body cavities may only be carried out by experienced therapists.

What experiences are there with intrapleural administration of Iscar?

It has proven very effective to administer Iscar in the case of pleural effusions, after thoracentesis has been carried out.

Care must be taken that thoracentesis should not be carried out completely, so that Iscar can mix with the remaining effusion and act on the tumor cells.

It is important not to start with a dosage higher than 20 mg Iscar of the desired type. 9 ml aspirate should be mixed with 1 ml Iscar and re-administered.

Fever and pain can appear as side effects, and must be discussed with the patient beforehand.

A preliminary treatment with subcutaneous injections must in any case have been carried out previously.

Often pleural effusions, due to adhesion of the pleura layers, are successfully dried out by means of intrapleural administration.

What is the background to Iscar infusions?

As has been elaborated before, Iscar infusions should only be carried out by an experienced therapis. tThe practice has to be equipped for emergencies, as allergic reactions cannot be precluded. Furthermore, it should be possible to do a thorough immunological diagnosis, as over-stimulation could otherwise occur.

Over-stimulation always leads to immune suppression, which then remains for at least two months during which time tumor cells can increase rapidly.

An uncontrolled administration of infusion therapy is thus not advisable.

Despite the dangers infusion therapy with Iscar is sometimes necessary. For more information reference is made to the literature. (Mercury Press)

Generally it can be said that Iscar infusion therapy has the following results:

1. increased immune stimulation,

2. definite decrease in pain,

3. tumor recession is more frequent than with subcutaneous injections

Concurrent Therapies — Medicinal

Is other concurrent therapy with Iscar of value?

Therapy concurrent with Iscar is meaningful in the case of tumor localizations or metastases, or in the case of general cancer symptoms.

There are for example particular medicines for hemostasis, effusions, febrile conditions, bone metastases, and for regulating circulation and intestinal function.

Medication for analgesia for acute or chronic pain may be required. Skin reactions to radiation should also be treated.

What concurrent therapy can be used in the case of bone metastases?

For bone metastases, in conjunction with Iscar treatment, an ampule of Cerussite D8 every day or every second day, combined with Pyromorphite D8 or Fluorite D6 as a subcutaneous injections is recommended. These preparations are effective for the stimulation of bone formation and against pain.

What concurrent therapies are meaningful for the treatment of pain?

Iscar has a pain killing effect and may enable a reduction of analgesics. In the case of a great deal of pain, Iscar infusions may be considered. Different kinds of tumor pain have benefited from the following treatment:

1. Formica D3/ Formica D15 AA amp: daily one ampule subcutaneously.

2. Apis/Rhus toxicodendron comp.: daily one ampule subcutaneously.

In the case of chronic pain conditions one to two ampules of Aurum D301 Equisetum arvense D20 AA can be injected subcutaneously daily.

In the case of nerve pain the preparation Naja comp. has proven effective. One to two ampules can be injected subcutaneously daily.

Is there a remedy for a skin reaction to radiation?

Weleda skin tonic and Lotio pruni comp. cum Cupro have proven to be effective in the treatment of this condition. These remedies should be applied frequently to the radiated areas to prevent skin reactions. They have also proven effective in the prevention of bedsores in bedridden patients.

Daily application of Quartz 1% oil in the area of an operation or radiation has also proven to be beneficial. In the case of skin reactions to radiation Combudoron liquid or gel is recommended for daily application.

Is there a therapy for ulcerated tumors?

Calendula ointment 10%, Viscum pini Gel 10% or Viscum pini 5% ointment are effective in the treatment of this condition.

Is there a remedy for hemorrhaging?

To contain acute bleeding in tumor tissue Stibium metallicum praeparatum D6 ampules have been especially effective. Two to five 1 ml ampules or one 10 ml ampule should be administered daily. Intravenous administration has been especially effective.

In the case of abdominal bleeding Stibium metallicum praeparatum 0.4% suppositories are recommended. In the case of gynecological bleeding Berberis Decoctum D3 ampules should be injected subcutaneously once or twice daily.

What preparations can be used for the stabilization of circulation in conjunction with Iscar?

For the treatment of circulatory disturbances, which are relatively frequent in cancer patients, Cardiodoron is effective. 15 to 20 drops should be taken three times daily. Veratrum album Decoction D4, 20 drops three times daily, also leads to a clear improvement in circulation.

Is liver treatment meaningful?

The liver is often severely affected in tumor patients. On the one hand, it is a large organ with a clear immune function in the reticulo-endothelial system. On the other hand, medication, either cytostatics or painkillers, must be detoxified here, often leading to a severe burdening of the liver.

Substances released in tumor breakdown are also a toxic burden to the liver.

The following medications have been effective in relieving the burden on the liver:

1. Carduus marianus capsules: one or two capsules three times daily.

2. Hepatodoron tablets: two tablets three times daily.

3. Chelidonium/ Curcuma capsules or tablets: one capsule three times daily.

What remedy is effective for the regulation of digestion?

Digestodoron N tablets or drops is an effective remedy.

This medication leads to a clear improvement in the secretion and motility of the digestive tract, as well as a reduction of heartburn, nausea, bloating and diarrhea.

Fluid intake has a regulatory function regarding good digestion.

A medicinal therapy without adequate fluid intake does not seem to be effective.

Concurrent Therapies — Artistic Therapies

Are artistic therapies applied concurrently with Iscar effective?

The treatment of a cancer patient must include the whole human being. In other words it is not sufficient to only take into account the physical well being of the patient in the use of the various therapies.

It is just as important to stimulate the patient emotionally and spiritually.

In many patients, not only the physical well being, but also the emotional and spiritual aspects have been disturbed.

The artistic therapies, especially curative eurythmy, therapeutic painting and sculpture, speech therapy, music therapy, as well as color and light therapy serve to alleviate these disturbances.

Is concurrent therapy with curative eurythmy effective?

Curative eurythmy is a movement therapy, which is always determined by the doctor's diagnosis, and is carried out by a qualified curative eurythmist in cooperation with the doctor.

A different understanding of illness and health is required in the treatment of the ill organism by means of an artistic therapy.

Cancer patients experience in curative eurythmy that they can actively contribute something to their healing process, that they are not passively at the mercy of their illness. This immediately brings about an improvement in well being.

The organic change enabled by curative eurythmy cannot be easily detected by patients, due to the fact that it is a long-term therapeutic process. During this process the diseased organ is treated by an actual restoration of the organ function and form.

The lack of energy often experienced by cancer patients can be reduced with eurythmy. The same is true for the loosening of rigid movement forms. Increased activity gives confidence and strength, as well as the courage to fight cancer.

Curative eurythmy can reduce lymphatic congestion, reduce pain and increase the sense of inner strength, which is significantly depleted in most cancer patients. Eurythmy is for many people a strange new way of movement, but it can bring about the experience that one has strengths and abilities one did not know existed. In eurythmy the emotional experience of humans, which is ruled by the objective laws of language, is expressed in movement formation.

In practice the effects of curative eurythmy have been obvious. Many patients treated by us carried out this therapy concurrently with their cancer therapy, many of whom immediately reported feeling better, that they had more courage and that they experienced a decrease in all their manifold complaints.

What meaning do artistic therapies have?

Artistic therapies should lead to a sense of unity in body, soul and spirit of the patient.

One-sidedness should be counteracted, and the harmony of the four aspects of being should be strengthened by means of such therapies.

The kind of therapy that is applicable has to be determined on an individual basis. Besides curative eurythmy there are also music, speech, painting and sculpture therapies.

Biographical Work and Related Issues

Is it significant to speak of "biographical work" in a modern context? Is this method also used for therapy?

For a long time there was no awareness of the factors in the patient's history which were related to the development of tumors.

Psycho-neuro-immunology has proven that emotional experiences, which have not been dealt with, present a great risk in the development of cancer.

Patients often develop cancer after a severe emotional crisis or after a long depression. In our opinion it is therefore essential to consider such individual factors.

A patient with a mammary carcinoma who is supported by her husband has a much better prognosis than perhaps a patient with the same stage of cancer, who is being beaten by her husband because she now only has one breast. These are real examples from our practice.

It is clear that the above mentioned patient who is being beaten needs concurrent speech therapy to enable her to change her situation, or to get out of the situation.

Of course it is very hard for many patients to examine their life and to bring on changes. Family structures are set and changes are not always possible in this regard. The comfort of family members could possibly be affected, which can bring about opposition. It is however essential to discuss such factors with patients and to start an appropriate course of therapy.

This could take the form of biographical work, which shows the patient the course of their life up to that point, and highlights significant events. The patient and therapist together decide what changes can be effected, with an emphasis on the future.

However, it could also be important for the patient to undergo speech therapy, which would give the patient courage to live with the illness and all its facets.

Psychotherapy is recommended only after the condition of the patient has stabilized.

Psychotherapy taxes the patient heavily, because issues, which have been suppressed for years or decades, are brought to the surface. These would have to be worked through, which is not possible if the patient is struggling with tumors, or as well as with chemotherapy or radiation also.

Speech therapy is recommended in such a case, which can, when stabilization has set in, be carried over into psychotherapy.

Can the family help with therapy?

Family help can vary significantly depending on the situation, but is always essential regarding a change in diet, which is discussed later. It is also essential for the family to understand that tumor patients have a different concept of time.

In many cases one must assume that, with the start of metastasis, the dying process has begun, i.e. complete cure is no longer possible. Family support and great sensitivity in accompanying the patient in this difficult process, is thus needed. The family should not allow courage and hope to fail.

Many tumor patients work for their families to the point of exhaustion, until the start of their illness. Often it is not convenient for the beneficiaries to now share the workload. Unfortunately for many families the shock of tumor diagnosis is forgotten after a few months. Many react strongly during primary therapy and the possible subsequent chemotherapy or radiation therapy. Once the patient again fills their role in the family or in the workplace, after conclusion of primary therapy, the cancer diagnosis is forgotten and the patient is, once again, heavily burdened with responsibilities.

Obviously a relapse into a situation, which in the first place led to the illness, is very bad for the prognosis. However, a change in the situation could lead to healing.

Should the patient always be told the truth with regard to the prognosis?

Many studies have shown that patients can handle the truth, whereas previously this had been strongly dis- puted. However, sometimes those concerned find it is easier not to tell the patient the truth because they then don't have to deal with the situation. In other words, many doctors and family members prefer to withhold the truth, so that they don't have to deal with reactions, such as despair, anger and bitterness on the part of the patient.

However, this, for example, often leads to a situation in which both partners know the true situation, but are too scared to discuss it with each other. The tumor patient does not want to burden anyone, and the partner wants to protect the patient. The result is a lack of communication, which can be a heavy burden in the last few months of the patient's life. This is, however, precisely the time at which patients need their family and their partner to come to terms with their destiny, and to organize the things that are important to them.

Meaningful Combination with Orthodox Medicine

Can therapy with Iscar be combined with chemotherapy, hormone therapy or radiation?

The reasons why Iscar therapy should always be carried out, especially in the case of chemotherapy or radiation, have been discussed earlier.

During chemotherapy the immune competence of the organism is radically reduced, this needs to be balanced out by the use of Iscar. A positive side effect of treatment is the stabilization of the leukocytes, which means that chemotherapy, if necessary, can be carried out with success. Also, the interruption of chemotherapy due to leukopenia, which is often necessary, is prevented.

The information concerning radiation therapy has already been given.

Injections can be administered up to the time of an operation, but should be discontinued post-operatively for 14 days. This prevents a possible interference with wound healing or infection. After a 14-day break the therapy can be restarted. In the case of sensitive patients who have undergone a severe operation, a dose reduction may be necessary.

Does Iscar treatment work despite chemotherapy and radiation?

If a patient has been treated extensively with chemotherapy or radiation therapy, leukopenia can set in, which often remains for years. Obviously the efficacy of Iscar therapy is reduced in such a situation, because certain reaction systems have been hardened and significant results are no longer possible.

But, even in such cases, it is often astonishing what can be achieved with mistletoe therapy, especially in conjunction with an artistic therapy, which would dissolve the mentioned hardening.

If a patient with metastases arrives for Iscar treatment after many operations, a lot of chemotherapy and a lot of radiation therapy, it is not realistic to expect great results from mistletoe therapy.

We would still recommend, that mistletoe therapy be started, even if only the well-being is improved during the time left for the patient.

Are there special indications for treatment with Iscar in conjunction with cytostatics?

Reactions to the various cytostatics are very individual. It is not possible to predict how severely a patient will react to a cytostatic combination.

Even the new Taxol therapy, which initially seemed to result in severe side effects, is tolerated by many patients, with the most severe problem being total hair loss.

It is also not possible to predict how severely a patient is going to react to a specific combination in terms of the immunological burden. This has to be determined individually.

If a patient is to receive Interferon in conjunction with chemotherapy, should Iscar be administered anyway?

In my opinion Iscar should also be administered, but only in conjunction with immune monitoring.

Chemotherapy results in severe immune deficiency, which would probably not be corrected solely by the use of Interferon.

A combination seems promising, as the basis for treatment with Interferon is completely different from treatment with Iscar.

The immune parameters should however be monitored to prevent over stimulation of immunity. A combination therapy with Interferon should not be attempted without monitoring immunity. The same holds true for Interleukin 2, Tumor necrosis factor Alpha, Interleukin 1/6 and 11, and hematopoietic growth factors.

What painkillers should not be used?

Today many preparations of the Diclofenac type are recommended, especially for the treatment of pain in bone metastases, such as in the case of prostate carcinoma.

With the use of these medications it is important to know whether the tumor is forming an inflammatory wall to encircle the metastases.

Investigations have shown that painkillers of the Diclofenac type disproportionately concentrate in this inflammatory wall, thereby disturbing the inflammatory wall.

Therapy with Iscar tries to stimulate such an inflammatory wall, and tries to stimulate and activate the migration of immune competent cells, such as eosinophils, into the inflammatory wall.

Pain therapy with Diclofenac preparations thus leads to a disturbance of this immune reaction, and is therefore a contraindication for the therapy with Iscar.

Centrally working analgesics such as Naloxone, Tramador, or other such medications are preferred.

It has proven successful to let patients choose their own pain therapy. Many of my patients, who have after all learned to inject subcutaneously, have Tramador ampules at home, which can also be injected subcutaneously. Patients can look after themselves very well in this way. Side effects are relatively rare, especially if the effects of the preparations have already been tested in practice.

Does hormone therapy represent a contraindication with Iscar therapy?

All hormone therapies can be administered in conjunction with mistletoe therapy. This holds true for oral applications and for forms of therapy where implants are placed under the skin of abdomen, or are administered intramuscularly by means of injections.

Hormone therapy can lead to temperature rigidity, which can be balanced by means of mistletoe treatment, or with artistic therapies.

The physical effects of hormone therapy, or the effects on the sexuality of the patient, are often severe, and should be addressed by means of speech therapy.

Meaningful Combination with Alternative Medicine

What methods of alternative therapy can be used in conjunction with Iscar?

The methods of so-called alternative medicine are manifold and range from treatment with thymic extracts, enzyme preparations, vitamin preparations and trace elements, to ozone therapy, various kinds of blood cleansing and many alleged immune-stimulating methods. It is important to know that mistletoe therapy is not an alternative therapy, but is included in the framework of an anthroposophically extended therapy.

This means that an anthroposophical doctor who administers mistletoe, is also trained as an orthodox doctor, and can also apply orthodox medicine in the treatment of cancer.

Anthroposophical doctors treat patients from a different understanding of the human being and of illness, using other medical therapies, artistic therapies, and also Iscar. Anthroposophical medicine is thus not an alternative to normal medicine, but an effective enhancement of existing therapies.

Not all alternative therapies are suited for use in conjunction with Iscar.

First, questionable therapies, which have financial gain rather than treatment as a goal, should be avoided.

Many alternative therapies have an immune stimulating effect, for example thymic preparations. In such cases it is important to determine whether further immune stimulation is actually necessary, or whether there is a danger of overstimulation in combination with Iscar.

Ozone therapy can also have an immune stimulating effect, but, if the wrong dosage is chosen, can have an immune depressive effect.

Would you combine thymic preparations with Iscar?

Firstly, I would begin treating a patient with a mistletoe preparation, because the efficacy of these preparations has been documented.

If, despite an increase in dosage and changing the type of mistletoe, there is no immune stimulation and the tumor illness is advancing, I would carry out treatment in conjunction with thymic preparations. It has to be kept in mind that these are defined preparations containing defined substances.

What about a combination therapy with vitamin A?

Stimulation of cellular and humoral immunity is possible in treatment with vitamin A. An increase in antibody production has been documented with the use of vitamin A, and the development of cytotoxic T lymphocytes and an increase in the activity of natural killer cells can be observed with high dosages of vitamin A.

A direct effect can furthermore be seen in the anti-proliferating effect against the actual tumor cells. In a study it could be shown that bronchoscopically determined metaplasias in the bronchial mucous membrane had decreased significantly in heavy smokers with the administration of vitamin A.

There are also further studies about decreased hormone levels in the case of metaplasias in the intestinal and urogenital mucous membranes, which can be seen as the preliminaries to pre-cancerous changes.

What can be said about combination with vitamin C?

Experimentally numerous immunological reactions can be achieved with vitamin C. An extreme deficiency of this vitamin leads, among other reactions, to defects in cellular immunity.

The most meaningful observation however seems to be that, with vitamin C, the transformation of amines to nitrosamines, and the amides to nitrosamides by means of nitrites, can be slowed down or prevented. In animal experiments these nitro compounds dissolve carcinomas of the liver, esophagus, stomach, kidney and pancreas. It thus makes sense to administer high doses of vitamin C in conjunction with Iscar.

Vitamin C can be taken in the form of ascorbic acid powder. Three knife tips per day are considered sufficient.

Some patients with metastasizing tumors show that the administration of vitamin C in conjunction with infusions results in a definite stimulation in immunity.

What can be said about combination with vitamin E?

Vitamin E is especially effective as an antioxidant, and is thus active with selenium in binding free radicals in cell membranes.

These free radicals appear increasingly as a result of environmental pollution and can be a burden to the immunity of cancer patients, but also to healthy individuals. Vitamin E thus helps to prevent pre-cancerous conditions.

It has been proven in experiments that people with low vitamin E plasma values have a higher risk of carcinomas. This is especially true in combination with low selenium concentrations. Besides bronchial, stomach and mammary carcinomas, for which a significant relationship with low vitamin E plasma concentrations has been proven, colon carcinomas should also be kept in mind. It has been difficult to prove a relationship between vitamin E levels and colon carcinomas in studies, because frequency is significantly lower.

What can be said about trace elements?

Trace elements play an important role in all life processes and are winning increasing importance in clinical oncology. They are used for diagnostics, and are being administered more frequently to correct deficiencies, or to achieve specific pharmacological conditions.

Selenium counts as one of the trace elements most essential to life. About twenty years ago it was pin-pointed as a possible environmental protector against cancer. Large scale experiments on risk populations about using selenium in cancer prevention are being completed.

Selenium is a requisite for normal cell growth, but slower growth appears in the case of heightened concentrations, and irreversible cell damage and eventual cell death in the case of very high concentrations.

Depending on the concentration, selenium is thus growth substance and growth modulator, as well as cytotoxic agent.

Selenium influences the immune system. It stimulates the formation of antibodies, modulates lymphocyte proliferation and improves the activity of macrophages and killer cells. Selenium however does not turn around the immune activity, and dosages in high sub-toxic quantities have an immune depressing result. Epidemiological studies show an inverse relationship between death due to cancer and local selenium quantities. These findings are supported by the results of prospective studies, from which it is clear that low selenium values in healthy volunteers are an indication for the heightened risk of cancer.

In the face of these observations it is justified to accept the therapeutic value of selenium for tumor patients.

The immunomodulatory basis of selenium is different from that of Iscar and no overlapping occurs. A combination of selenium and Iscar therefore seems effective. Very high concentrations of selenium however have a cytotoxic effect.

What can be said about therapy with zinc?

Zinc is another trace element used relatively frequently in the treatment of tumor patients.

Tumor growth is influenced by changes in zinc intake, with growth speeding up with a surplus of zinc and slowing down with a depletion of zinc. Even tumor regressions have been observed.

However, medicinal deprivation of zinc cannot be used for treating cancer in humans, due to the severe side effects.

Whether the cytotoxic results of chemotherapy are altered with zinc deprivation cannot be answered at this stage.

An inverse relation was observed between zinc concentrations in the prostates of patients with prostate carcinomas, and the results of therapy. Certain cytostatics results in a decrease of zinc in tumors.

As the serum zinc values are mostly low in cancer patients, the question needs to be asked whether they will be normalized by zinc supplementation.

One has to take into account that zinc can speed up tumor growth and that low zinc levels are not the result of low zinc intake, but rather the result of the tumor's need for high quantities of zinc. Zinc supplements at sub-toxic levels administered in the drinking water of mice with spontaneous mammary tumors resulted in a rapid acceleration of tumor growth.

In vivo zinc acted reciprocally with selenium, with the anti-cancerous results of selenium completely cancelled by zinc. This confirms the observations that there is a direct correlation between zinc intake through nourishment, and the fatality of breast cancer.

A warning must thus be leveled against treatment with zinc, as the zinc levels necessary for therapeutic purposes is not yet known.

Is treatment with iron dangerous for tumor patients?

The role of iron in tumor development is the subject of many investigations. From these it follows that iron may be essential for life, but that, in excess, it stimulates tumor growth. Excess iron is stored in the metabolically active cell membranes of tumor cells, instead of in the cytosolic ferritin as in normal cells. This enables the rapid growth of tumor cells. The iron content of tumor cells varies considerably and depends on the type of tumor. For example, breast tumors are often high in iron content.

Large quantities of iron can accumulate in tumors. In mice with large mammary tumors the total iron content of the tumor exceeded that of the liver.

As tumor growth is dependent on iron intake, iron supplementation in anemic patients should be carefully evaluated.

For tumor prophylaxis the same holds true for iron as does for zinc: chronic surplus, as well as chronic deficiency should be avoided. Resistance to cancer is decreased organ-specifically in the case of chronic iron deficiency.

Iron supplementation should, as with zinc, occur via diet rather than medicinally. The absorption of both elements is especially regulated by phytic acid, which is found in wholemeal products.

What other trace elements are important for therapy?

It is possible that chronic copper deficiency results in weaker cancer resistance.

Until now copper supplements have seemed unnecessary, as copper deficiencies were only observed in rare illnesses. Chronic copper deficiency is especially linked to bone and joint illnesses, but copper supplementation does not seem to be beneficial.

Magnesium stabilizes cell membranes, and a synergetic interaction between magnesium, selenium and vitamin E can be assumed.

It is noticeable that subnormal magnesium concentrations have been observed in almost all types of cancer, excluding melanomas.

General magnesium supplements cannot however be recommended, as magnesium can accelerate tumor growth.

Nutritional Aspects

Can a specific diet be recommended for cancer patients?

There are many opinions about specific diets for cancer patients, none of which are completely convincing. Without any intake of nutrients, an existing tumor can be starved.

However, all tumor diets that aim to "starve the tumor", or through the elimination of essential ingredients aim to "dry out the tumor", lead to a considerable loss of vitality in the patient, which often rapidly leads to tumor progression.

Tumor patients should follow these general criteria:

1. Mostly fresh food should be used, and if possible no preserved food, preservatives or artificial fertilizers.

2. No alcohol should be consumed. Alcohol has a laming effect on the spiritual Ego, which is probably the most important aspect of the human being. It furthermore affects the liver, which in our experience is the most important organ in cancer therapy.

3. Potatoes and tomatoes should be considerably reduced in the diet of a cancer patient.

4. Joy and rhythm in eating, and restfulness while digesting, should be observed. These qualities are severely lacking in contemporary lifestyles.

Why should tumor patients not eat potatoes?

Potatoes are not real roots, but rather stalk growths, which develop in the soil without light. If one exposes potatoes to light, they become poisonous. Especially cancer patients should avoid young potatoes, as they still have the potential to become poisonous. Rudolf Steiner elaborated that potatoes belong to the group of plants known as nightshades, which burden the digestive system and can lead to dullness and general lethargy. In other words they don't stimulate restorative energies.

In experiments the poison solanin has been found in the skin of potatoes. This poison is more evident in young potatoes, and recently the suspicion has arisen that it may contribute to the formation of cancer.

It is important to know that in experiments on laboratory animals with tumors, the tumors grew faster in the animals fed on a potato diet.

Why should tumor patients not eat tomatoes?

Rudolf Steiner said that the tomato, according to its nature, especially stimulates that "which is independent in the organism and that which specializes". In today's medicine we know that rheumatic and gout patients should not eat tomatoes. In the case of rheumatism and gout, deposits are formed in the joints or in the muscles. One could perceive cancer as an independent deposit in the organism. We can then understand why Rudolf Steiner said that cancer patients should not eat tomatoes.

There are also animal experiments indicating that animals with tumors, which are fed with tomatoes, develop significantly larger tumors than the control group.

It is furthermore important to know that tomatoes, like potatoes, also form the poison solanin.

Besides this, the proliferating growth, the love of muddy ground, the ripening in darkness and the characteristic of the fruit to draw the last strength out of the plant, place tomatoes in a particular category. These characteristics are the reason why Rudolf Steiner urged cancer patients not to eat this fruit. This does not mean that this fruit is forbidden across the board. It can absolutely be recommended to healthy individuals. It is also a misunderstanding that other nightshades should be avoided. Peppers for example are important nutritious plants, as are cucumbers and pumpkin-type vegetables, and should definitely be included in the tumor patient's diet.

What general guidelines should be observed in the tumor patient's diet?

Today, together with nutrients, the human body absorbs hundreds of different chemical substances, of which only a few serve as nutrients for the maintenance of bodily functions.

Due to the possible causal link to malignant tumors, mutagenic substances in foods should be especially monitored. Included are plant additives, toxic molds that cause perishing, as well as mutagenic substances that can arise in the preserving, processing and preparation of foods.

The high possibility that foods could be contaminated with persistent environmental poisons, such as heavy metals, pesticides or radioactive nuclides, which all have mutagenic characteristics, is only mentioned here.

Cancer patients should be especially careful about environmental poisons in food, but also about the possibility of foods poisoned with molds.

Molds are relatively widespread today and food contaminated with mold should not only be thrown away, but should generally be destroyed.

Often it is not possible to see whether food is contaminated with mold spores or filaments. The mold is only visible in one place, but will have grown through the food and have resulted in spoiling. Cancer patients suffer far more severely from the effects of ingesting mold.

Generally the consumption of food types that are more frequently contaminated, such as moldy nuts or highly heated, grilled pickled food, should be avoided. Food coloring should also be avoided.

Is there a link between nutrition and the immune system?

Nutrition, or individual nutrient substances, interact with the immune system and can inhibit or stimulate its function. Conclusions can be drawn from this for the treatment of patients with malignancies.

Different effects were found in the immune system with the intake of specific substances, such as arginine, nucleotides and lipids. Many more tests will be necessary to determine nutritionally induced

effects on the immune system with regard to specific clinical situations, such as burns, lengthy operations, organ transplants or tumors. However, current studies indicate promising results with immunomodulating diets.

In tests arginine clearly influenced immunity in the human being. Furthermore, healthy volunteers who increased their daily arginine intake showed significantly increased lymphocytic reactions to mitogens. Post-operative patients, who received increased arginine by means of enteral alimentation, also showed improved lymphocytic reactions to mitogens.

In animal tests the size and frequency of tumors could be reduced by means of increased arginine intake. Animals inoculated with a virus displayed longer latency periods regarding tumor formation and smaller tumors, when fed on an arginine containing diet.

All studies so far indicate that arginine has an immune stimulating effect. The improved function of lymphocytes and macrophages could be important in improving immune function post-operatively, and in preventing potential infectious complications.

It is important to know that high levels of arginine can be detected in mistletoe.

Nucleotides can also influence tumor growth. In animal experiments with induced T lymphocytic tumors, the tumors were dependent on nucleotides for their full development.

Lipids are important nutrients in the reaction of the organism to nutrient deficiency and stress. It has recently been discovered that lipids, especially prostaglandins, play an important role in the immune system.

In conclusion it can be said that immune competent cells react differently according to whether the diet contains medium chain triglycerides, omega 3 fatty acids and omega 6 fatty acids. Recent investigations show that the immune system can be influenced therapeutically and prophylactically with the administration of a special fat containing diet.

A diet can be put together in such a way that, mainly through a change in the proportion of the different kinds of fats, the function of the immune system is changed according to the need of the clinical situation.

Are there questions not yet asked in this context?

This small book contains the questions of many patients about therapy with Iscar. Many questions of other patients or their doctors have perhaps not been answered extensively enough, but for further information reference is made to the literature.

APPENDIX

Anthroposophical Medicine

Anthroposophical medicine is the spiritual scientific extension of natural scientific medicine.

It rests, in the assessment of health, illness and healing, on the physical laws that are encompassed by the natural sciences, but also equally considers the laws of life, emotion and spirit in their mutual dependencies. Physical body, 'body' of life forces, 'body' of emotional experiences and spiritual Ego are, according to anthroposophical knowledge, the four aspects of being.

Aspects of being

Physical body inorganic, material, "mineral" Etheric body (growth body)
basis for body of life forces, "plant-like" Astral body (emotions)

basis for organization of sensory experience and emotional life, "animal-like" Spiritual Ego
basis for the spiritual individual, "human"

With regard to matter and its laws, the physical body, which humans, animals, plants and the lifeless mineral world have in common, can be perceived directly by the senses.

The essential step from the inorganic nature of the mineral to the organic nature of all living organisms is the result of the body of life forces (etheric body), which allows the development of form to occur by means of metabolism, growth, regeneration and reproduction.

Humans and animals have in common the body of emotional experiences (astral body) as bearer of drives, instincts and inner sensing, which also allows independent movement to occur.

The human being's consciousness of self and control of self, the possibility to understand oneself as an individuality, as one who stands consciously and responsibly in the world, is founded in its spiritual essence, in the spiritual Ego. This is the essentially human, because it is the spiritual dimension, from which the human being creates culture and learns in the course of life.

The above-mentioned fourfold nature results in a differentiated functional organization of the human being and the essential laws of existence. The physical body is perceptible through the sense organs while the three other aspects of being are not. They can only be recognized by their effects in the domain of physical phenomena.

The working of the aspects of being in the human being's physical body result in the morphological threefoldness of

the nerve-sense system with its center in the skull, but functionally effective in the entire body;

the rhythmic system with its functional center in the chest cavity; and

the metabolic-limb system which encompasses all metabolic activity and willed movement, and which is centered in the metabolic organs of the abdomen and in the limbs.

The physical three-foldness corresponds to a spiritual three-foldness of the human being:

nerve-sense system carrier of thought rhythmic system carrier of feeling metabolic-limb system carrier of will

The three-fold organization is effective in the total organism, in the organ systems, organs, tissues and cells, morphologically as well as functionally. At each stage of life it experiences a corresponding modification. The rhythmic system mediates between the two opposite poles of the nerve-sense system and the metabolic-limb system, and creates health in the sense of a delicate, ever newly created balance, which is a harmonious working together of the aspects of being. A departure from the healthy central point results in the manifold illnesses.

This conception of a physical-spiritual functional organization, which recognizes the whole of the human as ensouled, makes possible an all-encompassing view of physical, pathological and therapeutic problems. The aim of treatment is thus based on the task of re-establishing the harmony of energies.

Methods

Natural scientific and spiritual scientific methods are used in anthroposophical medicine. Anthroposophical doctors are convinced that for this purpose, besides a conventional natural scientific training, a training based on Goethe's methodology for the understanding of life processes, is necessary. Furthermore, training in meditative higher knowledge, or insight, is necessary. Rudolf Steiner (1861-1925), founder of Anthroposophy, described this in terms of Imaginative, Inspired and Intuitive steps to higher knowledge. The results of the spiritual scientific research of Steiner are viewed as the starting point for many diverse contemporary studies and research projects in anthroposophical medicine. Natural healing methods, physiotherapy, phytotherapy, homeopathy, psychotherapy and artistic therapies can now be understood with a rational basis by means of the anthroposophical view of the human.

For the understanding of illness and for the finding of cures it is necessary to do research using the above mentioned methods. To move from pathology to therapy one needs to answer the question of how the organ systems described above, and the aspects of being, come to expression in the ill person, and with which curative means from the three natural realms, or through which action of the human, a healing of the patient can be attained. The understanding of the relationship between the human aspects and the natural realms on the one hand, and the actions carried out by the human on the other hand, are the essential foundations of therapy.

It is essential for the understanding of illness in terms of anthroposophical medicine that physical changes are understood as the expression of soul and spirit, which, in their changing interactions, can reveal themselves as illness, or also as a healthy expression of life and emotion. Psychiatric illnesses are also viewed and treated in their bodily context, in an equivalent of the above-mentioned body-soul relationship. The therapeutic measures adopted by anthroposophical medicine are also based on these considerations.

Specific methods of therapy have arisen, such as:

a) Medication according to special pharmaceutical methods of production, as also determined in the "Homeopathisches Arznei Buch" (HAB); or, for metal therapy, the breakdown of substances through

plants (vegetabilized metals); or the application of rhythmic and other processes in the manufacture of specialized healing plant substances, with the most well-known example being the manufacture of mistletoe preparations for the therapy of tumor illnesses.

b) Procedures for external applications, eg. metal containing ointments, rhythmic rubbing, or oil dispersion baths.

c) Curative eurythmy, a movement therapy founded by Rudolf Steiner, as well as artistic therapies: sculpture therapy, painting therapy, music therapy and speech formation as therapy, which all draw patients into an active, engaged participation in their own healing process.

d) Psychotherapy based on the anthroposophical view of the human and of illness, which is based on the spiritual scientific understanding of biography, and the soul's development from the bodily to the spiritual.

The basis for understanding illness and medicine according to anthroposophical medical methods, is contained in the book that Rudolf Steiner wrote in collaboration with Dr. Ita Wegman: Fundamentals of Therapy: An Extension of the Art of Healing through Spiritual Knowledge, (Mercury Press, Spring Valley, 1999).

It is therefore clear that mistletoe therapy cannot be understood in isolation when speaking of anthroposophically extended medicine in tumor therapy. Rather, other forms of therapy, e.g. art therapy, must be included in the expanded view and the understanding of the human.

Only by treating the entire human as a unity of body, emotion and spirit, can a tumor patient be successfully healed.

Richard Wagner, MD

Glossary

antihistamine: medication against allergic reactions

antigen: alien protein that causes the formation of antibodies in the body, which then make the protein harmless

antibody: defense substance formed as a reaction to the invasion of an * antigen in the blood serum

antibody formation: an immune reaction

anti-proliferative effect: acting against proliferative multiplication of tissue

ascites: abdominal dropsy; collection of fluid in the abdominal cavity

bradycardia: slow cardiac activity, slow beating of the heart

cell membrane: forms the cell surface; represents a barrier through which some substances, eg. water, can move through, others eg. sugar, not

chemotaxis: orientation movement triggered by chemical stimuli

collum carcinoma: cervical cancer

colon carcinoma: cancer of the large intestine

craurosis vulvae: shrinking of the transitional mucous membranes (in this case of the vagina)

(Breisky's disease) cytokine: * lymphokine

cytotoxic: cell poisoning, cell damaging

desensitization: artificial reduction of a specific oversensitivity (eg. an allergy); it is possible to test which substance the patient is reacting to; the patient is injected with the smallest quantities that give a hardly discernable reaction, which is increased gradually, to achieve insensitivity

differential blood count: counting white blood cells with an isochromatic method

effector: substance that regulates an enzyme reaction

enteral: regarding the intestine

enzyme: organic compounds in living cells, which regulates the metabolism of the organism

eosinophil: white blood cells colored with eosin (a red dye)

erythrocytes: red blood cells

esophagus: gullet

granulocytes: a type of white blood cell

hematopoiesis: blood formation

Hodgkin's disease: malignant lymphoma that probably arises from the lymph nodes; malignant disease of the blood

hypertension: high blood pressure

hyperthyroidism: overactive thyroid

immune suppressant: medication that suppresses immune reactions

immune system: a functional unity including immune cells, other cells and organs, which preserves the individual structures and functions of the organism by working together in the fight against foreign substances; the thymus gland is essential for the immune system, as is the system containing the liver, spleen, lymphatic system and bone marrow.

immune tolerance: the level beyond which an individual does not react normally to an immunogenic stimulus, in other words does not respond to an antigen by forming antibodies

inoculate: to bring pathogens, tissue, cell material into an organism

inotropic: influencing the strength or contraction power of the heart muscle; increasing: positively inotropic; reducing: negatively inotropic

interleukin I: stimulates T and B lymphocytes

interleukins: signal substances for immune regulation

intracutaneously: into the skin

intraperitoneally: into the abdominal cavity

intubation: insertion of a tube, e.g. airway tube through the nose or mouth

killer cells: sensitized T lymphocytes; excrete cell poisons in the presence of cells containing foreign antigens (eg. transplanted cells, tumor cells)

leukopenia: depleted total leukocyte count

"Leukotriene"/prostaglandin: prostaglandin

leukocytes: white blood cells; made up of granulocytes (60%-70%), lymphocytes (20%30%) and monocytes (2%-6% of the blood leukocytes); in infectious illnesses there is a gradual change in the leukocyte division, which can be seen in the differential blood count, and which enables a conclusion to be drawn about the illness

lymphocytes: white blood cells that originate in the stem cells of bone marrow; formed in the bone marrow, lymph nodes, thymus and spleen, and mostly end up in the blood via the lymphatic system

lymphokines: substances produced and excreted by the lymphocytes, which activate other cells and influence their function for the formation of various enzymes

macrophages: large * phagocytes

mastopathy: proliferating nodule and cyst formation, tissue multiplication, processes of change in the mammary glands

metabolic: (self-explanatory in English)

metaplasia: curable change of differentiated tissue into another type of differentiated tissue

mitogens: substances that effect cell division

mutagen: triggers mutation

mutation: change, alteration

neutrophile: easy to color with chemically neutral substances, especially susceptible to neutral colorants, eg. of leukocytes

non-Hodgkin lymphoma: malignant lymphoma

papillomatosis: cauliflower-like growth

phagocytes: Cells that are free in the blood (white blood cells), and are able to absorb and to make harmless alien substances, especially bacteria, by means of * enzymes. According to place of origin, prevalence and tasks, there are eg. histiocytes, monocytes, macrophages, microphages

phagocytosis: dissolving and making harmless of alien substances in the organism by means of phagocytes

plasma: 1. living substance 2. clottable body fluid, eg. blood plasma, muscle plasma, albumen containing liquid gained by pressing live muscles

plasma cell tumor: multiple myeloma, Kahler's disease; cancerous swelling in the bone marrow which originates from a single, malignant degenerate plasma cell type (B cell of the immune system)

plasma expander: plasma substitute, solutions of natural or synthetic colloids

pleura: covering of the lung tissue

prospective studies: possibility; with regard to the future

prostaglandin: local hormones that are biologically highly active and originate from the different body tissues; very important for cell function and act as transmitters

proteins: general description of albumens

randomization: a selection that allows an exact calculation of random dispersion, based on the probability of theoretical assumptions; serves for the attainment of representability of random checks and experiments

reactive protein: a protein located in the liver which can attain serum concentrations thousands of times higher than average by means of increased synthesis, in the case of infectious and non-infectious, inflammatory and dying off processes

receptors: reception devices of the organism for particular stimuli

resorption: absorption of dissolved substances in the blood and lymphatic system

reticulo-endothelial system: a cell system belonging to the immune system, which is also described as resorbing inner surface of the body. Especially plays an important role in healing chronic illnesses

selenium: important trace element; contained in bones and teeth

"sistieren": (self-explanatory in English)

subcutaneous: under the skin

sub-ileus: disturbance of the intestinal movement as early symptom of intestinal obstruction

suppressor cells: suppress the immune reaction of other, especially T helper cells

stenocardia (angina pectoris): heart complaint appearing as labored respiration; due to a functional disturbance of the coronary artery, which supplies the heart muscle with blood

T helper cells: lymphocytes important for the regulation of immune reactions

tumor markers: substances traceable in the blood serum that allow conclusions to be drawn about a particular tumor