

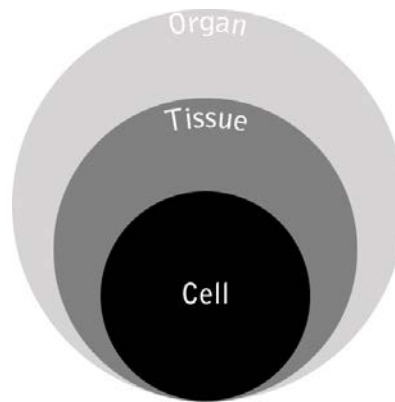
Oncology

1. Central ideas

Malignant neoplasm is characterized by *pathological changes of life (proliferation)* and *ban (differ-emiatio)*. *Proliferative vitality (immortalization)* is the goal of a therapy that is cytoreductively oriented. The pathology of form, that is, the loss of formative and structural power, appears morphologically as dedifferentiation (malignant transformation). Only a few therapeutic approaches have so far been developed here. Under physiological conditions, cellular growth is placed within the order and regulation of the next higher level of correlated tissue or organ and, ultimately, of the whole organism. With the *development of a tumour*, the pathological proliferation is isolated from these regulatory arrangements. *Desintegration* from the organismic context and *autonomization* ensues. Accordingly, a tumour disease requires a holistic view that focuses on the organismic connection alongside a particularistic view that is related to cellular changes.'

A 'cellular principle' that has broken free from the hierarchy of order predominates in the tumour.

The development of oncology illustrates this tension between a particularistic and a holistic approach. The first and still defining therapeutic options consisted of the *surgical removal of the tumour*. This form of therapy was focused on a somatic tumour manifestation. *Radiation therapy* orients itself in a similar direction that can, however, additionally influence pathological proliferation. Only *since* the discovery of cytostatics and, consequently, *chemotherapy* as a further pillar in the treatment of tumours, have substances been used that inhibit proliferation and interact with replication and therefore with vitality processes. With the introduction of *endocrine therapies* (for example, in breast and prostate cancer) and *antibody-based therapies*, the cellular function is no longer directly influenced, rather its regulation is influenced through various 'messenger substances'. Therefore, 'peripheral' and no longer only cellular factors are the focus of this form of therapy. The therapeutic range broadens from focusing on the tumour cell to the organismic context of the tumour cell. However, these therapeutic strategies also relate indirectly to influencing the cellular growth so that, ultimately, a particularistic understanding of disease still determines current therapeutic thinking.



Hierarchical order of cellular growth

A *particularistic undemanding* is currently predominant: cancer is understood as a '*disease of the cell*'. Consequently, therapeutic tools relate to *cellular processes* and their *regulation*. In contrast to this is a *holistic view* that recognizes cancer as a *disease of the human being*. It requires *more far-reaching therapeutic goals*,

2. Spiritual-scientific understanding of disease

A holistic view leads to the question about the *essence of cancer*. Is there a natural law that coordinates the individual phases of carcinogenesis? Tumour formation appears in many aspects as being sophisticatedly organized, like an 'organ formation' with independent metabolic processes, angiogenesis and tumour-specific immunological changes.' It demands, therefore, a *Comprehensive spiritual-scientific understanding of disease* that places carcinogenesis against the background of the threefold structure and the constituent elements of the human being.

2.1 Metamorphosis between the sense and the thyroid organization

Malignant growth frequently develops from *glandular tissue*. For instance, gastrointestinal cancers can develop in the context of the adenoma-carcinoma sequence Iwe Furthermore, breast cancer, pancreatic cancer, hepatocellular carcinoma, prostate cancer, etc. stem from glandular tissue.

Carcinoma shows a relationship to the gland organization.

Which natural laws characterize carcinogenesis and therefore also the transition from an exocrine gland to a benign adenoma and eventually to an adenocarcinoma? In this context, the *metamorphosis* between *the gland organization and the sense organization* becomes important from the aspect of the threefold structure of the human organism.

The *external localization* of exocrine glands that are part of the metabolism-limb system already indicates their metamorphic relationship to the sense organization. The lacrimal gland of the eye, the parotid gland and the salivary glands of the taste buds, the glands of the nasal mucosa (Bowman's glands) and, finally, the moisturizing glands of the sensory skin indicate the anatomical and functional relationship between these polar areas of the sense and gland organization.

This connection can also be found again morphologically: exocrine glands show an invagination of the surface that corresponds to the embryonic, golf ball-type invagination of the main sense organs.

The *relationship* between the *gland organization (metabolism-limb system)* and the *sense organization (nerve-sense system)* is mediated through *respiration (rhythmic system)*.

The embryonic development of the respiration organization is determined by the metamorphosis of the exocrine gland and the sense Lung development begins as an entodermal invagination and histologically resembles an exocrine gland. Following the gland-related organ rudiment is the sacculan terminal, as well as the alveolar phase and, finally, the lung organization that is formed 'in the air and for the air'. The air passages then reach the sense organization in the upper human being. The transition of the respiratory

epithelium of the air passages to the sensory epithelium of the olfactory mucosa can impressively be followed here. The respiration organization reaches the sense organization.

A double relationship to the environment develops with *inspiration and expiration*. A quality of the outside world is directed to the inner sphere through inspiration, while the inner sphere discloses itself to the world through expiration. This breathing process can metamorphotically be followed through to the intestinal gland organization: the mainly excretory 'exhaling' function of the crypts is opposed by the villi of the small intestine that mainly serve reabsorption (Inhaling). The catabolic activity of intestinal glands is in contrast to the anabolic vitality processes of the villi.

The breathing process also appears in the *sense organization*. In terms of the sensory perception, it is often exclusively its receptive function, namely 'inhaling', which is described. It is opposed by a soul activity that is oriented 'towards the outside' as an active, intentional sensory perception comparable to exhaling. Goethe has indicated this *breathing of the senses* in his theory of colours: 'The eye owes its existence to light. From indifferent animal-like auxiliary organs, light calls forth an organ that becomes its equal and thus the eye develops in the light for the light so that the inner light encounters the outer.'⁴

Hence, removed from consciousness, the breathing process appears in the liquid element of the gland organization (reabsorption and secretion). In lung breathing it reaches the air (inspiration, expiration) and, finally, in the sense organization it reaches the light. This description represents the 'illuminating', in other words, light-related quality of all the different sensory modalities.

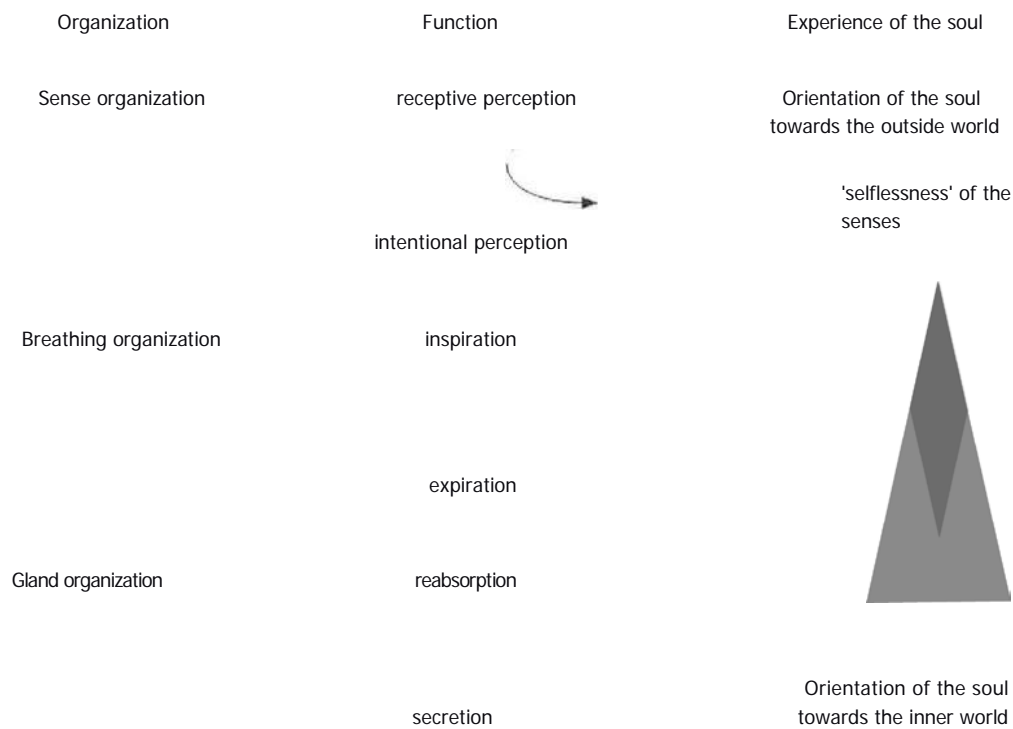
Accordingly, '*inhaling*' of the senses corresponds to a *receptive perception*, '*exhaling*' of the senses to an *intentional perception*.

The metamorphotic relationship between glands and sensory organs can be extended to the ensouled-spiritual level. Desire as a stirring of the inner soul world is connected to gland secretion. Compared to this, breathing is intensely connected with feeling which reveals itself in the formation of sound. The wakeful consciousness that is carried by thoughts can unfold in the sensory perception. The metamorphosis from gland organization to sense organization is, when viewed from the perspective of the soul, accompanied by an increasing 'awakening.'

There is, however, a characteristic distinction between the inner experiences of the gland organization and the sense organization: the '*selflessness*' of sensory perception and the *internally governed sensations and desires* that accompany gland activity are in contrast to each other. An example is the difference between the inner experiences of seeing and crying, which is accompanied by tear secretion. A clear, unclouded perception of the outside world is in contrast to the pain of the ensouled inner world that erupts with tears and clouds the perception. An essential change in the relation of the inner to the outer world is, therefore, found within the metamorphosis of the breathing process that conveys the polarity between the sense and the gland organization.

The *ensouled inner world* reveals itself in the *sensations* that accompany the *glandular function*. In comparison, the greatest possible '*selflessness*' in the *perception of the world* develops in the *sense organization*.

The world of sensation that accompanies glandular secretion is defined by the desiring Individual being; in the sensory area, it transforms itself into an open minded inner attitude in which one's own being must remain silent in order to unadulteratedly and 'selflessly' experience the world [see fig.]



Metamorphosis of the breathing process: sense organization and gland organization

2.2 Carcinoma and the threefold organization

Extensive regeneration processes, as the expression of an intense etheric action, are found in the exocrine glands of the intestinal tract while the sense organs have almost no regenerative possibilities and, as a result, appear as if they have been abandoned by the etheric organization. The gland organization appears as a formation of sense organs that has been transformed by the vitality of the organism.

The exocrine gland organization appears as physiological metamorphosis of the sensory function in the metabolism system.

In comparison, is it possible to find a non-physiological origin of a sensory process in the metabolism system that does not undergo this metamorphosis, rather appears as a 'sense organ in the wrong place'? This question gains significance for the understanding of cancer and leads to an initial characteristic of cancer.

Cancer develops in the area of the exocrine glands when the metamorphosis of the sense organization via respiration into the gland organization is not implemented in the usual way, but rather a tendency towards sense organ formation directly intrudes into the area of the exocrine gland as a 'sense organ in the wrong place' [see fig.]

Sense organization



Gland organization

(a)

Sense organization



Adenocarcinoma

(b)

Breathing organization

Carcinogenesis: physiological metamorphosis between the gland organization and the sense organization (a) and pathological dislocation (b) in the threefoldness of the human organism

'It may sound paradoxical: one must say that in an area of the human organism which in its normal organization is only designed to develop glandular matter, a tendency develops towards the rudiment of a sense organ formation process. A tendency is embedded to some extent, in the formation of epithelium that otherwise is only justified to be present in the human organism where the senses develop.

In 1920, Rudolf Steiner indicated the connection between the ear organization and tumour formation, and explained how a restricted faculty of hearing through to deafness is associated with an inhibition of tumour formation. Karl König has followed this initial suggestion and quotes a clinical study in which an increased faculty of hearing in tumour patients was detected.' Although until today no further studies that build on this are known in literature, it is nevertheless an important suggestion which should be researched.

In terms of the *encounter with patients*, it is also important to ask about changes in sensory perception. An increase in the intensity of perception in various sensory modalities is relatively often reported.

Case documentation

An approximately 70-year-old patient with abdominal symptoms, increasing frailness and loss of weight was admitted. In the diagnostic investigation, pronounced *liver metastasis* with an unknown *primary tumour* was detected (CUP syndrome). This patient complained about a considerable *sensitivity to noise* as well as a tormenting sleeplessness. He subsequently requested a single room and even there he could hardly tolerate the noises of the daily routine in the ward. The ability to set limits in the auditory space was for him a considerable challenge and was equal to the symptoms caused by the tumour in terms of the level of suffering.

Peter Selg has pointed out that the 'openness' that is similar to a sense organ is impressively described in the poetry of *Rainer Maria Rilke*. In connection with his leucaemia that was like a path of initiation, Rilke described an experience that evoked a heightened sensory perception. He therefore becomes an impressive representative of those cancer

patients who describe this distinctive feature of their inner life and understand it to some extent as an essential inner task of their cancer.

*I live in so much misfortune I
trickle away, I trickle away like
sand running through fingers.
I have suddenly so many senses
that are all differently thirsty.
I feel myself in a hundred places
swollen and in pain
but most in the midst of my heart.*

A further connection between cancer and the sense organization has been described for *breast cancer*. A clinical study shows that blind persons develop breast cancer 20% to 50% less often. It is also assumed that a higher tendency to breast cancer exists for night duty workers who cannot enter into the darkness of sleep.

On the other hand, the *physiological action of light* can also have a *protective effect*. The action of light that relates to the sense organization should be distinguished from its physiological bodily action. The corresponding research, also in connection with Vitamin D, is described in [-.5.5.5 Influential factors].

During the course of a disease, an essential *metamorphosis of sensory perception* can develop and lead to the question of which new qualities reveal themselves to this 'sense organ formation: Some patients report that the significance and essence of an experience is much more intense than the external appearance that is accessible to sensory perception. Small things gain greater significance than they would have previously gained. The concealed aspects of the world that belong to its spiritual nature are intuited.

Case documentation

An approximately 50-year-old woman suffered from a far advanced *ovarian cancer*. Following the initial surgery with subsequent chemotherapy, a relapse occurred after a few years. The question then arose with regard to repeating chemotherapy as a palliative treatment. After initial insecurity, a clear rejection of a repeated chemotherapeutical attempt developed after consideration of various aspects.

During the following period a development occurred that impressed the treating professionals. Externally, loss of function increasingly occurred. A deep vein thrombosis that reached as far as the vena cava and later an ileus developed. At the same time, we saw an *impressive inner development* of this patient. We gained the impression that a far-reaching internal effect emerged against the background of a withering body, and an inner healing process took place which — pointing to a broad future — soon no longer needed the diseased body. On request, this patient put into words her inner experience which also includes a different sensory perception:

'There are totally new experiences with the spirit while the body gets weaker and weaker and fails. Things become clearer, move closer to me and even start to develop an unusual, new language. I am surprised and happy. It gives me strength and assurance and I feel it as a message of love from the other world. A light reflection on the wall opposite my bed, for example, or a tree. Once, when I sat on a terrace of the hospital with a view on the beautiful forest, a tree came close to me in an astonishing

way and something like a dialogue developed. Unfortunately, the chatting of a patient who I could not readily get rid of disturbed this unique, beautiful experience.

*You dear tree!
I embrace you
my silent friend.
How often already
ha ▶ 'e I seen you and yet not,
have passed you by
and have not thanked you
for your silent friendship,
yes, I should have
loved you and not
the false friend.
Now you are
a part of me
and I am a part of you.*

Even when confined to bed, one can still make new experiences that help to bring a happiness that one did not think was possible, and which is totally independent from a functioning body. Therefore, the spirit can exist completely free and independent from the body. It is not affected by its disintegration.

*The body leans towards the ground
because it is tired and heavy.
On earth it was the apparel of the spirit,
which it no longer wants to be.
Thus, it releases that which ensouls and animates it.*

*The spirit grows wings
without the ailing burden.
It feels free and lighter
and is almost home.*

A faculty of perception has developed in connection with cancer that turns towards the essential and not only towards an outer appearance. From looking with the senses, a 'looking with the spirits' develops [3.8.7 Spiritual tasks]

2.3 Carcinogenesis and the effect of the constituent elements

The characterization of cancer as a 'formation of a sense organ in the wrong place' segues into the *effect of the constituent elements* within carcinogenesis.

The functional metabolism and, thereby, the vitality processes, namely the etheric organization of an *exocrine gland*, are modulated by the astral organization because the soul experience is closely related to the glandular function (for example, 'appetite juice').

The *upper constituent elements* are physiologically *intensely* connected with the *glandular function* [1.1 Gland organization and cancer].

Referring to this, there are other conditions for the *sense organization*. A perceiving person, oblivious to everything around, is no longer 'with himself or herself', rather he or she is totally oriented and devoted to the world. The facial expression of an amazed person is therefore similar to that of a sleeping person. The upper constituent elements detach themselves 'sleep-like'¹² from the lower elements in the sensory perception and turn towards the world of perception and surroundings.

In *carcinogenesis*, being a '*formation of a sense organ in the wrong place*', the upper constituent elements detach themselves from the lower elements in a defined area of the organism. The *ensouled-spiritual essence* of the human being withdraws — comparable to sleep — from the physiological connection with the etheric and physical organization and develops an action that is characteristic for the sense organization.

'When somewhere in the human organism the tendency to a sense organization appears where no sense organization should be present — and in any part of the human organism this tendency can appear — then one sees ... how the physical and etheric body on the one hand, and the astral body and Ego on the other hand, fall apart.

With this, an effect of the constituent elements is reached which corresponds in a certain way to sleep.

The human being '*sleeps*' at the *location* where a *cancer* develops.

The polarity between a painful inflammation and an *unnoticed, 'sleepy' cancer growth* appears also in terms of consciousness.

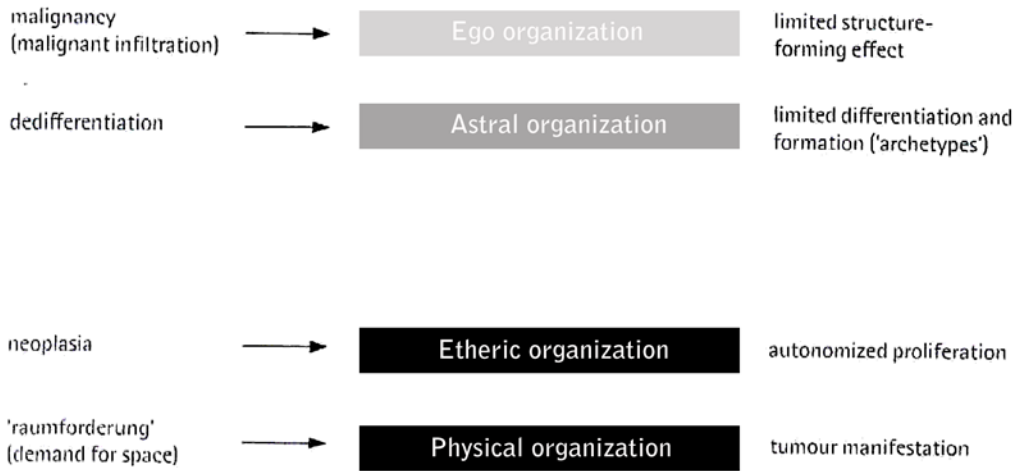
The following summary arises in terms of the changed effectiveness of the constituent elements in carcinogenesis: in the *physical organization a tendency to sclerosis and hardening* is often found with coarse palpation findings. A dominance of the physical domain develops, a 'revolution of physical forces' in a location that is otherwise governed by differentiated vitality processes morphologically, the invaginating, invasively growing disease process that is centripetally aligned leads to the ulcerating tumour form. The term '*Raumforderung*' (literal translation from German means 'demand for space') points to this physical level of cancer manifestation.

Vitality forces of the gland organization remain unused in the etheric organization due to the astral body detaching itself from its action in the functional metabolism. These unused vitality forces are the basis for the proliferation that appears in a non-physiological location. A dominance of the etheric sphere develops in the tumour, which is captured in the term '*neoplasia*'.

The astral organization detaches itself from the connection with the lower constituent elements (etheric and physical organization), no longer imprints the archetypal natural laws on the vitality processes and can no longer give Form to proliferative growth. An increasing *dedifferentiation* and lack of apoptosis develops. *Pathology of form* is added to the pathology of proliferative vitality processes.

Form and gestalt of the human body point to the Ego-organization, they are characterized and maintained by it [XXIV. 2.2 Polarity in the skeletal system]. Rudolf Steiner stated, '... the whole Form of the human organism is a result of the Ego-organization ..' The structure of the human organism is destroyed due to malignant infiltration. The Ego-organization is no longer sufficiently effective in the warmth-generating metabolic processes, but develops a surroundings-oriented action that is typical for the sense organization. *Malignancy* is associated with the destruction of the human form as an expression of the insufficiently effective, structure-giving Ego-organization [see fig]

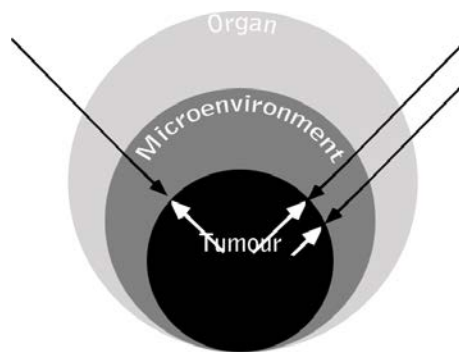
The effects of the upper constituent elements are, to some extent, mediated via the peritumoural tissue. With this in mind, the autonomy of growth signifies disintegration from the organismic gestalt cohesion that integrates the cellular vitality processes into the whole organism and corresponds to the formative effects of the constituent elements (e.g.). Numerous phenomena point to the significance of the peritumoural tissue in the development of a tumour. Indeed, it might be more appropriate to search for the reason for age-related changes in cancer incidence at the level of the response to the *stromal cell* to carcinogens, rather than merely the *tumour cell* itself:¹⁷



The effect of the constituent elements in carcinoma

However, not only the formative effect of the constituent elements that is typical for the anabolic night phase [1.7 The day and night effect of the constituent elements; V. 2. Physiology of inflammation], but also the inflammatory and immunological reactions, which represent the clay phase that challenge the foreign tissue, experience restrictions. Thus, the immunological 'detectability' of tumour tissue is restrictedly and, with it, the salutogenetic inflammation processes that are set against carcinogenesis [2,4 Inflammation and carcinoma]. In this context, *immune senescence* should be pointed out which, through the ageing process, is directly connected to the detachment process of the constituent elements.

In this respect, the importance of peritumoural tissue should be noted within the scope of a tumour therapy, as it is, for example, severely affected due to the often necessary radiation therapy (with potentially clinically relevant consequences tissue senescence and possibly procarcinogenic effect). On the other hand, the peritumoural, inflammatory reaction is strengthened and a 'coat of warmth'²¹ is generated, in-particular through the intra- or perilesional *Viscum album* therapy. Warmth improves immunological functions and contributes to overcoming the tumour escape



Restricted organismic formation in contrast to autonomized proliferation in tumour development

Tumour remissions under mistletoe therapy have been documented mainly in context with intralesional *Viscum album* (VA) application.

2.3.1 The weak engagement of the upper constituent elements in cancer

An insufficient engagement of the upper constituent elements is the basis for cancer.

In a clinical study on autonomous regulation (aR) based on *Rudolf Steiner's anamnestic questions I* - Hi. 3. [The anamnestic questions], Kroz et al. were able to document a lower aR in women with breast cancer and in other tumour diseases (however, not in patients with colorectal cancer) when compared to a healthy control group.²¹²⁴ Tumour anaemia also indicates an insufficient action of the upper constituent elements. Meanwhile, its significance in connection with tumour progression has been well documented. Tumour anaemia seems to be associated with a poorer prognosis.

This altered action of the constituent elements appears particularly impressive in the *chronic fatigue syndrome* that often accompanies cancer [H4.7 cancer fatigue syndrome]. Lack of movement and a medical history of few incidences of inflammation also illuminate this connection. Movement and inflammation connect the upper constituent elements more intensely with the lower constituent elements. This has consequences for the prevention of cancer and for tumour therapy.

2.4 Inflammation and cancer

When a *displacement* in the *threefold structure with dominance of the nerve-sense system* arises, an *inflammatory reaction* of the *metabolism-limb system* is activated as a *salutogenetic process*.

The insufficient engagement of the upper constituent elements in the formation of a sense organ in a wrong location leads to the tissue becoming 'foreign' to the organism due to the lack of differentiating and individualizing impulses, similar to a foreign body that penetrates from the outside. This dominance of the (nerve)-sense system is opposed by inflammation as a process that belongs to the metabolism-limb system so that the foreign quality can be overcome.

The dominance of the nerve-sense system with the formation of a sense organ in the wrong place is opposed by *inflammation* as a process that belongs to the metabolism-limb system. In this respect, the connection between *inflammation and tumours* takes on a particular significance.²⁵

2.4.1 The dual function of inflammation

Every acute inflammation heals when it overcomes the causative foreign quality (for example, a foreign body that penetrated from the outside or tissue that has internally 'become foreign'). If this is not successful, then a *chronic inflammation* ensues. It has now totally different qualities by no longer appearing as an acute, inflammatory, process that warms the hotly, but rather by being associated with *sclerosis* and *cancer* Hi. 2. aiseH.r

2.4.2 The tumour as a chronic, non-healing wound

inflammation is closely connected to *wound healing*. Here too, an inflammatory stage is found that is followed by the formation of granulation tissue and, finally, by re-epithelialization or scar formation. The inflammatory day phase of wound healing is in contrast to the regenerative night phase [xv. 6.1 The diabetic foot syndrome]. During this night phase, the formative natural laws are assigned to the regenerative processes of the etheric organization. The epithelial cells experience impressive changes by detaching themselves from the basement membrane, becoming mobile, changing their shape and, within the scope of the epithelial-to-mesenchymal transition (emt), taking on a fibroblastic appearance. Due to this mobility, a restoration of the injured epithelial layer is achieved during wound healing. Finally, another formative impulse (re-differentiation) takes place through the mesenchymal-to-epithelial transition (met). The interaction between form and formation of tissue and its malfunctions can also be macroscopically impressively seen in the pathology of wound healing (for example, 'proud flesh' and keloid formation). There is an essential functional and morphological *correspondence between tumour growth and wound healing: tumours appear biologically as chronic, non-healing wounds*. In contrast to the processes of normal wound healing where, for example, the platelet-derived growth factor (PDGF) is released only for a short period until haemostasis sets in, this process happens in a tumour over weeks and months. The continuous activation of stromal cells leads to an interspersing of connective tissue as far as a so-called 'desmoplastic stroma' with hardening of the tumour.²⁷

2.4.3 Tumour and blood coagulation

The hardening and *sclerosing effect* of the dominant nerve-sense system is also expressed in tumour-associated phenomena. A close relationship to the coagulation system arises

X. 4.2.3 Phleho [wonthosis]. The link between tumour diseases and *thrombosis* has been known for a long time.² Armand Trousseau (1801-1867) described for the first time phlegmasia alba dolens as the initial manifestation of a malignancy. When he himself developed a thrombosis, he accurately predicted the diagnosis of his own stomach cancer from which he shortly thereafter died.

Apart from a tumour-associated hypercoagulability, there are indications that increased blood coagulation can be linked to the potential of metastasis formation. Thereby, further factors such as tissue thromboplastin or cancer procoagulant, the latter with direct factor X activation, are expressed by some tumour cells. A possible activation of thrombocytes points in a similar direction. On the other hand, fibrinolytic activities have also been described. Occasionally, the acquired von Willebrand disease occurs paraneoplastically. In terms of a differential diagnosis, it is mainly then considered when a bleeding tendency (haemorrhaging in the mucous membranes, soft tissue and muscles) exists without obvious changes to the global parameters.⁹ In this context, it should be noted that numerous oncological forms of therapy increase the risk of thrombosis (for example, anti-hormonal therapy, angiogenesis inhibitors, etc.) or can also lead to an increased propensity to bleed.

2.4.4 Biographical connection between inflammation and carcinoma

The *polarity* between *acute inflammation* and *cancer* is essential in a number of ways. It can illuminate the biographical connection between inflammation and cancer.³⁰ The clinical studies listed in the summary indicate a higher frequency of cancer when fewer

febrile diseases have been experienced. Numerous papers and studies that, in some cases, go back to the 1911¹ certitly indicate the protective impact of fever. It is assumed that the protective effect diminishes when the febrile diseases happened a long time ago, that is, when a long non-febrile phase has occurred.)⁵ Often, inflammatory and febrile diseases appear to precede the very rare, however, to some extent well documented spontaneous remissions.³⁶

Authors	Definition of risk factor	Number		Relative risk of all cancers with 95% confidence interval
		Cases	Controls	ODDS RATIO
Engel (1934/1945)	infection index 0	300	300	10.7 (6.6–17.4)
Sinek (1936)	infection index 0			
	a) in childhood	212	1664	1.9 (1.4–2.5)
	b) in adulthood	212	1664	1.4 (1.0–1.9)
	c) total	212	1664	1.4 (1.1–2.0)
Witzel (1970)	no fever episodes over 38.5 °C in the last 5 years	150	150	11.4 (3.4–37.7)
Remy et al. (1983)	a) less than one febrile disease per year on average over the past 10 years	110	126	15.1 (8.3–27.2)
	b) less than one common cold per year on average over the past 10 years	110	126	5.7 (3.9–9.8)
	c) no organ infection in the medical history	110	126	2.6 (1.5–4.5)
Albonico HU (1996)	number of classical children's diseases	436	390	20–35% decrease in risk of cancer (depending on the emphasis of patients' responses) per children's disease
risk of melanoma and febrile infection ³²				risk of melanoma (defined as 1, when neither a severe infection was experienced nor vaccination had been carried out [variola and BCG]) dropped to 0.37, when at least one severe infection with fever over 38.5 °C had been experienced. ³³

Association inflammation — carcinoma, case control studies referring to risk of cancer depending on frequency of infection

The different diseases experienced by a human being during his or her life are interrelated and represent wholeness and not an accidental stringing together of various diagnoses.

Against this background, therapeutic measures will have to take the *salutogenetic aspect* of inflammatory diseases into account and not thoughtlessly intervene in a biographical interrelation of diseases.

In this context, the occasionally discussed association between an *increased risk of breast cancer* and *antibiotic therapy* is noteworthy.

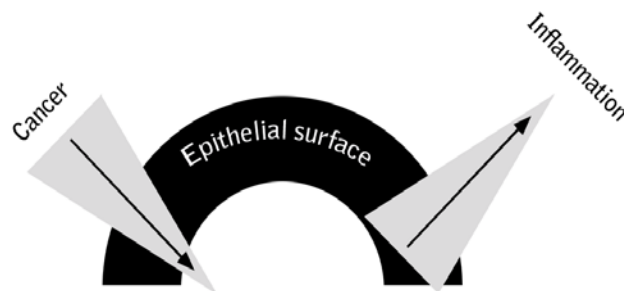
On the other hand is the therapeutic aspect of this connection between inflammation and carcinoma. Steiner has mentioned in detail *warmth and fever development* in the context of the mistletoe therapy of cancer. Cooley has documented the effectiveness of a 'fever therapy' in a large number of sarcoma patients. 'Descendants' of this approach are the various procedures of hyperthermia (which, however, are not based on an active heat generation by the patient but on 'passive' temperature increase).

Steiner described the importance of fever in connection with mistletoe therapy: 'And this effect is expressed by the occurrence of fever, Therefore, an injection must be Followed by fever. You can expect failure right from the outset when you don't induce fever.'

2.4.5 Directional qualities in inflammation and carcinoma

The *polar relation* between acute inflammation and carcinoma is also apparent in the direction of both disease processes. Inflammation is characterized by a centrifugal direction: a foreign body 'festers' towards the outside, an inflammation breaks through surfaces to the outside. Carcinoma is polar to this. Initially, it develops epithelially and therefore close to the surface. Subsequently, it invades the interior of the organism through infiltration and metastasis and by doing so, follows a centripetal direction of disease that is opposite to acute inflammation. It is the *centripetal formation gesture of the sense organization* that is reflected in this direction of malignant growth.

In the case of *inflammation*, the *organism* asserts its *own space*. The *foreign quality* is overcome by inflammation that is directed towards the outside. In the case of *carcinoma*, a 'peripheral' process that belongs to an *epithelial surface* invaginates through infiltration and destruction and, finally, through *metastasis into the organism* [see fig.].



Processual polarity between inflammation and carcinoma: carcinoma grows through infiltration towards the 'interior', acute inflammation is directed towards the 'exterior'

2.5 Constitution and carcinoma

Rudolf Steiner mentions *constitutional factors* in connection with cancer.³⁹ A 'skinny' constitution is mentioned and its characteristic action of the Ego-organization is explained

in connection with cancer. While this constitution, which is already perceivable by its gestalt, indicates the dominance of the nerve-sense system, the obese constitution is polar to this.

Obesity and *Movement* are directly connected [4,2 Diabetes mellitus type 2 and the metabolic syndrome]. Due to its warmth-related quality, movement is closely related to inflammation H XII. 5.2 May emend and, just like inflammation, it is associated with a volitional engagement of the constituent elements in the organism. Hence, from an oncological view, the question arises about the extent to which obesity and lack of movement are associated with an increased risk of cancer.

Both *constitutional aspects* have been considered in a *Swedish study* on breast cancer. In 47,000 female patients in the Swedish Cancer Registry,⁴¹ the *body mass index* as an indicator of breast cancer is only described for women over the age of 55 whereas, strikingly, a high body mass index in younger women is associated with a low cancer rate. A rather slim figure is also described for premenopausal breast cancer patients in the study by Kroz et al.⁴¹ In addition, the dynamics of weight gain play a decisive role. In terms of the mentioned constitutions, initial interactions with regard to cancer arise.⁴¹

In the case of the older patients, those who are characterized by abdominally emphasized obesity, show a higher risk of cancer.⁴⁴ In the case control study, women with breast cancer had on average 45% more visceral fat than the control patients, as shown by computed tomographic evaluation.

In the Swedish Cancer Registry, the closest relationship between body weight and carcinoma occurred with endometrial cancer.

Corresponding links are also known for *men*. Prostate cancer occurs approximately three times more often in obese men compared to normal weight men.¹⁵ An increased incidence of bowel cancer is mainly found in obese men.

In terms of pancreatic cancer, similar links seem to arise. Besides being overweight as an independent risk factor, poor physical activity is an additional factor.¹⁶ Moderate and regular movement appears to be more effective than short-term peak performances. Walking or hiking four times per week was most effective.

In a note from 1923, as if inspired by foresight, Rudolf Steiner responded to the polarity between cancer and inflammation from the view of calmness and movement: "Tumours are overcome by movement — inflammation is overcome by calmness (inner activity): a7

Thus, *constitutional factors* appear to be associated with *cancer* that, on the one hand, emphasize a *slim figure* with a focus on the nerve-sense system (in younger breast cancer patients) and, on the other hand, emphasize *obesity* as a *metabolism-accentuated constitution*. An *increased body mass index* is linked to an *increased risk* of developing common, but also *rare types of cancer*.⁴⁸

In addition, the functional qualities in the threefold organism that consist of calmness for the nerve-sense system and of movement for the metabolism-limb system are the respective salutogenetic-healing principles for the polar diseases of inflammation and carcinoma.

The *transition from the gland organization to the sense organization* corresponds, on a *soul level*, to the *transition from an internally oriented soul experience to selflessness and openness of the senses to the environment*.

Is such a soul quality observed in a person suffering from cancer?

A preliminary comment is necessary here. It cannot be assumed that a carcinoma, which originates in a particular location of the organism, imprints its sense organ quality on the whole soul nature of a human being. Moreover, the effect of the astral organization that is close to the body and the inner experiences of the soul must be differentiated.

Hence, a '*cancer psyche*' in the strict sense does not exist. Rather, the altered effect of the constituent elements HP 2.3 Carcinogenesis and the effect of the constituent elements] will appear in the soul in varying degrees and be *dependent on the tumour entity*, just as, conversely, the *spiritual-ensouled essence of a human being* can *modify the body-related effect of the constituent elements*.

A *withdrawn emotional expressiveness* is described in the extensive literature as a characteristic feature of cancer. A curbed world of emotions seems to inhibit the experience of the soul to unfold and reveal itself to the outside. These observations follow far earlier observations. The London surgeon Sir James Paget summarized it in his book 'Surgical Pathology' in the following way: 'The cases in which an appearance or exacerbation of cancer occurs after deep fears, unfulfilled hopes and great disappointments are so frequent that we can hardly doubt that emotional depression belongs to those influences that promote the development of a cancer condition.'⁴⁹

Numerous studies that pursued this question struggled with *considerable methodological problems*. Often they were retrospective studies that described findings of the soul in connection with cancer, however, they could not confirm these findings to be the cause of the disease, rather they could only satisfactorily show them to be a consequence of the disease. Prospective studies also remained mostly inconsistent and had only provided a point in time of the diagnosis in relation to the emotional state.

One *study* stands out from this. It describes a connection between a *longer existing depressive mood* (documented in three assessments over six years) and cancer in 71-year-old or older patients. The summary reads as follows: 'When present for at least 6 years, depression was associated with a generally increased risk of cancer. (... 88% excess risk of developing cancer during the follow-up of, on average, 3.8 years compared with non-chronically depressed older persons.)'⁵⁰

In this study, associations with a depressive mood that has existed for approximately 7 years are described for many forms of cancer (with the exception of breast cancer). The review by Oerlemans et al. shows a slight and marginally significant association between depression and overall cancer risk and a clearer increase of breast cancer in depression dating back several years.⁵¹ The meta-analysis by Satin et al.⁵² of the prognostic significance of depression in cancer patients showed an association with mortality, but not with disease progression (however, for this purpose only three studies could be included; in animal testing, corresponding links were documented⁵³). In the Scottish Health Survey, the multiple regression analysis showed that psychological distress in tumour patients was associated with increased mortality.⁵⁴ In their meta-analysis in relation to patients with depressive symptoms, Pinquart and Duberstein report an approximately 20% increased mortality compared to patients without relevant depressive symptoms.⁵⁵

For this reason, *depression cannot be seen as a triggering factor. It possibly has an impact by modulating the disease progression.*⁵⁶

Against the background of a changed action of the constituent elements one must differentiate between *bodily factors* such as constitution and genetic factors, *processual factors* such as precancerous diseases, for example, in chronic hepatitis with a medical history of few fever episodes, and soul as well as *spiritual-individual aspects* as described below.

Referring to 'something neglected' in the biography or referring to depression can too easily give rise to the theme of 'being blamed for being ill'. Each disease has its past, present and future — accordingly, the question about not only 'where from' but also 'what for' is asked, that is, the *question about the meaning* of the disease.

In which form can the essence of cancer reveal itself on a soul level? Two polar orientations can be found here: a *self-determined soul life* with, on the one hand, its quality of engaging with the world in a modifying way and, on the other hand, a *'selfless' devotion to the outside world* (orientation towards the outside world).

Jorgen Smit has used an appropriate image for this breathing process. When a person reviews their own life, the following evaluation can arise for some life situations: everything that has been achieved came into being through the constant effort of the individuality, all surrounding persons were only welcome 'extras'. A short review then gives rise to another picture: what would have happened without other humans who were supportive and paved the way and what came into being only through them? The person now sees himself or herself rather as an 'extra', the protagonists are the other human beings. In every human life, both qualities are found and are joined together in a healthy, breathing relationship. In cancer, the soul activity that acts 'towards the outside' seems to withdraw, the orientation and openness to the outside world prevails as an exaggerated 'inhaling':

In many patients a *withdrawal of the 'centrifugal tendency'* of the soul is found. Impulsivity, enthusiasm and joy in taking up the different tasks that everyday life sets on disappear and make way for an inner emptiness, *sadness* and *stiffness*. A gesture of sclerosis develops. The turning-oneself-to-the-outside withdraws; an *'inhalation' of the soul* that captures the environment like a sense organ prevails. Patients repeatedly report the withdrawal of the outwardly oriented activity of the soul. The much-quoted example of the swallowed tears that could not be shed emphasizes this connection. The inner ensouled sphere cannot sufficiently unfold in its expressions of life, a lot of things remain in the soul as if they are congested.⁵⁷⁵⁶ The loss of a human being that has been central to the individuality can also be included in this. Von Leshan describes it as follows: 'Not one of the 500 patients who I have examined during the course of my research appeared to be able to display a greater emotional energy than he or she really had. On the contrary, all seemed to have more emotional energy than possibilities to realise it. A kind of congestion was typical for their emotional life:

For this *orientation of the soul towards the outside world*, which seems to drown out the statements of the inner sphere, Leshan quotes the image of the 'individual song' that every human being carries inside and is able to unfold. Many cancer patients were presumably not able to resound this 'song' for a long period of time, instead they sang the melody of others.

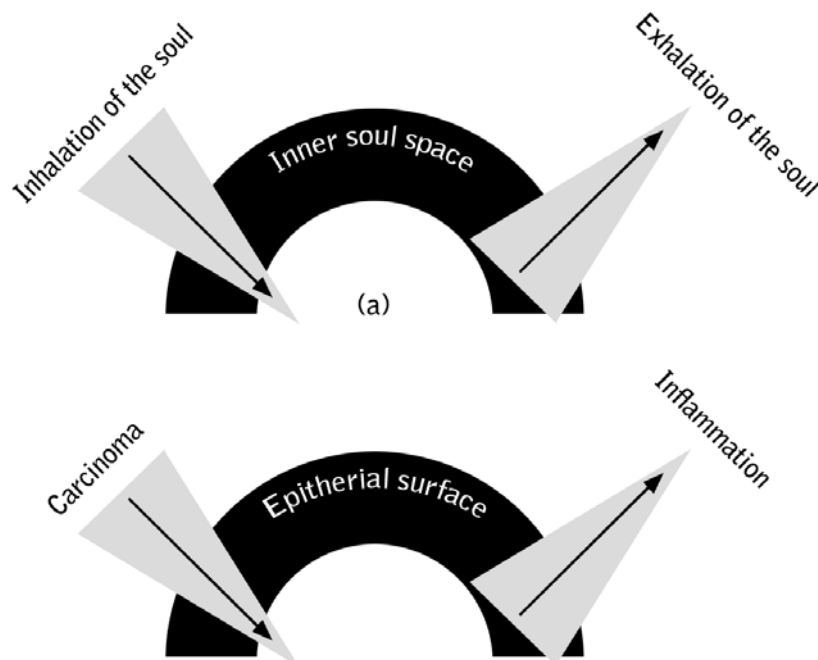
'Selflessness' and the outward orientation of the sensory perception can appear in the 'wrong place' in the emotional and volitional world of a person. An exaggerated 'orientation towards the outside' subsequently develops.

In summary, a picture develops that connects the morphological gesture of cancer development with the soul. Inflammation has been described as an outwardly directed, centrifugal processuality that pushes everything foreign to the outside and, for example, makes a drawn-in splinter 'suppurate' outwards. In opposition to this 'exhaling' is the 'inhaling', inwardly directed and invaginating disease gesture of cancer which finally culminates in the metastatic infiltration of the organism. In this sense, all epithelial tumour growth starts on the surface and penetrates towards the interior.

A corresponding gesture can again be found in the soul and its breathing processes. Here, the expressive, 'inflammatory' tendency withdraws and an *inhaling of the soul* prevails (see fig.1).

A *prevailing 'inhaling' of the soul* can also develop through an *abnormal 'expiration' of the soul*. This involves patients who, on the outside are robust and have both feet firmly on the ground; however, on the inside they have -a sensitive soul life that rarely penetrates the solid wall of their external appearance. Sometimes tears suddenly and uncontrollably erupt that momentarily open windows into this part of their nature and guide the person towards 'exhaling'.

An *insufficient effectiveness of the constituent elements* in the metabolism-movement system is associated with *depression*. *Soul rigidify and psychomotor inhibition* indicate a *predominance of the upper human being*. *Sclerotic processes* can accompany *the clinical picture* [-• XII, 4.2.3 Emotional phenomenology in the metabolic syndrome]. The *warming, inflammation-related dynamics of the constituent elements withdraw*, which is *presumably significant for the progression of cancer*.



Directional qualities on 6 soul level (a) and during a disease process (b)

Conversely, a depression can improve through activation of the constituent elements in the metabolism-movement system. *Movement* can contribute to an improvement of depressive symptoms [5.2 Movement].

The 'inner breathing processes' of the soul are particularly significant for *art therapies* and *eurhythmy therapy*. They must be 'discovered' as part of the diagnostic process

in order to then become the therapeutical field of work. The patient becomes an active agent in this therapeutic process. Bar-sela et al. documented the positive effect of painting therapy for cancer patients during chemotherapy with regard to depression and fatigue syndrome.⁵⁹

This theme can also play a role in *counselling*. Self-regulation as a faculty of individuality to deal positively with stressful life events can be seen in direct connection with the *breathing rhythm of the soul*, as has been described by Grossarth-Maticek.⁶⁰ It could be demonstrated that patients with high self-regulation also had an above average beneficial reaction to mistletoe therapy. In the case of little or poor self-regulation, the effect of mistletoe therapy with regard to the prolongation of life was not given.

As a consequence, there are initial indications that *salutogenetic forces* can be called upon and reinforced by the patient through such therapeutic work. On the other hand, these observations point to systemic processes that go beyond cellular tumour growth and concern the whole human being; they demand an integrated therapeutic concept.

3.8 Cancer — individual task and destiny

The question of inner work, which corresponds to the task that has been set by the disease, arises in many cancer patients. An extensive industry has developed that focuses on very different goals. In the following observations an attempt is made to describe those aspects that can, from the developed picture of cancer, result in individual tasks.

3.8.1 Biography

A fundamental exercise for understanding one's own biography is the exercise for the distinction between the essential and the non-essential that has been described by Rudolf Steiner in 'How to know higher worlds'.¹⁶⁶

'Create for yourself moments of inner calmness and learn to discern in these moments between the essential and the non-essential'.¹⁶⁷

It is the contemplation of that which is essential for a person, which belongs to his or her individuality, and should be taken up in the life style. At the beginning of life there are still largely undetected possibilities in a little child. What a baby could become! During further development, the spectrum increasingly becomes restricted; many ideals of childhood and adolescence are forgotten. Education and, finally, the learned occupation put a person in his or her 'place' and let them find at best their place for living. It is like the way out of a big room through an increasingly narrower corridor that ultimately leads to the current moment in life. Many things have been left aside on this journey, - have probably remained unnoticed. In this exercise it is important to discover them and 'possibly to revive them again.

The biography appears as the venting of a person's in

Above and beyond this individual level, 'phenomena of stasis' are constantly generated in the current cultural period, which guide the view from an individual disposition to a cultural and historical disposition. Think of the image of human *death* that is characterized by the physical plane of existence. The postulated finiteness congests the inner feeling that — in consciously varying degrees — cannot agree with this. To the same extent [4]. that a civilization and, therefore, the life of humans who carry it is defined by a physical, material view, the ensouled and spiritual human nature that extends beyond it cannot adequately unfold.

Stasis phenomena and *lack of prospects*, of which the absence of ideas is often declared as 'realism', are the consequence: a contemporary historical dimension of cancer is emerging. The internally gained knowledge about the indestructibility of human nature that 'is not seized by metastasis' can give rise to a *tranquility* and *strength* from which health-giving powers can develop. These aspects and also the work on one's own biography can be addressed in *counselling therapy* and — depending on the orientation of a patient — in pastoral medicine that has acquired an important consolidation through Rudolf Steiner.¹⁶⁸

A further training area relates to the excessive 'inspiration' as it is frequently described by cancer patients. It is the challenge to find the middle between the demands of the world and the individuality in the art of living. A person 'should not impose something on his environment that this environment does not understand, but he should also be totally free from the addiction to do only that which can be approved by this environment. Thus, he will develop within himself that which one calls a spiritual balance in occult science.'¹⁶⁹ This condition is the fourth of seven conditions in an organism, in which the pendulum between individuality and the world can be recognized, and which give rise to a special relationship to cancer.

3.8.5 The six properties

Rudolf Steiner described the *sense organization* under a double aspect: the perception function is in contrast to an effectiveness that animates the organism.¹⁸² The sensory process is supported by a little noticed vitality process. In addition to some physiological processes that occur due to the perception of brightness in the organism, one may think, for example, of the health giving and vitalizing sight of a flowering landscape. These qualities are rediscovered in the metamorphosis from *gland* to sense organ. A vitalistic process predominates in the gland organization, while the perception process withdraws. Conversely, in the area of the sense organization, the perception process develops with only low vitalistic qualities.

This relationship between the gland and the sense organ is now associated with the internal development of the human being: All organs that a human carries can become sense organs through a certain higher development, in which their etheric sphere or their more spiritual astral sphere becomes a perception organ.¹⁸³

With this, an essential light is cast on cancer as a '*sense organ formation in the wrong location*'. Is there in this abnormal development a metamorphosis on a physical level realized that occurs in a supersensory sphere in connection with the spiritual development of the human being? An important approach of an anthroposophic medical patient encounter thus leads to questions that refer to an *individual path of knowledge*. Can a task set by the disease liberate itself from its physical manifestation and transform into a conscious step on the path of knowledge? Hence, the destiny of the disease connects with the individual path of knowledge of a human being and allows insights into questions about the meaning of disease.

The question of the inner human essence, the Ego, arises when the diagnosis has been made and with the knowledge about the nature and the course of the disease. In a new way, the opening words 'know yourself', which in ancient times were written above the entrance of a temple, encounter the person in the disease. Now they no longer have

an intellectual and 'philosophical' character, but attain an immediate, existential quality. Every moment of the day is determined by this fundamental question, which, through its close proximity to the end of earthly life, has a threatening character and resembles standing at the edge of an abyss.

Thinking

Concentration exercises, learn to differentiate essential from non-essential, sources of power through inner contemplative work (e.g. spiritual-scientific texts, maxims, fairytale images) and meditation [see below]

rain in our

sorrow

the senses full 'imprisonment' in one's own inner world. When there is loss of a

sense, not only is inner support considered, but also active 'opening of the senses' for the world and conscious seeking of that which is beautiful and precious. Loss of a sense is

often accompanied by the closing of the senses, it is getting 'dark' and a sorrowful inner world defines awareness. The double meaning of the word 'sense' also has a therapeutic dimension.

Volition

Feeling

Conscious decisions for action, planning of day, setting small targets.

Positivity

Dealing with anxiety, sorrow, desperation by gaining sustaining life convictions, symbols, meditative handling of maxims [see below], task setting from art therapy, support through counselling therapy.

Development and consolidation of human relationships.

2 Disease and development. Development of perspectives in the confrontation with disease, dying and death. Discovering positive things (e.g. in one's own development, in human relationships, in new perspectives, conscious experience of joyful and grateful moments.

Impartial' paying attention to individuality and uniqueness on the way through

the disease compared to generalizing, 'statistical' statements about the course of the disease. Future aspect of the disease: in addition to the

Question.

Another question 'where does it lead and what does it enable:

Thinking is restricted by daily sorrows, the courage to persevere is repeatedly confronted with great challenges, and shocks, fear and desperation that can suffocate all hope are emotionally experienced. In these life situations, the 'six properties' described [- vn. 4.1.9 Anthroposophical psychocardiology] become an existential training area. The individual exercises can, according to different requirements, be translated into an individual life practice as part of a consultation with the doctor.

3.8.6 Task setting for the soul

Patients can suffer from *restlessness* in connection with cancer. This can escalate to strength-sapping activities due to the concern of leaving nothing undone, but it can also develop due to helplessness in terms of what should be done, or else arise as an answer of the soul to the indiscernible path through the disease. Every important decision should be borne from an *inner calmness*. Haste and restless fear are not good advisors. Strengthening forces can develop from calmness, which do not weaken the organism as a result of inner tension, but support the healing powers. A meditative approach that has been

experienced as being helpful by many patients and can possibly also accompany other necessary therapeutic measures consists of the following maxim:

*I carry peace within me,
I carry in myself
The forces that strengthen me.
I want to fill myself with these forces' warmth,
I want to imbue myself with my willing power.
And I want to feel
How calmness pours through all my existence,
When I strengthen myself
To find within me
Calmness as strength
Through the power of my aspiration.* Rudolf Steiner

3.8.7 Spiritual task setting

Patients often ask about an *inner meditative activity*. This activity must be dedicated to the inner development stage of the disease and should not owe its existence through the understandable wishes for a longer life span or a more favourable course of the disease. As little as meditative work will bear fruits on the inner path of knowledge when it is done for the specific purpose of achieving as fast as possible insight into spiritual worlds, and therefore diverts rather than supports the actual spiritual activity, the same also applies for this meditative work.

The danger of the illusionary misjudgement that one would succeed in any case through 'spiritual' work must be also mastered. It is a path of slow transformation that does not know any 'shortcuts'. Every seemingly hurried wanting-to-break-through to the real essence rather sets back than promotes advancement. It would be comparable to the situation of the youth in Sais who broke down from such an encounter. When one seeks ways of inner practice that correspond to this task set by the disease, then the motive of the human being who matures into his or her true essence can become a guiding principle. How much within us is foreign and does not yet belong to this true essence and has defined our external and internal existence! A great deal (or much) needs to be transformed in order to bring the actual Ego to unfold its effectiveness.

It should be emphasized again at this point that inner work must not be expected to be part of the usual 'therapeutic offer'. Even the passage through the disease itself is such an *intensive developmental path* that it completely dwarfs some so-called spiritual work. Only through the pertinent question of inner work that corresponds to the task set by the disease can such aspects become a justifiable support.

A meditation that is important in this context seems to be the so-called '*Rose Cross Meditation*'. It is made up of four *stages*, described by Jorgen Smit in a small text that has been very helpful for many patients. In The imperfect which has been overcome and that which does not belong to the Ego-essence appears in the black shape of a cross. The newly gained that has been transformed into the human sphere appears in the seven red roses. In the meditative activity, the power that transforms the inferior appears before the sign of the cross and the mystery of the resurrection. A wide perspective of development opens up, in which the broadly understood healing of cancer places itself.

The theme 'it is fulfilled' was touched upon in a *conversation* with a patient who was in an advanced stage of his tumour disease. He made it clear that he did not at all experience this sentiment, rather that redemption achieved a totally different meaning:

'redeeming does not mean that one is rescued from something, but that one becomes', capable of something new.

In this situation, it is possible to learn from this patient as well as from many other patients that they feel as if they are 'healthy in a sick body. In such encounters with patients, neither the mood of an anxious waiting for the moment of death nor the longingly expected 'salvation' is felt, but the inner knowledge about a *newly created possession* of internally felt health. Such depictions by patients, which can sometimes be projected on to the earthly life and lead to apparently unrealistic plans such as new career choices, should not be misjudged in their actual quality and not be deemed to be 'mechanisms of repression'.

In many situations of support with patients, the experience was made that patients can develop an astonishing inner certainty in such situations. This clearly stands out from the previous phases of the disease in which advice and support was often sought and every consultation meant much more than only the words exchanged. Now patients are capable of their own decisions and want to determine for themselves what the next steps will be. Similar to a convalescent, where increasing independence from attending doctors and therapists ensues and any adhering to a quality in the disease that is marked by searching for help would be anachronistic, the same also applies in this situation.. Consequently, becoming independent can result in a positive quality in which the carers become attendants who are connected in friendship and are ready for any support that might be asked of them. A rich *fruit of the disease* seems to form. While previously the sense organ formation was repeatedly mentioned in context with cancer, this maturation of the *human personality* now appears as training for future 'perception with the senses' and for future seeing in the sense of spiritual seeing. Future seeds for perceiving the spiritual sphere develop in a materialistically oriented time.