Anthroposophical basis for understanding autoimmune diseases

VOLKER FINTELMANN

Translation of "Menschenkundliche Grundlagen zum Verständnis der Autoimmunkrankheiten" by Volker Fintelmann. Der Merkurstab 2004; 57/5:336-40. English by A. R. Meuss, FCIL, MTA.

Anthroposophical basis for understanding autoimmune diseases

■ Abstract

In modern scientific medicine, questions concerning

logy of autoimmune diseases do not take us beyond establishing a number of hypotheses with a theoretical basis. Findings made in anthroposophical spiritual investigation by Rudolf Steiner can help us to see autoimmune diseases as an attempt to make untransformed (not individualized) remnants of the inherited body one's own at a later time in the biography, i.e. create an individual body that accords with the I or self also in this organic site. Inflammatory and digestive processes to destroy matter and then give a new configuration are pathophysiological in the case. Suppressing them with anti-inflammatory drugs or immunosuppressants is counterproductive, for the self is impeded in its efforts to heal itself. World substances such as Phosphorus, Quartz or mistletoe treat the causes by guiding and supporting I-activity. Reconciliation with the world of the ancestors from whom the body primarily comes is another element in causal treatment.

■ Keywords

Aetiology Autoaggression Inherited body Individual body Remnants of inherited body

n the medicine based on modern science, a number of theories and hypotheses have been developed on the causes of autoimmune disorders. (1, 2) Examples are the release of inflammation mediators and cytotoxic cells by antibodies, production of antigen-antibody immunocomplexes which are deposited in the organism, or sensitized T cells attacking structures in the organism. 'Genetic and other factors' are said to be the causes. (3) Generally a disruption of normal immunotolerance processes is postulated, and again a number of hypotheses for this are under discussion. (4) All in all we have here a remarkable lack of knowledge, despite the fact that autoimmune disorders have become common over the last 30 or 40 years and major scientific advances have been made in the field of immunology.

Can more light be thrown on the matter by considering the phenomena and their non-physical background in the anthroposophical science of the spirit?

In the invitation to the Anthroposophical Medical Association's Conference on 22 and 23 November 2003 in Kassel it said: "Autoimmune disorders on the other hand reflect disruption in the human organism's self-recognition and self-regulation. Internal organs become foreign elements in the body." This would therefore also affect the immunotolerance which functions in health, i.e. the immune system attacks tissue belonging to the organ and to the body as though it were foreign. Quite naively one might ask: "Has the organism gone mad?" (seeing that it is senselessly destroying itself).

A basic law in anthroposophical medicine is that a large part of disorders are due to auto- rather than heterogenic factors. These take effect in the wrong place, at the wrong time, or show excessive or inadequate intensity in the site where they normally take effect: (5)

Disorders reflect bodily processes which take effect in the wrong place, at the wrong time and/or act with the wrong intensity (too powerful/too weak).

Does this basic law also apply to autoimmune disorders? This is what we want to explore in what follows.

Polarity of I and body

A first area for our consideration derives from another basic fact in anthroposophy. It is that the differentiated body ("organism") is seen as the instrument or tool of the real human being who is wholly spiritual by nature. Rudolf Steiner called it the "I". With the help of higher ("hierarchic") spirits, this I creates instruments for itself in soul and body so that the intentions it had in the spirit before birth (plan for life) may be brought to realization in existence between conception, birth and death. The body must be seen as polar opposite to the I, with the soul active between the opposite poles (matter and spirit), always mediating and maintaining balance. A special aspect is that the body is pre-formed and genetically determined by the parents, which makes it primarily foreign and not self. It only becomes self in long stages of development taking 20 to 30 years. This will be an important aspect when it comes to understanding autoimmune disorders.

Let us first consider the opposite nature of body and I (spirit). Rudolf Steiner spoke of a fact which his investigations had shown and I want to quote him here. "Wherever the spirit enters directly into physical matter we have a destructive process. A subtle death process coming from the senses thus spreads along the nerve tracts in the human organism."(6) This relates to the "visible" human being, i.e. once again the body which throughout life has an invisible human being everywhere within it. Essentially all constructive processes originate in this. The body of physical matter, also known as "physical body", is destroyed under the direct influence of the I, or subject to destructive processes. This leads to a first hypothesis for a possible cause of autoimmune disorders:

Autoimmune disorders reflect an excessively powerful, destructive influence of the I on the organism. ("The spirit burns up the body.")

Anticipating slightly, let us note that this manifests in inflammatory processes, above all those that result in purulence and liquefaction. Inflammation plays a major role in autoimmune disorders and also determines essential aspects of modern treatment. It is, however, scarcely of the kind discussed above but rather involves chronic destruction of tissue. The image one might have is more that of a smouldering fire.

The organ which has turned foreign

The second area for our consideration is that of an organ or tissue turning foreign. The most characteristic example are viral diseases where incorporation of the viruses in cells of the organs will, in the sight of the immune system, cause such alienation. The immune system attacks the material affected by the viruses, often in a violent, acutely destructive way. A typical example is fulminant hepatitis with hepatitis B virus infection, formerly also known as acute hepatic dystrophy. Essentially, however, inflammatory changes with virus hepatitides reflect an immune reaction on the part of the organism and therefore attempts to heal and not sickness. For decades, acute virus hepatitis was treated with anti-inflammatory drugs such as glucocorticoids. Later, when

the immunological process was understood and one could see why such treatment was largely ineffective and did actually in many cases lead to protracted chronic evolutions.

Autoimmune processes connected with virus-associated disorders continue to be seen, and for a time it was therefore also thought that autoimmune disorders might be viral in origin, with research taken in this direction. The second hypothesis for a possible cause of autoimmune disorders therefore is the following.

Autoimmune diseases indicate that an organ has been alienated under external influences. ("The organ becomes outside world.")

This hypothesis is more likely to help us find an answer to our question concerning the causes of autoimmune disorders. Viruses or other pathogens clearly cannot be the only external factors to be considered. A vast field has to be opened up for research to investigate this and look for answers. There can be no question but that the human organism is today exposed to many different environmental pollutants in material form or also in form of different kinds of radiation. We need only think of the indeterminable number of food additives, pesticide or heavy metal pollution, and both natural and artificially produced radiation of many different kinds. From the point of view of anthroposophy, where existence in soul and spirit is something very real, one must also consider if external influences of a non-material kind may not also cause an organ to become foreign. Think of the "indigestible" flood of images and information provided by the media, but also the actions, feeling and thoughts of others and the effect these can have on us. Any kind of childhood abuse must also be mentioned as a prime example.

Organic focus of destruction within us

A third area for our consideration is again created on the basis of Rudolf Steiner's investigations. He described how in every human organism there is an organic and therefore unconscious area where an intensive form of destruction arises which is directed towards the organism"s physical matter: "Matter is never completely destroyed in the outside world. In more recent times, philosophers and scientists for the external world have therefore spoken of the conservation of matter. This law of the conservation of matter applies only in the outside world, however. In the inner human being, matter is completely transformed back into nothingness. Matter is there destroyed completely in its essence. Our human nature actually bases on the fact that we are able to throw matter back into chaos, destroy matter completely at a level deeper than the mirroring of memory."(7)

He then referred to the way pupils were taught in earlier mystery centres, mainly in Ireland and the West altogether, though originating from the Orient: "Beneath the capacity for memory, you bear something in you as a human being which is out to destroy; without this inside you, you would not have been able to develop your ability to think, for you must develop your thinking in that powers of thought penetrate the ether body. An ether body filled with powers of thought will, however, have the effect on the physical body of throwing its matter back into chaos, destroying it."(8) Later he introduced two further important concepts, speaking of a focus of destruction and a destructive frenzy.

These spiritual facts are profound and may well awaken defensive or negative reactions in someone following the line of thought. The known facts of research into digestion show, however, that such powers do indeed exist in us. Destruction or degradation of matter in the process we call "digestion" involves powerful, aggressive forces located in the different digestive organs, with corresponding digestive enzymes acting as mediators. Our organs of mastication, acid production in the stomach and bile acids also come under this heading. We also find this destructive frenzy in the rejection of organ transplants, a process with an immunological basis. Many readers may perhaps for the first time become aware here of a situation which is experienced and described all over the world, a phenomenon of our time that almost seems beyond comprehension. This is the enormous increase in a (seemingly?) incomprehensible destructive frenzy as an expression of uncontrolled aggressiveness which culminates in terrorism. Do we not become aware of a need here for research in medicine as to how far such aggressiveness discharging itself in an outward direction does not also reflect digestive activity not adequately put to use, i.e. digestive powers "straying" into the soul sphere? And should not our attention turn to causal phenomena in nutrition, fast foods being but one form of expression? Reference must also be made to the highly successful commercialized world of films which profit from showing such extreme forms of material destruction, their "material" also including the human being.

These questions concerning the phenomena of our time will not, however, help us to understand autoimmune disorders. Here the destructive frenzy woiuld have to be directed towards parts of the organism itself, which is also an important aspect of self. Suddenly the earlier term "autoaggression" gains fresh new significance. Permit me to refer to an image from the world of folk tales. In Rumpelstiltskin we find an accurate picture of autoaggression of the kind which at the level of organs we see in the extreme situation of pancreatitis, for instance, a situation where an organ digests itself. We are thus able to formulate a third hypothesis for understanding the cause of autoimmune disorders.

Autoimmune disorders reflect an (organ-related) destructive frenzy directed against oneself. (Rumpelstiltskin type of autoaggression)

Acute pancreatitis is not an autoimmune disorder, though the triggering factors do in many cases remain unknown. But it is striking how often extreme psychological stress is seen in conjunction with this disease, often having persisted for a long time and finally finding

an outlet. This is the field of psychosomatics, interaction between body and body-related soul. Scientists acknowledge that psychological factors can become somatic, connecting with it the idea of a pathophysiological process. This may well play much more of an aetiological and pathophysiological role in the development of autoimmune disorders than modern scientists have realized so far. And no careful observer can fail to see how intensively the symptoms of autoimmune disorders also involve the psyche.

Untransformed elements of the inherited body

The fourth area to be considered takes us deep down into the true causes of autoimmune disorders. It presupposes the situation mentioned earlier, which is that the individual human spirit, the I, can only incarnate if parents create the necessary living body. In every case and with utter logic this is foreign to the I. Rudolf Steiner would frequently mention in his collected works that the time needed for human infancy and childhood development until maturation is reached is extremely long compared to the whole animal world and can only be understood if we consider that the I needs this time to transform the inherited body, also called a "model", into an individual body, which has to happen at all levels of physical matter, life, sentience and soul and ultimately also of the spirit. This happens in developmental stages of 7 years each. Initially the material consistency of the inherited body is transformed and replaced, as is clearly evident in the changing of the teeth, though it also applies to all tissues and organs in the organism.

More work is done on transforming physical matter in the second seven-year period, but the emphasis is now on the sphere of life, most evident in all functional processes in the organism. These, too, must become highly individual to serve the unique (individual) nature of the I as ideal tools for future life. These individuation processes come from the above-mentioned invisible or supersensible human being who is not embodied but influences the body by different routes.(9) It is always the next higher member of the supersesible organization which works on this individuation, always guided by the I which on its part has the help of spiritual (hierarchic) entities of planetary origin (Fig 1).

After 3 times 7 years, i.e. around the 21st year of life, individuation of the body is complete, the individual has "come of age". The I then works to develop the three soul elements (sentient, rational and spiritual soul) out of the body which also need to be given wholly individual character. In our time this reaches its culmination in about the 28th year, when ideally the human being is a true individual and takes personal responsibility concerning self and world. This is the ideal form of an independent individual nature. All kinds of problems, resistance and obstacles do, of course, arise, so that the work will scarcely be wholly successful. "Bodily residues" left incomplete will persist, with hereditary body elements remaining in them.

Fig. 1: Physical development in the four 7-year periods (IO = I-organization; $AB = astral\ body;$ EB = ether body;PB = physical body; SS = sentient soul)

	Sun	Moon	Other planets	Constellatio of fixed star	
	supersensible AB + IO	supersensible IO	supersensible IO $\psi \psi \psi \psi$	Individual body de soul devt. at sam	
		supersensible AB	1 st individuation AB	AB as basis for	·SS
		$\downarrow\downarrow\downarrow\downarrow\downarrow$	$\downarrow\downarrow\downarrow\downarrow\downarrow$		
	supersensible EB	1st individuation EB	2nd individuation EB		
					"freedom" responsibility
	Birth 7	1.	4	<u> </u> 21	28

Rudolf Steiner characterized two types of wrong development in this connection, calling them premature or delayed development.10 He described the former as a case where transformation is too rapid, coming to a premature and therefore incomplete conclusion which leads to an "inner determination" of the individual that may be compulsive by nature, for instance. If individuation of the body is too slow, and also if it persists beyond the 21st and 28th years, the body is determined in a way to which Rudolf Steiner did not give a name, but which comes to expression in addictions. The very brief description given here may lead to my fourth hypothesis:

Autoimmune diseases reflect a late attempt to individualize residues of the inherited body.

This will of course again and again come upon organic regions referred to as such residues. This is not to say that the I will on principle attempt to individualize them at a later time. The way I see it, this will be a relatively rare occurrence, otherwise the number of people with autoimmune disorders would be much greater. Such residues do, however, persist through life, though they act as foreign elements in the body, and may thus be considered to be sources of all kinds of organic, functional and also mental disorders. Perhaps we can in the light of this understand why cancer manifests in a specific site, in an organ or as a systemic problem. Autoimmune disorders may, however, develop in people who do not allow these residues of the inherited body to persist but absolutely intend to transform them, i.e. make them their own or individualize them.

In my opinion, this is where the real cause of these disorders lies. We thus see them as diseases of our time and can also understand why they are on the increase. Individuation or the development of one"s own individual nature is something which more and more people enter into at the present time. It is also evident from the above why the typical time of onset is between the ages of 20 and 40. Earlier or later onset does not speak against the type but merely raises the question "why" for the in-

The noticeably psychosomatic symptomatology of autoimmune disorders, already mentioned in the above, merits further consideration. The biography frequently

contains elements that have not been "dealt with", digested or overcome, and this with reference to the adult world around the developing individual, above all mother, father and siblings, but also other close relations or family friends, teachers and clergy. Working through such problem areas in talks and finally achieving reconciliation often proves to be the vital precondition for successful treatment.

We must also learn to differentiate the times (sevenyear periods) when transformation did not succeed, and the trend followed by premature developments. For it will primarily be these which cause the developmental disorders and hence the "residues". At the very centre of all diagnostic questions and observations, indispensable preconditions for "rational" (causal) treatment, we must put the relationship between I and body, i.e. congruence between individual nature and physical body. It is perfectly clear that this does not mean making the kind of diagnosis learned at medical school. One has to develop empathic intuition, which results from "the results of observations made in the soul using the methods of modern science" (subtitle of Rudolf Steiner"s Philosophy of Spiritual Activity).

Prospects of a rational therapy

The processes connected with the first three hypotheses are important if we are to understand autoimmune disorders, though they are not of primary significance in understanding the causes. They reflect processes which play an essential role in the pathophysiology of the different autoimmune disorders and have been given as hypotheses not for rhetorical reasons but because they are genuine fields where work may be done to gain deep-reaching insight into these disorders, with the scientific findings of conventional medicine also taken into account. Manifestation in specific organs and aspects of treatment will be considered in detail in the lectures that follow. Before coming to a conclusion, however, let us look at some of the clinical requirements or consequences in the light of the above.

The key point, I believe, is that inflammation must not be suppressed or reduced but rather encouraged. It goes without saying that this calls for great experience and sensitivity. On the basis of many years" experience,

Finally spheres of life must be worked through in the biography that have created obstacles or trauma in the period of development and must be seen as connected with the disease. Reconciliation with these situations, and often also with oneself, is an important element in overcoming the disease or bring one's bodily development to a good conclusion.

Prof. Volker Fintelmann Carl Gustav Carus Academy Rissener Landstr. 193 D-22559 Hamburg

References

- 1 Classen M, Diehl V, Kochsieck K. Innere Medizin. Urban & Schwarzenberg 1993, 402-406
- 2 Johnson AG. Immunologie auf 70 Seiten. Thieme 2001, 58-59
- 3 Classen M, Diehl V, Kochsieck K. Innere Medizin. Urban & Schwarzenberg 1993, 402-406
- 4 Johnson AG. Immunologie auf 70 Seiten. Thieme 2001, 58-59
- 5 Fintelmann V. Intuitive Medizin. Einführung in eine anthroposophisch ergänzte Medizin. Hippokrates, 4. Auflage 2000, 66-73
- 6 Steiner R. The Invisible Man within Us. tr. A. Wulsin, G. Karnow. Spring Valley: Mercury Press 1987.
- 7 Steiner R. Cosmosophy vol. 1. Lecture of 23 Sept. 1921. Tr. A. Wulsin. Steiner Books.
- 8 Steiner R. Loc. cit.
- 9 Steiner R. As ref. 6.
- 10 Steiner R. Pastoral Medicine. Lecture of 11 Sept. 1924. Tr. G. Hahn. Steiner Books 1987.

GEORG SOLDNER, MARKUS SOMMER

Abridged version of a lecture given at a conference of the Anthroposophical Medical Association in Germany (Kassel, November 2003)

Translation of "Autoimmunerkrankungen der Schilddrüse und Störungen der seelischen Reifung" by Georg Soldner, Markus Sommer. Der Merkurstab 2004; 57/5:341-9. English by A. R. Meuss, FCIL, MTA.

■ Abstract

In the biography of many patients with autoimmune thyroid diseases characteristic problems are identified at the age of 9 to 15 years, a phase which may be seen as the time of awakening in mind and spirit.

pathogenetic background and possible consequences for therapy are discussed.

■ Keywords

Autoimmune diseases of the thyroid Problems with psychological maturity 2nd 7-year period in life Hyperthyroidism Hashimoto thyroiditis

1) Case records

Mrs M, age 33, hyperthyroidism

A slender young woman brought her 8-month-old infant for treatment. The child had been born with a marked premature cranial suture synostosis and is already showing definite psychomotor retardation—unable to turn round, communication not possible in the way appropriate to the age. Mental disability had to be considered. The indication for surgical correction, not without risk to life and prognosis, had to be established. The intervention was due to be done at about 12 months. Currently the decision had to be made as to which surgeon would do the operation. The patient came for a routine check on the child before going on holiday.

The child presented with a mild upper respiratory tract infection; the mother seemed exhausted. As attention turns to her, one sees the eye signs of stare and lid retraction, she seems rushed, never taking time for herself. Asked if there was something wrong she said that she had felt weak and exhausted for the last 2 months, 'something not right'. Further questions elicited that she had lost 3 or 4 kg in weight, and has palpitations now and then. The pulse was 110-120/min, BP 130/75 mmHg, pulsating goitre size 2. Clinically, Graves' disease was suspected, the holiday trip cancelled, blood taken, and then an injection given of

- Glandula Thyroidea D30 amp. Wala
- Cuprum met. prep. D30 amp. Weleda i.v.,

on the assumption of a florid inflammatory autoaggressive disorder of the thyroid (for this a relatively high potency of the homologous organ was recommended) and also because experience had shown that mothers of children with serious, life-threatening conditions gain immediate relief and relaxation with Cuprum met. prep. D30.

Laboratory findings. TSH depressed, T3 19.6 pg/ml (normal < 4.2 pg/ml), T4 7.74 ng/dl (normal < 1.75 ng/dl), TRAB 12.4 (normal < 1 U/L), TAK (thyreogl. AB) 64 U/ml (normal < 60 U/ml), anti-TPO 283 U/ml (normal up to 60 U/ml), zinc borderline, reduced to 624 µg/l (normal 630 $-1180 \mu g/l$), transaminases incr. to about twice normal, sonography showing thyroid enlarged to 31 ml (normal up to 18 ml), diffusely reduced echo, structure of parenchyma coarse with no nodules, technetium uptake greatly increased at 11.4 %.

Treatment. Immediately following the clinical diagnosis, anthroposophic treatment with

- Colchicum Rh D3 Weleda per os, t.d.s. (varying no. of drops)
- Glandula Thyroidea D30, 3 times a week s.c. 1 ml, later D₁₂
- Cuprite D20 trit. Weleda per os, a pinch once daily Thyreostasis once laboratory findings were known and following discussion with the patient, with
- carbimazole 10 mg daily

and arrangements for a full biographical consultation, with the patient making her own written record (this is an important part of the treatment):

"I had a good, protected childhood and youth until my mother started a new relationship, confronting me, then 14 or 15, fully with the situation after a very short time. I was torn apart between my parents and could not understand why my mother discussed her problems with her daughter, for these intense problems affected me greatly, causing great stress. My father did not help much, for I could not talk to him about this; even later on, when he knew about it, he could not talk. Achievement counted, feelings did not—at least he could not and cannot show his feelings. In spite of this I appreciate and respect my father, though I no longer respect my mother. When my father asked my mother to move out I was on the one hand relieved to have matters clarified, but it is always painful when parents separate. I stayed with my father and took on all the housekeeping, which I enjoyed, for I was given a free hand."

The patient then trained for her work and after initial problems she and her husband established an independent firm where both worked 7 days a week until the child was born, with just a few days holiday now and then.

"Initially there were massive problems with my mother-in-law. Then, after a difficult time for me and a brief separation, my husband decided to run the business without his mother and with me instead. The relationship between son and mother and mother and me was extremely fraught—we had had no contact until the wedding. From then on the relationship has been friendly, contact relatively infrequent. The relationship with my own mother is wonderful in her eyes, catastrophic in mine. She is jealous, pessimistic, dissatisfied with everything, upset about everything for days, unpopular, gradually losing her friends ... My thyroid disorder developed because of psychological and other stress. I am convinced that my daughter's illness has much to do with it."

The patient felt that the biographical talk helped a great deal.

Two more followed. Consequences for her daily routine were worked out, e.g. that she now takes the baby out in her pram herself and does not leave this to the nanny (a phenomenon which is not uncommon with mothers running their own businesses). Among other things she then looked consciously at the natural world, took in light, breathed consciously, and switched off the telephone for hours, playing with her child free from pressure.

Painting therapy was also started.

Evolution.

- · After one month, her mood was balanced, the volume of the goitre regressing.
- After four months, the patient was pregnant again, T₃ was wholly normal at this time (4.27 pg/ml, TRAB 4.6 U/I). After five months the first child's operation went well, without complications.
- After seven months, TSH above 1, TRAB negative, TAB below 20, anti-TPO 184 U/ml. Carbimazole 5 mg continued in reducing dosage, to be discontinued after ten months. She gave birth to a healthy second child after 13 months.
- Two years later, TSH 0.92 mU/ml, T3 2.96 pg/ml, T4 1.35 ng/dl, anti-TPO elevated, TRAB negative. No treatment. Clinically n.a.d.

The first child had normal thyroid parameters for the whole period. It was only during the mother's illness that the following information became available, which so far had not received any attention. "Newborn infants with congenital hyperthyroidism ... (not applicable here) As a rule the indicator is maternal Graves' disease. If not, the diagnosis is often made very late, at a time when complications such as premature sutural synostosis have become established..." (1)

This means that every premature sutural synostosis may point to a thyroid disorder of mother or child, which needs to be clarified - something which no one, including the author, had done so far.

The first child had caught up on all delayed development within two years of the corrective operation. Today his motor functions are just on normal for his age, psychosocial behaviour is normal, nor are there cognitive deficits. As with all children with premature sutural synostosis, treatment by a qualified osteopath was of major importance. The second child has no appreciable disease.

The above case record shows important motifs which are frequently seen in the life history of patients with autoimmune hyperthyroidism:

- mostly affects women
- relationship to mother plays specific role
- mainly in 2nd 7-year period, "loss of maternal mantle" comes like a shock, not by the child initiating the process as the soul matures, but because it is taken away from outside.
- stresses due to being a refugee, siblings needing care (as well) and so on may also cause the protective space necessary for inner development to be lost
- This loss causes "emergency" inner maturing in childhood, and at the same time more or less suppressed aggressive feelings which cannot be adequately expressed to the parents

- Not infrequently the role of provider changes abruptly, with the growing child becoming the maternal provider, e.g. for siblings, father or mother
- As a rule, "reminder" of traumatizing childhood experiences will come with renewed loss of security, (threatened or real) loss of a child, or too much being asked again in a maternal role
- The disease will usually only develop in this stress si-

We might speak of a premature birth at the level of the psyche, premature labour pains, or the waters breaking early. The space for buoyancy for childhood soul development (corresponding to the buoyancy provided by amniotic fluid) is lost too soon.

This aetiological model appears to be of particular relevance to Graves' disease, but terms such as "Graves' disease" and "Hashimoto's thyroiditis" merely mark the extremes in a range of autoimmune thyroid diseases. The case records given below are an attempt to show characteristic backgrounds to the disease process in either direction and are therefore largely limited to the biographical aspect.

Mrs B, aged 60, Graves' disease

Her father's first wife died of cervical cancer 18 months before the patient was born; her father was 54 when she was born, the second wife, a new partner within a fairly short time, was 38. When the patient was 12, her mother was diagnosed as having breast cancer. In the 2 years that followed the patient increasingly took on the nursing care for her mother whose death was a heavy blow to her. It was noted at the time that the patient seemed "more serious, and older" than other girls of her age.

At 17, the patient entered into a partnership with a man who "was strong, making me feel safe and secure". At 22, birth of her first child. At 23, birth her of second child, a premature infant. Two days after returning home, the infant died of sudden infant death syndrome. The patient said she was "as if frozen" after this, and was not able to talk about it to anyone.

At age 50, the patient saw a man in the street who was very upset, suddenly poured petrol over himself and set himself on fire. Shortly after this she developed Graves' disease. Treatment with carbimazole resulted in remission. (Victor von Weizsaecker said that in his view, onset of Graves' disease frequently followed incendiary bomb attacks and the mental stress they induced. He saw the disease as a reflex shock effect and a kind of "self-cremation" by an abnormal metabolism.) When the patient was 55, her daughter gave birth to her first child; at the same time partnership problems caused uncertainty. She suddenly developed great anxieties and with this a compulsive need to check again and again that her grandchild was still alive. Recurrence of her Graves' disease. Relatively low doses of carbimazole, Cuprite D8 (amp., Weleda) and Glandula thyreoides Gl D15 (amp., Weleda) quickly brought remission.

Four years later the patient needed to deal quickly with a mountain of "paper stuff" to avoid financial problems posing an existential threat. She had by then separated from her husband. She felt exhausted after this. Again Cuprite (now D8 trit.) helped. When hyperthyroidism was again confirmed, as feared, it was decided to treat the goitre with radioiodine. This resulted in euthyroidism. The patient still felt frozen in her soul, however, and that her vitality was reduced. Anthroposophical painting therapy proved a great help to her.

Mrs A., aged 66, autoimmune thyroiditis

Her father had been an engineer. She said that she only rarely saw him but felt much connected. Psychologically he was anacastic and hostile to the flesh. "I did not relate to my mother at all." The patient was the eldest of four children. "They are all cracked. I really came off best."

Her mother developed neurodermatitis whilst pregnant with her. The patient says her mother tended to be depressed and frequently suicidal, so that the patient was often afraid for her. She had been brought up strictly and pietistically and was always her mother's confidante.

They had to flee from Silesia when she was seven she had to push her siblings' pram. "I was so afraid; I couldn't breathe from the effort." From the age of 11 she practically took sole care of her siblings. "I had to be grown-up so early." The others would still say to her today: "You were our mother."

At 38 she had four children. She was also fostering a boy at the time. "After bitter disappointments I was quite beside myself; it was not the way I had perceived it to be." Since then recurrent periods of depression and frequently changing hyper- and hypo-thyroid phases, Initially only TPO antibodies elevated, later also TRAB. – Disorders of thyroid function are among the most important differential psychiatric diagnoses when there are psychosis-like problems with perception and drive.

Medical treatment proved particularly helpful with

- Colchicum Rh D3 dil. Weleda
- combined injections of

Amnion Gl D10 amp. Weleda

Stibium met. prep. D6 amp. Weleda

Solum inject. amp. Wala

Mrs S. age 54, Hashimoto's thyroiditis with hypothyroidism

Well-rounded female form, in menopause. The patient developed manifest hypothyroidism, with laboratory findings typical of Hashimoto's thyroiditis.

Massive cervical tension (as if she could only hold up her head and keep her eyes open with an effort), alopecia, tiredness, moderate degree of arterial hypertension.

Her story: "I grew up in the GDR. My parents escaped separately, first my father, and we then followed (mother, patient and three siblings) via Berlin before the Wall was built (the patient remembers every detail of that escape). Her father, village teacher in Lower Saxony, developed Alzheimer's early. No support was available in the village. Her mother gave her children little care and only did the most necessary things for the father, being involved in catching up on her university studies. The children felt very much left alone with a father who had changed so much. It was too much for them. They had little psychological support from their mother. Following their father's early death, her mother continued her medical studies, developed breast cancer and continued to work on her doctorate to the very end, even on her sickbed.

The patient left home at 17, much like her siblings. Following a first marriage in France with a man who became an alcoholic she returned to Germany. In her second partnership, which is still continuing, she had two children; neither partner felt like getting married, the financial situation remained precarious, with the patient living largely on social payments and later part-time work, her partner's income being very irregular. The partnership clearly did not develop fully as regards inner fulfilment, though it did develop more at an academic and cultural level as time went on, yet there would be repeated serious crises.

The disease developed when her first daughter had a puberty crisis, presenting both parents with major problems.

In this case and those that follow thyroid hormone replacement was necessary in conjunction with anthroposophical treatment.

Mrs G. age 46, rheumatoid arthritis and Hashimoto's thyroiditis with hypothyroidism

The patient first came on account of chronic recurrent sinusitis. She is Danish, slim, blonde and always feels cold in the lower body, a chilly feeling which is difficult to deal with. Happily married, with two children. Soon after first admission, it became evident that she was developing massive rheumatoid arthritis, with humoral inflammatory parameters (CRP, IgM and IgG RF, and so on). In the course of establishing the diagnosis, she was found to be hypothyroid (TSH 21.7 µI U/mI) with elevated anti TPO antibody titres as with Hashimoto's thyroiditis.

The biographic history was as follows: Father an independent businessman. When the patient was 15, he suffered from severe depression. The family's financial situation was precarious for some time. The patient was greatly worried about maintaining the family and her father's recovery at the time, being much attached to him. About a year ago, she said, her father, now 70, had again suffered from depression. She was worried about him – generally rather reserved and under control, the patient started to cry at this point – and about how her mother would be able to cope. She goes to Denmark whenever she has some free days. Another point is that in recent years the family have always gone to their parents or in-laws for their holidays.

This patient, too, felt greatly relieved once she had put her inner problems in words and also worked on them in painting therapy. On the other hand she stopped her painting therapy when the emotional problem situation of being so closely attached to her parents became evident. It took years before the subject could be properly discussed; in the meantime her father has died and the relationship to her mother has been harmoniously resolved. L. Simon is treating her rheumatoid arthritis using an anthroposophical approach, with no basic therapy or steroids, and the evolution is very satisfactory, with no progression to joint destruction evident in the X-rays.

The sensation of coldness and chronic susceptibility to infection only responded finally to mistletoe therapy with Iscusin salicis, with strengths E and F given by injection two or three times a week, initially increasing the dose slowly over years (starting with strength A, o.5 ml once a week).

Mrs C, age 74, Hashimoto's thyroiditis with hypothyroidism

The patient grew up in Königsberg. Her father "was always drunk", often beating her mother. In her 10th to 14th years, she first experienced time spent in air-raid shelters, then the devastating bombing attacks on the city, seeing dead bodies and smelling them afterwards. When she was 14, she and her mother fled to the west, all the time afraid of being strafed or raped. The ship they tried to reach left before they got on board. She saw people fall in the water and drowning. As they continued in their flight, her mother collapsed unconscious and, terribly afraid, the patient had to get help from enemy soldiers. To her surprise she and her mother were well treated, ending up in a camp and then on a farm where she had to work hard.

Later in life the patient went to Brazil, where she could only get poorly-paid work. Then she cared for her mother who had had a number of strokes, continuing to work for financial reasons. Panic attacks at work first developed when she was 64. Hashimoto's thyroiditis with hypothyroidism was diagnosed. The patient is still working as a secretary at 74, has she does not have adequate pension rights.

The biographical conversation, when she was for the first time able to speak about the difficulties in her life clearly brought relief. Following exhibition of Aconitum C30 (which has proved its value in the treatment of shock sequels) she felt altogether very much better. With Thyreoidea comp. (Wala), 7 pilules t.d.s. and 12.5 µg thyroxin per day she is feeling well, with TSH back to normal (2.57 µIU/ml, normal range 0.27 – 42). On one occasion she faced up to a noisy man on the underground who then followed her for miles and spit in her face. She developed fear of persecution for a time, but following a dose of Aconitum 30c this ceased within a few days. For more than a year now she has felt very well indeed.

2) Phenomenology of hyper- and hypothyroidism

Making a deliberate comparison between hypo- and hyperthyroidism, we note that waking up has different qualities.

Hypothyroidism Eyes look sleepy, dull, tired	Hyperthyroidism Eyes look wide-awake, fixed, wide with fear, when seen, the individual feels taken hold of by a powerful inner energy	
Palpebral fissure narrow, latent prosis	Palpebral fissure wide	
Shoulders and back of neck may tense when trying hard to say awake and keep eyes open		
Voice rough, low, with little psychic modulation. Patients says little.	Voice bright, rich in timbre, over-tense (like Mozart's "Queen of the Night")	
Increased need for sleep	Reduced need for sleep	
Reduced drive	Restless in action, in spite of growing muscular weakness	
Pulse slowed down	Pulse accelerated	
Patient feels chilly	Characteristic feature – rather warm, slightly sweaty handshake	
Hair thick and dull, sticking out, combing does not help	Hair thin and glossy, soft, style won't hold	

In both cases, emotional rangey is limited, the state of consciousness altered, subtly or markedly, depending on the case.

3) Biographical aspects of Graves' disease and Hashimoto's thyroiditis

In the authors' view, the biographical aspects in relation to these polar features of an autoimmune thyroiditis may be contrasted as follows.

Hashimoto's thyroiditis

- Always worried, loss of support (family, native land) and the feeling of too much being asked all the time may describe the situation of the parents in the patient's childhood but then also affect the child growing into a young person in the second seven-year period in life. This triggers the process of premature maturing and parentification, as described. At the same time the need for maternal warmth is not adequately met. The loosing of bonds which happens physiologically at this developmental stage is
- · handicapped by their growing need for care and this impedes the child's developing independence.
- Triggering elements in later life are situations reminiscent of earlier ones, above all of having too much asked of one once again, esp. in form of social responsibilities as mother, or concerning one's own mother or parents, generally combined with a feeling of lack of sup-

port (e.g. no partner, partner absent for work reasons or partner unable to cope).

fh Therapeutic measures are seen to be meaningful when when the situation is addressed and the biographical context clarified, with targeted relief of stress, drawing on available support, and above all also art therapy which offers the experience of free expression and also a protected space.

Graves' disease

- The quality of sudden loss of security, like an assault, is a dominant feature, the shock of having to awaken in the soul suddenly, above all between 9 and 15 years of age. This concerns above all the bonding with mother and father, at that time still the inner relationships needed to sustain the child.
- Reversal of the maternal relationship appears to be a particularly significant factor, with the child forced into a maternal care provider role in the family (as in the first cases described), or having to care for the mother, with the child's own need for maternal care is split off and suppressed (rather than gradually reduced). The experience of "having to be mother" gets inwardly bound up with an ambivalence concerning the maternal; this may break out again at any time and "poison" the situation of being a mother (or becoming a mother, a woman). Biographically it is the element less of deficiency but rather of being "toxic" which is dominant in Graves' disease, the traumatic reversal of the maternal relationship. Mozart's "Queen of the Night" embodies a maternal figure whose daughter has deeply ambivalent feelings about her; her voice is excessively young (with a hyperthyroid quality).
- The triggering situations later in life also tend to be acutely dramatic with Graves' disease—death of one's child, a man setting fire to himself in front of the patient's eyes, the child facing a life-threatening operation, etc. Here it is not a question of wanting simply to shut one's eyes, which it is above. No, it is a matter of getting wholly caught up in the situation. The eye wide with terror becomes a signature of Graves' disease.
- As to treatment, the aim is first of all to convey a feeling of security and being protected to the patient, breaking through compulsive actions, and stabilizing her in soul and body. Intervention to establish a new metabolic balance is necessary not only to prevent organic damage but also to enable her suddenly to have adequate means again of experience and conscious awareness. On this basis it is then possible to clarify biographical background situations and aim to relieve mental stress and allow for a late maturing. It is particularly important to identify traumatic events in youth and work through them, and to clarify ambivalent bonding situations. Art therapy, especially painting, is again very helpful.
- Girls and women differ from boys and men in their need and capacity for bonding, the depth and degree of differentiation in inwardly perceiving their reference persons, and in their resonance in soul and body to the quality of relationships. The difference is demonstrable

from birth; it unfolds fully with puberty in the second seven-year period of life. A well-known though pathogenetically little understood phenomenon is that the incidence of autoimmune thyroid disorders is much higher among women than men—after puberty by a factor of about 10 (2). No pathophysiological reason for this has so far been established in medical science. The pathogenetic connection shown here would, on the other hand, make us expect a higher incidence among women. It also gives the reasons why the period from the 9th to the 15th year of life has particular significance in this respect.

4) Phylogenetic aspects of the thyroid

In simple chordates (e.g. Amphioxus) the thyroid develops close to the gills at the entrance to the digestive tract. The localization of this organ between respiratory and digestive organs, in a site which will later differentiate into the cervical region, is thus of primary significance. The original Glandula thyroidea, e.g. in Amphioxus, is identifiable from the iodine-containing secretion which in this chordate animal still passes into the digestive tract (to be absorbed with the food). The thyroid can be identified ab initio as an iodine-absorbing organ which organizes ("potentizes" (3)) iodine in a form effective for the organism. This originally exocrine secretion into the digestive tract can help us to understand why thyroxine taken by mouth retains its action on the internal organism (4). Functionally one assumes the secretion to act on (katabolic) metabolism, growth and sexual maturation.

The thyroid became an endocrine organ in the fishes, which at the same time developed a mobile internal skeleton differentiated into vertebrae and the ability not only to develop bone but also to break it down and rebuild bone tissue (as distinct from the molluscs, for instance). This process brings the skeleton itself into the animal's ensouled movement. Thyroid function plays a major part in this and all the way to maturation of the human skeleton.

The thyroid plays a key role in amphibian metamorphosis which enables these vertebrates to leave the water and go on land as they mature, leaving the sphere of birth and childhood and growing independent.

- The development and maturation of the lungs and
- the development of the limbs (7)

are made possible through thyroid activity. In an experiment done in the carefree way of childhood, one of the authors saw how when thyroxine was added to the water in the aquarium, tadpoles developed into dwarf frogs and came on land prematurely—a picture of premature maturation under exogenic influence. Conversely, pharmacological blocking of thyroid hormone can suppress tadpole metamorphosis.

It is worth noting that the greatest accumulation of iodine occurs in the vegetative zone of coastal regions around the world's oceans (you can smell the iodine in the ozone in those regions), e.g. in bladder-wrack (Fucus vesiculosus) and related plants. The plants concentrate iodine by a factor of 10,000 - 100,000 (from 50 mg of iodine/t of seawater to up to 19 kg/t of plant). It is not clear what this means for the plant (whereas the significance of the iodine organization for ensouled, animal organism is all the more evident). Note, however, the site where this accumulation occurs—the seashore where vertebrates originally came on land. It is a site where polar opposite qualities come together (continent and ocean) and relate to one another (which also applies in the region of the human neck).

The element iodine was first produced from seaweed ash in 1811. Industrial production was for a long time based on these plants as living "iodine deposits". With the halogens bromine and chlorine, the metals gold, copper and caesium and the non-metal sulphur, it is one of the seven coloured elements occurring in nature; the name "iodine" derives from the Greek adjective for "violet".(5) At room temperature, iodine gradually sublimates to the gaseous state (a signature telling us of a strong connection with the air organism, the soul sphere, the astral body). Kolisko (6) repeatedly characterized the connection between lung and limbs.

Coming on land, actively overcoming gravity, increasingly developing internal warmth as respiratory and metabolic activity gains in importance, the soul principle incarnates more and more in the animal organism. This evolution culminated in the achievement of homothermia, a stable internal temperature which permits independent movement and waking consciousness in variable external temperatures. This step came with the birds; taking it to extremes they are able to move from ground to air. Their physiological body temperature is up to 40 °C with a correspondingly high basal metabolism which in turn correlates with the level of circulating thyroid hormone and intensive respiratory activity. The respiratory organs extend into the bones, resulting in a "physiological osteoporosis". Tachycardia, rapid movements which in the head region appear jerky, the sharp, wide-awake eye, even the liquid stools remind of hyperthyroidism.(15)

This evolution reached its "goal", a balanced upright walk, in human beings. The birth of a child is another way of "coming on land" and depends on thyroid activity, especially with regard to the maturing of lungs; up to the time of birth, however, maternal thyroid hormone can compensate fully if fetal thyroxine is lacking. It is only from birth that a child has to depend on its own thyroxine production. In addition to the above, maturation of the nervous system, and above all its myelinization, depend on thyroid function. If the thyroid does not function adequately, the child cannot develop full conscious awareness.

Again it is worth noting that the thyroid is located in the throat region, beside the larynx, the organ which in speech enables the singular "birth" of the soul principle in producing the meaningful world. Humanity owe the potential for speech to the fact that the larynx moved down; at the same time an unstable crossing-over arose of air and food passages (in the dimensions of above/below and posterior/anterior). Compared to the animals, human beings are at a high risk of aspiration, especially when consciousness fades. The human throat and neck region thus proves unusually dramatic.(8) A further cross-over in the craniocervical transition area lies in the sphere of the nervous system (in the left/right dimension). The neck mediates between the fundamental polarities of the head on one hand and the trunk and limbs on the other, with opposite developmental principles and different embryonic tissue origin.(9)

Rudolf Steiner described from supersensible observation and in agreement with many other investigators working at this level(10) that it is exactly in this location, at the level of the larynx (and thyroid) that spiritual investigators perceive a particular "chakra" (wheel) as an organ primarily at the astral and soul level. Suitable training can develop this into an organ for perceiving the "nature of the thoughts of other ensouled beings". Chakras organize and orientate the intervention of etheric powers in the physical organism. They may be called organs in the human soul organism. M. Girke developed a therapeutic approach for patients with thyroid disorders from the exercises which R. Steiner gave for the unfolding of this chakra.(11)

It is only at this level that one finds the organizing powers which in the course of evolution brought about the development of the relevant organs and faculties in the physical body. To the extent to which the evolution and health of the individual depend more and more on his own conscious awareness and actions, it will be possible for human beings to make progress in perceiving, taking note of and developing soul and spirit as organizing reality.

5) Age-relationship of disorders and pathological dispositions affecting the thyroid

It will be evident from the above that hypothyroidism indicates that the soul organization primarily involved in respiration is not intervening strongly enough, or less and less. Hyperthyroidism is a condition where the soul principle exerts too much of its catabolic potential in the living body. This is reflected in the age distribution. Congenital hypothyroidism, incidence 1:4,000 newborn infants, is the most frequent endocrine disase. Hyperthyroidism on the other hand is reatively rare up to the 18th year (1:50,000 - 1:100,000). Graves' disease, which involves hyperthyroidism, most frequently develops in mid-life, between the 20th and 40th years, when bodybound soul activity is most intensive. Hashimoto's thyroiditis most frequently manifests between the 30th and 60th years; up to 10 % of all women aged 60 are affected (12), with 85% showing subclinical to manifest hypothyroid metabolic status at diagnosis. Withdrawal of the soul principle from the living body shows itself.

In the second seven-year period, the thyroid develops a different volume corresponding to the developing sexual characteristics. The female thyroid generally has a volume of 18 ml compared to the male at 25 ml (ratio of 2:3). Physiologically this may be said to relate to the relative muscular development, depth of breathing and physical strength, but it does also show how much the development of this endocrine organ is determined by the differentiation into genders. This quantitative aspect may be considered a further indication that it matters how the soul develops in a phase in life which is sensitive to thyroid maturation, and how the young person is able to identify with this. This includes the metamorphosis of bonds with the same-sex and the other-sex parent. Diseases involving autoaggression later in life may also be considered to indicate that identification in soul and spirit with physical maturation and the responsibilities that come with this has been incomplete or disturhed.

Between the 9th and 15th years, iodine requirements are particularly high (also in pregnancy), and depending on the availability of iodine, the thyroid also develops dispositions for potential diseases that have far-reaching significance for the whole of life. A diet low in iodine, and also one rich in "goitrogens" (e.g. soya) will more frequently lead to the development of (iodine deficiency goitre); later in life the risk of autonomous adenoma and multifocal autonomy is distinctly higher, and if cancer develops, follicular and undifferentiated tumours are more frequent.

A diet rich in iodine, on the other hand (originally connected with living near the sea, but nowadays, with chemical substitution possible, depending primarily on cultural factors) significantly increases the risk of autoimmune thyroid disorders but reduces the risk of goitre and adenoma; any thyroid cancer would be more likely to be papillary. It appears that the disposition for cancer develops early—by the 14th year—and 80 % of papillary carcinomata develop before the 40th year (in areas where iodine supply is adequate); the ratio for female: male gender is again around 2 or 3:1.(16)

6) Consequences for medical practice

Regarding the history, include biographical questions:

- what happened between the 9th and 15th year?
- what is the relationship to each of the parents?
- in how far was there a feeling of security and warmth?
- how did personal autonomy relative to parents and siblings develop?

In the authors' experience these questions are particularly important with autoimmune thyroid disorders. They provide a possible starting point for anthroposophical biography research.

With regard to diagnosis, it is important to identify triggers for the presenting condition and clarify how they relate to earlier stresses (v.s.)—is it an instance of re-living something?

As to treatment, possible methods have been described above. Medically, treating earlier shocks may be important as a first stage, especially with Graves' disease, for instance giving Aconitum in relatively high dosage. A broadly stabilizing effect on autoimmune thyroiditis

may be achieved, especially at the beginning of treatment, with

- Amnion D30 amp. Wala and
- Cuprum met. prep. D30 amp. Weleda as a combined injection.

Good results have been seen with both Graves' disease and Hashimoto's thyroiditis—including a measurable and in individual cases even remarkable reduction in auto antibodies—with the organ preparation

- Glandula Thyroidea D30 amp. Wala (per os or s.c., 2 or 3 times a week)

Painting is particularly suitable for art therapy in the beginning; later speech therapy can above all address the I for a positive effect on its role in stabilizing the astral body, the soul organization. This may also be achieved with eurythmy therapy exercises done daily. This also provides better conditions for entering on inner development (13, 14) in terms of the "eightfold path", for this has a specific relationship to the configuration of soul powers in the region of the thyroid.

Georg Soldner, paediatrician Markus Sommer, physician Josef Retzer Str. 36 D-81241 Munich

References

- 1 Schulte, Spranger. Pädiatrie 2. Aufl. Springer 2003:S.514
- 2 Remmele W. Pathologie Bd. 4. 2.Aufl. Springer 1997:584/588
- 3 von Laue B. Kalzium als Substanz und als Prozess im Menschen. Der Merkurstab 57 2004: 78-95
- 4 Romer AS, Parsons TS. Vergleichende Anatomie der Wirbeltiere, 5.Aufl., Hamburg/Berlin 1991: 536
- 5 Trueb L. Die chemischen Elemente. S. Hirzel, Stuttgart 1996. S. 347
- 6 Kolisko E. Auf der Suche nach neuen Wahrheiten, Verlag am Goetheanum, Dornach 1989:138 7/8 Husemann A. The Harmony of the Human Body. Tr. C. v. Arnim. Ednburgh: Floris Books
- 9 Rohen, Lütjen-Drecoll. Funktionelle Embryologie. 2. Aufl. Schattauer Stuttgart 2004:
- 10 Steiner R. Knowledge of the Higher Worlds / How to Know Higher Worlds.
- 11 Girke M. Die Schilddrüse. Der Merkurstab (48) 1995:404-416, 564 - 583
- 12 Dietel M, Dudenhausen J, Suttorp N (Hrsg.). Harrisons Innere Medizin. ABW-Verlag Berlin 15. Aufl. 2003:2260
- 13 Girke M. Die Schilddrüse. Der Merkurstab (48) 1995: 404-416, 564-583
- 14 Bittlestone A. Das Leben meistern. Zur Praxis des achtgliedrigen Pfades. Verlag Freies Geistesleben, 2. Aufl. Stuttgart 2002
- 15 Husemann F. Das Belladonnagift und seine Wirkprinzipien. Beitr. z. Erw. d. Heilkunst (32) 1979:198-206
- 16 Reiner C, Stuschke M, Dralle H, Schmidt HJ. Schilddrüsenkarzinom. In: Schmoll HJ, Höfken K, Possinger K. Kompendium internistische Onkologie. Bd. 2 Springer Berlin, Heidelberg New York 1999:668-710

Polar opposites in autoimmune diseases of the thyroid

MATTHIAS GIRKE

Translation of "Die Polarität in den autoimmunen Schilddrüsenerkrankungen" by Matthias Girke. Der Merkurstab 2004; 57/7: 350-65. English by A. R. Meuss, FCIL, MTA.

Abstract

Graves' disease and the atrophic form of Hashimoto's thyroiditis are in several respects polar opposites. Thus the pathological process may lead to increased blood supply in conjunction with the inflammation in Graves' disease, and sclerosis with autoimmune atrophic thyroiditis. The clinical syndrome with developing hyperthyroidism on one hand and hypothyroidism on the other also points to the polarity. Behind this is the characteristic function of the different human bodies, which leads to therapeutic approaches in anthroposophical medicine aiming to broaden the approach using suppression or substitution of the organ's function. Eurythmy therapy is an important element next to medical treatment. These thyroid conditions also present an inner challenge which patients may take up.

Keywords

Graves' disease

Hashimoto's thyroiditis

Autoimmune atrophic thyroiditis

Multiple endocrine adenomatosis

Polyglandular autoimmune syndrome

Myxoedema

Hypothyroidism

Hyperthyroidism

Colchicum

Cuprite

Chalcosine

Levico

Bryophyllum

Lycopus

Iodum

Thyreoidea

he thyroid and its disorders are closely connected with the nature of the human soul and spirit. In this sense, thyroid status may offer a differentiated picture of astral-body activity and also the relationship between astral body and I-organization. If the changes in the activities of the four bodies which are described below develop, an organ becomes 'foreign' and begins to drop out of the comprehensive integrity of the organism. The human organism responds to any foreign quality with inflammation. Inflammatory changes in the thyroid are rarely acute but tend to be subacute, like de Quervain's thyroiditis, and the frequently seen chronic lymphocytic thyroiditides. The atrophic evolution of Hashimoto's thyroiditis, with the development of initially latent and later manifest hypothyroidism, is the opposite of Graves' disease, where hyperthyroidism tends to be marked. A polarity does, of course, also always point to an inner relationship. This makes it possible to consider the spectrum of thyroid disorders, polar in composition, in the aspect of metamorphosis.

Graves' disease

Graves' disease belongs to the group of immunogenic thyroid disorders which will be considered in more detail below. With these conditions, too, one cannot overlook the significance of the human psyche. Thus Graves' disease may manifest after sometimes severe mental shocks. Major strokes of destiny and separation from people to whom one has been close can, if the physical constitution goes in this direction, provide the basis for psychic dynamics which the individual is unable to cope with. Here the age at which Graves' disease tends to manifest is telling. From the fourth seven-year period onwards, the I-organization changes soul life, differentiating it into sentient soul, rational soul and spiritual (or consciousness) soul. With the seventh seven-year period, i.e. in the early forties, it generally begins to unfold the next important step in development, which is the spirit self. Similar to the way in which diffuse goitre reflects inadequate astral activity, Graves' disease presents as the pathology of unfolding, "being born" of individual character, starting from the fourth seven-year period. The transformation of the astral body into the qualities of the spiritual self in the "knighthood" period of human life, approximately between the 42nd and

49th years, is a special characteristic of the relationship between astral body and I-organization which pertains with Graves' disease. It is worth mentioning at this point that the condition evidently does not occur in the animal world.

Onset of Graves' disease may often lie outside this period, for instance at the neonate stage, in infancy, at puberty and also in old age (Fig. 1), but this reflects its special nature, with an astral organization lacking adequate guidance and direction from the I-organization. What are the typical symptoms, and what relationships can be established with other thyroid diseases of autoimmune thyroiditis of the Hashimoto type and primary myxoedema?

In the case of Graves' disease, we have intensive and excessive enhancement of the awakening in the soul which is characteristic of normal thyroid function. Vital energies are transformed into restlessly flickering powers of conscious awareness, leaving behind an organism consuming itself in katabolic metabolism. The organization of limbs is taken hold of by the astral body's destructive activity, limiting its function. The condition called "thyrotoxic myopathy" and thyrotoxic osteopathy develop. Patients complain of muscle weakness and increasing lack of energy. One woman with Graves' disease had muscular problems as the main symptom, preventing her from playing the piano (as a pianist); these improved impressively with treatment. Apart from functional limitation, reference is also made to loss of muscle mass.(1) The astral body takes hold of the organization of limbs in katabolic metabolism, "consuming" it, and now pushes up towards the upper human being. The situation is similar with the skeletal system and hence thyrotoxic osteopathy. Bone density is reduced in hyperthyroid patients, so that the risk of fractures in increased. Treatment of the hyperthyroidism leads to normalization in this case, with no need for other forms of treatment for osteoporosis.(2)

With hyperthyroidism, the astral organization is orientated towards the day-side, the neurosensory organization, the upper human being. Following these dynamics of astral activity, blood quality penetrates into the sensory sphere. Skin circulation is increased by several factors, and the haemodynamics of the nervous system are also enhanced, contrary to former views. With hypothyroidism cerebral blood flow is decreasing; with hyperthyroidism it is increased, with oxygen utilization raised.(3) The soul, struggling to gain conscious awareness, does not develop a calm life of thought; instead one hears of a hectic restlessness driving the patient and tormenting her. The I-organization is not able to guide and structure the soul-organization adequately. Graves' hyperthyroidism may be compared to a candle which does not burn steadily but blazes intensely, consuming the "basis for life" in destructive combustion and producing an excess of light and heat.

As described for the Merseburg triad by Basedow in 1840 (goitre, exophthalmos and tachycardia), the thyroid is often enlarged in Graves' disease, with metabolic processes and blood flow in the organ greatly increased. So-

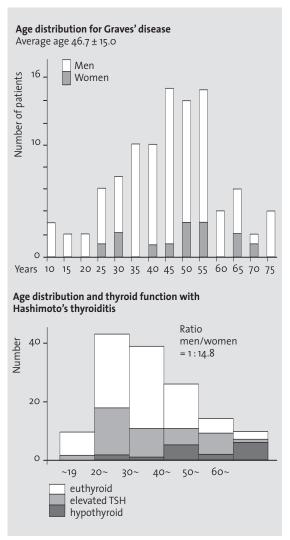


Fig. 1 a and b Age distribution for Graves' disease (from Greer MA (Ed.), The thyroid gland. Raven Press 1990) and Hashimoto's thyroiditis (from Wheeler MH, Lazarus JH (Eds), Diseases of the Thyroid. Chapman & Hall Medical 1994).

nography shows a change in the form of the organ, often especially enlarged in depth; echogenity to the hyporeflective parenchyma changes, and in colour-coded doppler sonography one sees diffusely increased hypervascularization. Under the microscope one sees empty or slightly filled, partly folded-in follicles with cylindrical epithelium and—reflecting the inflammatory processes which is taking hold of the organ—lymphocytic infiltra-

Chronic lymphocytic Hashimoto thyroiditis

A syndrome which is closely related to Graves' disease is chronic lymphocytic Hashimoto thyroiditis,(4) described by Hashimoto in 1912.(5) There are patients with a history of Graves' disease who then show the antibody constellation of autoimmune thyroiditis. This "transition" of Graves' disease into lymphocytic thyroiditis is not common, but known from the literature.(6-9) Conversely, Graves' disease may follow a sometimes marked hypothyroidism arising from Hashimoto thyroiditis.(10) This suggests a metamorphic relationship between the two conditions. Hashimoto thyroiditis involves thyroid enlargement, but with the atrophic form one sees reduction and regression in size. Chronic lymphocytic thyroiditis with thyroid enlargement is the classic Hashimoto thyroiditis. The atrophic form, occasionally also called primary myxoedema with reference to the untreated clinical picture, seems to be the other end of the spectrum. It is certainly justifiable with the present state of knowledge and in contradistinction to the view that was formerly taken of the different disease entities, to refer to an immunogenic thyroiditis with different forms of evolution which may involve goitre or also atrophy of the gland.

The spectrum beginning with Graves' disease, in which we are looking for connections with autoimmune thyroiditis, thus appears to extend as far as the atrophic form of thyroiditis.

If we first of all consider the morbid processuality, we have excessive increase in metabolism with Graves' disease, and a massive increase in blood flow in the organ, as demonstrable by doppler sonography. This is the above-mentioned emphasis on the metabolic system, also evident in the thrill frequently noted over the gland on auscultation in the past. With Hashimoto's thyroiditis, on the other hand, the disease has a different orientation even at this point. It is a chronic lymphocytic thyroiditis with progressively increasing connective tissue involvement and marked fibrosis in parts of the organ. In advanced stages, normal parenchyma has largely disappeared.(11) Similar changes may ultimately characterize the atrophic form of thyroiditis. Instead of the emphasis on the metabolic system one sees with florid Graves' hyperthyroidism, there is progressive sclerosis as the disease spectrum evolves, with the neurosensory system functioning in a way which here is not physiological.

These changes in the activities of the different bodies can be seen in the symptoms and signs of Hashimoto's thyroiditis in the threefold organism. In the organization of limbs, the astral organization separates itself from its physiological movement function. Contraction and relaxation slow down in the course of hypothyroidism. A feeling of stiffness may develop and it is not too uncommon for patients to report this. Myalgiform symptoms may develop when the astral body, normally coming into its own in movement, separates itself in this way. Occasionally one also hears of muscle fasciculations being a problem, in one woman with Hashimoto's thyroiditis this escalated into a clinically visible "fasciculation storm" of striated muscles. Symptoms indicative of changes in the activities of the bodies are also found in the articular system. Various problems with joints and arthralgia (often of the MCP and PIP in the hands) may occasionally also involve swelling. An inflammatory "response" to changes in the activities of the higher bodies may lead to Hashimoto's thyroiditis associating with rheumatoid arthritis.(12) Here a sclerotic condition manifests in the articular system not only at the functional level, as with the muscular symptoms, for instance, but also physically. Other sclerotic changes which may develop in the locomotor system in connection with hypothyroidism and this autoimmune thyroid disease indicate changes in astral organization activity going in the same

direction. This applies to Dupuytren's contracture and carpal tunnel syndrome.(13)

Apart from these manifestations in the system of limbs, all due to changes in astral body activity, corresponding processes are evident in the metabolic system, starting with autoimmune diseases of the liver (autoimmune hepatitis). Approximately 20 % of patients with primary biliary cirrhosis (PBC) are said to have or develop hypothyroidism.(14)

Another involvement of the glandular system in the upper human being must also be mentioned. This is Sjoegren's syndrome,(15) or sicca syndrome, which initially affects the salivary and lachrymal glands. Patients complain of dry eyes, sometimes also a developing xerostomia, an indication that astral activity has withdrawn from glandular function. Tiredness is a general symptom mentioned in some cases, again pointing to withdrawal of the astral body. Sjoegren's syndrome is associated with autoimmune liver diseases and may also involve arthralgia and even non-erosive arthritis. Gastrointestinal motility disorders may occur, again due to astral body withdrawal. These have also been seen in hypothyroidism without Sjoegren's syndrome.

The associated coeliac disease also comes in the sphere of the metabolic organization. These patients show an increased incidence of autoimmune thyroid conditions; as one would expect with a syndrome where the higher bodies do not sufficiently intervene in the metabolic organization, hypothyroidism is more frequent than hyperthyroidism.(16) Mention must also be made here of the association between autoimmune thyroid diseases and autoimmune (metaplastic) atrophic gastritis, where atrophy of the glandular organization points to withdrawal of the astral body.(17)

Effects of the sclerotic process are also apparent in the middle human being and the rhythmical system. With subclinical hypothyroidism, only a discrete change initially involving endothelial dysfunction has been noted.(18) The constrictive and hardening qualities of the upper human being impose form principles on the vascular system. The relaxant gesture of dilatation connected with processes remote from conscious awareness in the lower human being can then no longer be adequate. Hypothyroidism is connected with a decrease in myocardial contractility and a reduction in ventricular diastolic relaxation. It appears that with subclinical hypothyroidism a limitation of diastolic relaxation also develops,(19) a finding which typologically corresponds to endothelial dysfunction. A connection exists also between hypothyroidism and artherosclerosis (20) and coronary disease, frequently marked, and reduced HDLcholesterol levels. At this point we may also go beyond the above phenomena leading to sclerosis and hardening and refer to possible changes in blood coagulation. This has its place in the polarity of hardening coagulation processes belonging to the upper human being and the dissolving fibrinolysis processes relating to the lower human being. The blood is in the field of tension between these polar opposite activities. It seems that in

connection with (also subclinical) hypothyroidism a hypofibrinolytic and hypercoagulant constellation may develop, reflecting the sclerotic process.(21)

A revealing connection also exists between autoimmune thyroiditis and pernicious anaemia, with a large proportion of these thyroid patients being positive for parietal cell antibodies. The symptoms of the anaemia also reflect a withdrawal of the upper bodies from organic activity, as in the picture of autoimmune thyroiditis which was presented above.

With hyperthyroidism, excessive activity on the part of the astral body goes hand in hand with increased body temperature and intolerance of heat. Conversely, hypothyroidism involves cooling—patients easily feel chilly and do not tolerate cold well.

Finally with regard to the nervous system, attention must be drawn to the extremely rare (steroid-sensitive) Hashimoto's encephalitis. A connection with the thyroiditis may exist and needs to be investigated.

With hyperthyroidism one sees increased cerebral haemodynamics; with Hashimoto's thyroiditis, blood flow appears to be diminished. Comparing euthyroid patients with a group of healthy controls, cerebral perfusion was found to be reduced. Anxiety and depression scores showed significant differences between the two groups, though these did not relate to the changes in perfusion.(22)

It is interesting that there have been occasional reports of reduced hearing which is said to have returned to normal following exhibition of thyroid hormone. Where a patient with Graves' disease develops the characteristic eye symptoms, hypothyroidism means that hearing and speech (myxoedema voice) are affected. Rudolf Steiner characterized the polarity of the eye, which is turned towards the outside world, and the ear with its orientation, which is directed towards inner essence; this is evident with these thyroid disorders.

The sclerotic process can also be shown with other conditions associated with autoimmune thyroiditis. A connection exists between sclerosis and diabetes mellitus, for instance. Every 5th type-1 diabetic is said to develop autoimmune thyroiditis as well.(23) The connections Hashimoto's thyroiditis has especially with the adrenal gland (Schmidt syndrome) or beyond this, with diabetes (Carpenter syndrome) as part of an autoimmune polyglandular syndrome, point to pathological astral body activity behind these individual phenomena. Rudolf Steiner referred to this in his Pastoral Medicine Course. "Now the I-organization and the astral body are more bound to each other, and the two together are not entering into the physical and the ether body the way they should." There follows the suggestion "that one sees marked abnormalities in the more subtle glands and hormone production, in the glands we refer to as adrenals and in the small glands that lie hidden in the thyroid here in the neck region." Reference is also made to other glands (pituitary and pineal body), as well as changes in the sensory and the nervous systems.(24) The psychic phenomenology of fading sensory perceptions and the tendency to "giddy dream states" arising in this context are also described which arise because the astral body and the I-organization are not adequately connecting with the sensory organization.

The polar opposite to polyglandular autoimmune syndrome, which points to withdrawal of the astral organization, is multiple endocrine neoplasia, MEN I and II, which points to autonomous endocrine function that is no longer subject to the guiding power of the I-organization and therefore drops out of the regulatory system of the organism as a whole. Medullary carcinoma of the thyroid, which comes under this heading, is an important thyroid-related disease.

Another important point is that above all lymphomas of the thyroid and also papillary carcinoma of the thyroid are said to show a higher incidence with lymphocytic thyroiditis.(25) It is no doubt premature to see the latter as a precancerous change, but the relationship between chronic inflammation and malignancy, referred to on several occasions, may come into this. It is interesting to note that patients with differentiated carcinoma and thyroiditis are said to have a better prognosis than patients with differentiated carcinoma and no inflammatory changes.(26) The qualities of both the acute and chronic forms of inflammation may be seen in these fin-

Hashimoto's thyroiditis shows the above-mentioned polarity of being associated with goitre or atrophic evolution. Constitutionally one also sees a polar symptomatology. Thus one has a "hysterical" constitution with inner excitability and restlessness, sometimes also rapid speech and sequence of thoughts, and on the other hand the neurasthenic typology with signs of asthenia and weakness.

Autoimmune disease processes of the thyroid against the background of threefoldness

At the level of morbid processuality, we have the polarity between a syndrome with the emphasis on metabolism and increased blood flow on the one hand and a thyroid condition involving progressive connective-tissue sclerosis on the other. In the one case, the system of metabolism and limbs is dominant, in the other the neurosensory system.

If we consider the functionality of thyroid metabolism, the hyperthyroidism of Graves' diseases is the opposite of atrophic autoimmune thyroiditis in the sequence of thyroid diseases given above. The middle position is again held by autoimmune thyroiditis, which frequently starts with an initially hyperthyroid metabolism and may later develop a latent hypothyroidism.

What then are the characteristics of the psyche with these syndromes, ascending from morbid processuality to the organization of the psyche?

In connection with autoimmune thyroiditis one often sees a lively, agitated inner life, on occasion with restlessness, reminding of Graves' disease. The elevated TSH-basal which suggests a latent hypothyroidism is in marked contrast to subjective and objective findings. Unlike

organism.

Type of disease	Thyroid function	Psychic phenomenology
	NEUROSENSORY SYSTEM	
Sclerosis and fibrosis of thyroid Autoimmune atrophic thyroiditis	Hypothyroidism	Psyche growing rigid, apathetic, dull
autoimmune thyroiditis Hashimoto	(Latent) hypothyroidism initially frequently hyperthyroid	
Graves' disease	Hyperthyroidism	Restless, excited psyche
increased blood flow and metabolic activity		
	METABOLIC SYSTEM	

Graves' disease, the metabolic changes characteristic for hyperthyroidism are absent, however. It is an inner life that often seems to have little guidance from the I-organization but does not take hold of metabolism intensively—as in the case of the initially frequent hyperthyroidism and Graves' disease. The astral body turns more from metabolic activity to influencing the conscious mind, here appearing as wide-awake and restless inner life.

With the soul-organization's metabolic activity partly withdrawn, metamorphosis of vital energies into powers of conscious awareness finally can only be inadequate. The clinical picture of hypothyroidism evolves. Initially the patient's increased need for sleep suggests that conscious awareness will be limited to a level comparable to sleep. The recuperative, anabolic side of sleep does, however, have a very different quality and must not be confused with the hypothyroidism which develops in this case as a circumscribed type of disease frequently tending towards sclerosis. Rudolf Steiner spoke of the opposing qualities of sleep, how it gives health and also sickness.(27) Hyperthyroid people show a dull, apathetic waking state which is growing rigid, with interest in the environment progressively lost. In connection with hyperthyroidism and hypothyroidism, which manifests at the opposite pole, we thus find two opposite gestures in the soul (Fig. 2).

Dynamic and sclerosing inner life

Contrasting the two different forms of immunogenic thyreopathy, we see the different ways in which the astral organization is active. With Graves' disease we have extreme activation of metabolism in terms of a lifeconsuming catabolism, with powers of conscious awareness evolving. With Hashimoto's thyroiditis this is less so. It is quite often that one still sees an agitated inner life, with activity not so strongly directed to metabolism, and this may ultimately change into hypothyroid dimming of consciousness.

Considering the evolving contrast it is important to look at the fundamental factors that constitute our waking consciousness. An important description of how our world of thoughts arises was given by Rudolf Steiner: "Never would our thoughts flash through the soul if I

and astral body did not work together, and this is reflected in the way blood and nervous system work together. Scientists of the future will feel that it was a strange thing for scientists today to look only in the nervous system for the source of thought. The source and origin of thought does not lie in the nerves alone. We must accept that it is the interplay between blood and nervous system which allows thoughts to arise."(28)

He then evolved the macrocosmic image which lies behind the development of thoughts: "When the blood, our inner fire, and the nervous system, our inner air, work together in this way, the thought flashes through the soul. And the genesis of the thought in the inner soul corresponds to the roar of thunder in the macrocosm. When the fire of lightning ignites in the masses of air, when fire and air come together to create thunder, this is the same macrocosmic event in the big world; the corresponding process develops when the fire of the blood and the play of the nervous system discharge in inner thunder, which, however, sounds out in thoughts, doing so gently and quietly in a way imperceptible to the outside world."

Powers of thought, powers of conscious awareness emerge from the organization in the process of katabolic metabolism which is part of every unfolding of consciousness and presents as enveloped in the warmth and quantitatively especially emphasized circulation of the head organization. "Pre-conscious" powers, they then shine out against the structural quality of the nervous system as conscious thoughts.

With hypothyroidism, the "blood pole" of thinking appears to be progressively receding, the element which in hyperthyroidism pushes overwhelmingly into the conscious state falls progressively silent.

We can find this aspect in Rudolf Steiner's words: "Reading medical books today, it is described as if the human being loses his rationality with disease or absence of the thyroid. No, he merely loses interest, involvement, grows dull and does not use his rational mind. The rational mind remains intact when you lose interest. What is lost is the lively interest one takes in things, wanting to direct attention to things. Someone who does not take an interest does not turn his attention to anything because he lacks the tool for this. We do not give him ratio-

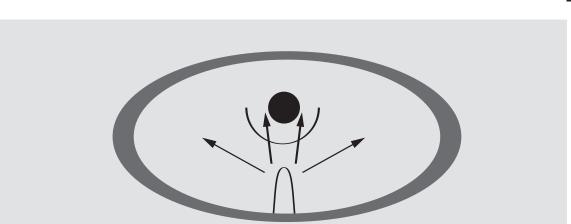


Fig. 3. Centrifugal (arrows) and peripheral (ellipse) astralbody activity with hyperthyroidism (Graves' disease) and hypothyroidism.

nal understanding with the thyroid but a tool which enables him to take a lively interest in the things of the world."(29)

This is unequivocal reference in connection with the thyroid to the active, will-related side of the inner world in soul and spirit, developing active interest and attentiveness and involving oneself in the things of the world.

Starting from this characterization, important light is cast on the dimming of consciousness with hypothyroidism, and beyond this also with some forms of dementia. One will often see an apathetic, frozen inner live which nevertheless is awake, having lost the inner-life dynamics connected with the blood. Apart from reduced attentiveness to things in their surroundings, patients with manifest hypothyroidism often show reduced speech activity(30) and a slowing-down in their thinking. A hardening quality has arisen; in many of the phenomena described above it also shows itself to be a form of sclerosis.

To sum up, the above-mentioned diseases of the thyroid lie within the polarity of neurosensory system and the system of limbs and metabolism. Via a description of the morbid processuality one comes to perceive a corresponding differentiation in inner-life activities.

Influence of the different bodies in hyper- and hypothyroidism

In hyperthyroid patients, astral activity takes hold of the organism dynamically in katabolic, warmth-generating metabolic processes and pushes restlessly towards the upper human being. The "hectic spots" described and also increased blood flow in the nervous system accompany the inner experience of unrest evolving from the organism and point to relevant astral-body activity. This—compared in the above to a fire evolving light and heat as a metaphor—increasingly consumes its organic base and orientates itself centrifugally towards the upper human being.

A wholly different gesture develops with hypothyroidism. Here the astral body does not adequately take hold of the living body but remains in the periphery—as in an unphysiological sleep. The organism, neither adequately taken hold of nor still bearing soul and warmth, then becomes subject to progressive rigidity and sclerosis.

Where hyperthyroidism presents as excessive wakefulness, a pathological daytime aspect, manifest hypothyroidism has to do with a tendency to pathological sleep, a predominantly night-time aspect. With hyperthyroidism, the bodies consume life as they develop towards the upper human being and hence the waking state; with hypothyroidism, they seek the periphery—as in sleep. Rudolf Steiner's characterization of the different bodies is relevant to these day and night constellations which arise morbidly.

"We thus have the difference between waking and sleep state characterized in that we are able to say: Our I and our astral body act in all directions from the inside in the waking state. Our I and our astral body act back on us from outside with the spiritual powers of the cosmos in the sleep state."(31) (Fig. 3)

To sum up, we see polar changes for the four bodies in hypothyroidism and hyperthyroidism. At the physical level we have the contrast between the emaciated-loo $king\,figure\,of\,someone\,with\,long-term\,hyperthyroidism$ and the sometimes oedematous changes in the body of someone with manifest hypothyroidism. The etheric organization shows a corresponding contrast. With hyperthyroidism, powers of life metamorphose into powers of conscious awareness; metabolism has been observed to be accelerated and more katabolic. With hypothyroidism, vita processes slow down, the fluid principle drops out of the etheric body, with fluid accumulating and oedema developing. The influence of the astral body is different, as evident from pathological waking and sleeping. The I finally seems to have become remote in a hypothyroid individual. The tired look in the eye is not filled with the power of the I and often noticeably "empty". With hyperthyroidism, astral dynamics goes beyond the inadequate guiding powers of the I-organization.

Subclinical hypothyroidism and hyperthyroidism

The so-called subclinical functional disorders of the thyroid fit in with the described activities of the four bodies. They also deserve mention here because their clinical significance is often underestimated. The sclerosing process which has been described appears to exist even with subclinical hypothyroidism, i.e. elevated basal TSH and peripheral (free) thyroid hormones at normal levels.

In Hak's Rotterdam study,(32) women with subclinical hypothyroidism were found to face c. twice the risk of developing atherosclerosis or myocardial infarction than euthyroid women. At the astral level of this disorder, a number of investigations have found a psychic symptomatology which agrees with the activities of the four bodies described above. We may characterize them as mood changes, e.g. depression, disorders affecting attention, feelings of weakness and a slowing-down of cognitive functions.(33)

Conversely, subclinical or latent hyperthyroidism involves excitation of astral activity, often connected with anxiety and emotional irritability. Overlaps may occur with the symptoms seen in latent hypothyroidism. Studies on the subclinical thyroid disorders are noticeably few considering the frequency and intensity of symptoms reported by patients. With regard to other manifestations, there are indications for excitation of the astral body affecting e.g. the rhythmical system. Biondi et al.(34) thus conclude that subclinical hyperthyroidism involves elevated pulse rate, atrial fibrillation, increased left ventricular mass with marginally concentric remodelling, abnormal ventricular relaxation, reduced performance and increased risk of cardiovascular death.

Therapeutic aspects

The described pathology of thyroid diseases may be developed further into an approach to treatment which is to be given in outline below. This alone gives them real significance for medical action.

With regard to medical treatment, every human illness presents a multilayered task with different emphasis. In the first place we have the physical manifestation of the disease, usually dealt with by suppression, thyrostasis, in the case of hyperthyroidism, and substitution of thyroxine in the case of hypothyroid metabolic changes. The other areas of thyroid disease continue to be totally disregarded. What possibilities are there of treating the disease process which, for instance, is found in the spectrum of inflammation-related or sclerosing morbid processes? How do we approach the characteristic changes in the psyche? What is the individual inner task which may bring a new step in the development of the human being?

Medical treatment—copper and iron

Important pointers can be gained from considering the two functional gestures characterizing the hyperthyroid and hypothyroid metabolic states. It will, of course, be necessary first to establish status. Working with thyroid conditions for many years, insight into their nature has led to a number of therapeutic approaches. This first step of gaining a concept has been followed by application in practice in the case of patients who had been given the relevant information and wished to have anthroposophical treatment. The case studies, some impressive, have led to consolidation in various areas, and this must be followed by validation.

As an introduction, let us recall the metamorphosis described for thyroid activity. Water-bound gill-breat-

hing changed to breathing air, leading to the senses being able to breathe in light. If we look not so much at larval metamorphosis but the spheres of life with the life-forms belonging to them, a telling polarity may show itself. Marine molluscs, shellfish and snails, and also freshwater and even land snails, crabs and octopuses breathe with the aid of a pigment which is known to contain copper (haemocyanine). They do not have their own inherent temperature. Enveloped in a dim, voiceless inner life they develop a soft body, excreting the hardening element to the outside in shells, carapaces, etc. When air-filled space is conquered, a different metal quality gains significance—iron. Its main function may be evident from the way in which levels of life in spirit and soul are brought into the living organism. Independent warmth, air-breathing and a soul presenting itself to the outside in sound can develop. Any iron deficiency anaemia with its inner adynamics of soul can make us see a clear picture in contrast of iron quality bringing in spirit and soul. In the neurosensory system with its abundance of arterial blood, phylogenetically developing early with arterialization of the circulation, iron has the dynamic qualities of conscious life. In the rhythms of the blood it addresses itself to respiratory processuality. In the system of metabolism and limbs it finds its place in energy and warmth processes. In the metabolic processes of the respiratory chain with its surprisingly great amount of free warmth produced, it is one of the essential metals, here seeking to relate to phosphorus.

In the language of the phenomenology here considered, we thus see a polarity of substances. With copper it points to the night-sphere of the inner life, and with iron activity it develops the unfolding endowment with soul.

The following phenomenology is taken from the extensive body of knowledge available on copper and iron. It directs our attention to the pathological processes.

Among the vital processes of acute inflammation, those of heating up and secretion are very evident. The extensive vital process of respiration in incorporated into them, as apparent from the steep increase in oxygen uptake called a "respiratory burst".(35) Oxygen consumption is a key element in inflammatory processuality, with dependence on the microbicidal activity of oxygen. The activated oxygen metabolites are also important. Oxygen's relationship to iron demonstrates the significance of the metal in acute inflammatory processes. We will concentrate on this here, leaving aside the other aspect of iron activity as it may be evolved for the healing phase of inflammation.

The destructive aspect of acute inflammation is met with a number of limiting metabolic processes with different enzymatic processes which protect cells from the destructive metabolism of activated oxygen compounds. One is superoxide dysmutase (SOD): "In the mammalian extra cellular environment extra cellular SOD (ECSOD) and ceruloplasmin serve as antoxidant enzymes."(36)

Ceruloplasmin is the serum protein with copper content; SOD also contains copper. Iron and copper are op-

posites in this, with iron relating to the acute inflammatory processes whereas copper does more act to limit the katabolic metabolism of oxygen radicals, guiding the inflammation-geared metabolism towards the healing and constructive phase of its night-side. This compares with the polarity of the metals. It is important to note that this is merely one aspect of specific characteristics in the comprehensive picture of the essential nature of these metals.

The aim has been to show how these two metal qualities can be related to one another for an awakening inner life that takes hold of the organism on the one hand, and an inner life that goes to sleep, calming down, on the other. Iron and copper thus are of major importance in the treatment of hypothyroid and hyperthyroid diseases.

Fundamental aspects of medical treatment for hyperthyroid individuals

Rudolf Steiner spoke of chalcosine (chalcosite, copper glance) and cuprite as important medicinal agents to treat Graves' disease hyperthyroidism. Chalcosine, a compound of copper and sulphur, shows metallic lustre in fresh surfaces, otherwise it is opaque, its colour a dark leaden grey, usually tarnished black. Beautiful chalcosine crystals can sometimes be seen, their structure rhombic or pseudo-hexagonal. Cuprite on the other hand is a deep red, flame coloration green. The crystals are octahedral, dodecahedral and more rarely cubic. With this compound of copper and oxygen, the ordering, formed crystal principle confronts the effervescent inner life of the hyperthyroid patient. Its form-giving powers strengthen the I-organization so that it may act to heal. Concerning chalcosine, Rudolf Steiner wrote: "I have shown you the influence which chalcosine has on the I-organization. I have shown you what we have to consider with Graves' disease, so that one is able to say: If one is in a position to look on the human being on the one hand, how there physical, etheric and astral body and I are in interplay and interaction, and how this grows abnormal in the morbid state, and if one also gains insight into the principle found in nature, then one sees the following, for instance: There the I-organization is too weak in Graves' disease. Out there I have chalcosine. Brought together with the I-organization, this copper compound will greatly strengthen it."(37)

In 1933 Dr Norbert Glas compiled a unique (and to my knowledge so far the only) list of seven patients with Graves' disease, on the whole diagnosed clinically, and their treatment which included chalcosine. (38) The following case record comes from this.

"Case V. Nurse aged 30, Graves' disease from her early 20s. Recently difficult night duties and in consequence unfit for work because of heart problems, restlessness, weakness. On admission, marked tachycardia, exophthalmos, particularly noticeable vasomotor excitability, poor quality sleep. The patient had always been lean, always keen to work, and in spite of her illness very sensible. Clinical symptoms worse than her experience of them.

"Treatment. Chalcosine (copper glance) 3x twice daily; 2 or 3 times a week s.c. injection of chalcosine 8x. Cardiodoron. In the mornings she was for a short time given a hot fomentation with a decoction of Berberis, in the evenings 0.1% silver ointment in the bladder region. She returned to work after five weeks. The significant improvement persisted."

The excited inner life of a hyperthyroid individual can be calmed by giving phosphorus. Three kinds of use referred to by Rudolf Steiner may be considered. Oral exhibition addresses metabolic activity; subcutaneous injection serves if there is marked excitation of the rhythmical system (tachycardia, tachypnoea), and occasionally external application in a full bath will be indicated for a will-o'-thewisp, restless thought life with flight of ideas.

Excitation of astral-body activity, getting "frozen" in the orientation of its conscious awareness and not achieving the opposite pendulum swing to its night-time constellation, can be regulated using iodine in high potencies. Iodine in the low-potency algal preparation prepares the way for astral-body intervention; given in a higher potency it can reduce its excessive activity. Combination with an organ preparation of the thyroid in comparable potency (Glandula thyreoidea D20 amp. Wala) has proved effective. At this potency, the material level has been left well behind. With the organ preparation, the structuring principle belonging to the thyroid prepares the way for the other therapeutic approaches. This is a special quality in anthroposophical medicine, not only looking for a medicinal agent from the natural surroundings but also considering how it can reach the "site" of its medicinal action. Thus the healing answer to the process of sclerosis lies in the essential nature of lead. Its quality as substance must, however, metamorphose before it can be the medicinal agent needed, for instance in the form of Scleron.

Another important medicament which can be almost seen to have astral activity connected with its vital organization is Colchicum. Both Graves' hyperthyroidism and circumscribed, multifocal or disseminated autonomy involve intensive metabolic processes. Doppler sonography can be used to demonstrate these as increased blood flow, scintigraphy as increased uptake. These enhanced metabolic processes, in Graves' disease also evident in inflammation-related lymphocytic infiltration of the organ, can be regulated with low potencies of Colchicum. For the significance of Colchicum as an important medicament in anthroposophical thyrology, see previous publications.(39) First prospective studies (observation following exhibition) of Colchicum actions with latent hyperthyroidism and goitre have been completed and will be published shortly.

Bryophyllum may be used to support guidance of the astral body.

Lycopus virginicus or—as a native plant—Lycopus europaeus, a labiate, is another important medicinal plant. Labiates show intense relation to warmth in numerous variations.(40) In hot sunny climes, preferably Mediterranean, they take warmth into their organization in the substance-language of volatile oils. Closeness to soul quality is impressive in the sphere of warmth, experienced when walking through a field of flowering lavender with its rich hum of bees, for instance. In Lycopus, volatile oil production is reduced, however. The plant grows in the vicinity of damp grasslands, ditches and bodies of water, needing a connection to the watery element. This gesture appears to define the medicinal quality which consists in subduing excited astral activity when metabolism is hyperthyroid. In accord with the image we have gained, the time for harvesting the aerial parts of the plant is just before flowering.

The above medicinal agents provide the therapeutic qualities desired: strengthening activity of the I-organization, reducing excessive astral activity and guiding it back from overweening orientation towards conscious awareness to the physiological level.

From these points of view, additional light may be thrown on conventional antithyroid medication with thiourea derivatives. These agents were developed following discovery of the goitre-producing effect of a diet consisting largely of cabbage in wartime. Thiocyanate ions are believed to compete with iodide for uptake into the thyroid resulting in competitive inhibition of iodide uptake. Rhodanide (thiocyanate) ions are obtained by splitting mustard oil glycosides. The mustard oils in cabbage may also yield vinyl thio-oxazolidines (goitrins) with thyrostatic activity. Neither principle is used as a thyrostatic, but goitrins show structural similarity to carbimazole.(41) Cabbage (Brassica oleracea(42)) is full of vitality. A water content of c. 90 % indicates tremendous etheric development. Established use as a poultice to treat leg ulcers or decubitus demonstrates its power to stimulate regeneration. Vigorous development of the etheric sphere of life will in the case of hyperthyroidism set limits to an astral organization which is restlessly pushing for conscious awareness.

Apart from aiming for a euthyroid state, an important question will be in how far the anthroposophical approach to treatment will guide evolution to achieve remission with Graves' disease. It is largely unknown which factors lead to autoimmune thyroiditis. Many questions require further consideration, among them the possible significance of Rudolf Steiner's reference to chalcosine to treat the pathological process which has been described.

After normalization of metabolism and the influence, not so far examined, of the time form of the disease, the next level touches on the typical sentient configuration of someone with thyroid disease. It does not usually correlate with the laboratory findings. Patients sometimes continue to complain of "hyperthyroid symptoms" even if the metabolism is well "balanced". Others still feel hyperthyroid although latent hypothyroidism has already developed with autoimmune thyroiditis. Patients who need thyrostatic treatment also benefit from the anthroposophical medication given above. Eurythmy therapy is particularly effective. It appears that positive steps in inner development can help to make treatment successful. A connection between emotional strain going beyond the I's powers to cope and onset of autoimmune hyperthyroidism has been established, also with regard to the prognosis. In a prospective cohort study, patients with Graves' disease with euthyroid metabolism were subjected to a range of psychological tests 2 – 5 years after completing treatment. Compared to people with no thyroid disease, significant correlation was found between stress score, TRAB and/or thyroid volume. The group of patients who had had a recurrence showed a greater frequency of hypochondriac, depressive, paranoid and asthenic "personality structures" than patients in stable remission. Compared to patients in remission, patients with a recurrence of Graves' disease did in addition have a significantly higher score for problems.(43) These findings make it very clear that we must go beyond medical treatment, establish the inner tasks and find ways in which patients may be supported in this respect.

Fundamental aspects of medical treatment for hypothyroid patients

Treatment is the opposite for hypothyroid metabolism. Support is needed for an organization of soul and spirit which is not fully effective. Here iron is an major medicinal agent. An important observation is that iron deficiency with or without anaemia can influence thyroid metabolism. Animals with iron deficiency are said to have significantly lower T₃ and T₄ levels compared to animals which are not anaemic. Similar phenomena are known with humans. Thyroid peroxidase (TPO) activity seems to correlate with the degree of iron deficiency anaemia.(44) Iron thus also relates to thyroid hormone metabolism and hence the incarnation of the higher bodies.

For clinical use we may think of Levico Water with its complex composition (among the medical consultations he gave, Rudolf Steiner once recommended Levico for a woman with goitre "to stimulate astral body activity").(45) It is exactly through iron quality that the souland-spirit level of being can gain the orientation in the described way to take hold of the organism. The arsenic in Levico water is also important. The essential nature of the arsenic here corresponds to the waking-up process in human beings. (46) The thyroid is reported to be particularly rich in arsenic.(47) Through the substancelanguage of iron and arsenic, therefore, this medicament recommended by Rudolf Steiner is a convincingly effective means of energizing the astral body. Levico Water has a very low pH. This acidity can with clinical use guide the astral body to connect with the organism. Levico Water also contains phosphorus and this guides the I-organization, its activity changed to be sleep-like with hypothyroidism, to take hold of the living body. The copper contained in this uniquely medicinal water appears to prepare a receptive gesture towards the higher bodies as they are once again incarnating more strongly. (Table 1)

Scorodite, natural iron arsenate, may be considered analogous to Levico Water. As an oil-producing medicinal plant, Hypericum may be added to the metal and Levico Water for treatment. The quality of the oil is taken into the plant as "condensed warmth-body nature" (48); it helps the "lightless" individual with hypothyroidism. Prunus spinosa is another important medicinal plant here. It acts on the etheric body which may grow rigid in hypothyroidism. Oedemata indicate that its function has been limited.

Other medicaments are for specific forms of hypothyroidism in the threefold organism, e.g. the arthralgiform symptoms and stiffness in the locomotor system known with Hashimoto's thyroiditis.(49) Dupuytren's contracture may be treated with Formica (6x) in combination with the organ preparation Tendo. Mistletoe may be considered if the circadian temperature has become fixed.

Fasciculations are disturbing for the patient and difficult to treat. Cuprum aceticum/Zincum valerianicum will ameliorate them. Copper acetate takes the astral body back from activity relating to the upper human being to its warming and voluntary movement of muscle functions.(50) If fasciculations increase with mental tension, Bryophyllum may prove helpful.

Latent hypothyroidism may show clinical improvement with this approach to treatment. Severe, manifest hypothyroidism, e.g. in cases of autoimmune atrophic thyroiditis, needs substitution in addition. With the latent hypothyroidism of Hashimoto's thyroiditis it also has to be considered that early hormone substitution can have a favourable effect on the further evolution.

At this point, reference may be made to a suggestion made by Rudolf Steiner. The following was said concerning a woman with goitre and weakness and lack of psychic equilibrium: "Do you have any thyroid hormone? You need to get some. And until we have it, let us give a vegetable equivalent, which would be the lower leaves of woodruff ... And then you merely need to take a decoction in the 4th decimal." (Injection, lumbar region)(51) Asperula odorata is a medicinal plant where the etheric quality of the leaf organization fills itself with a scent which comes close to the astral. Astral quality is brought into the life organization—a therapeutic gesture which is needed in cases of hypothyroidism and goitre.

To sum up, we thus have different levels of medical treatment. As a first step we find the physical configuration of the disease from the clinical findings supported by laboratory findings and other investigations. Sometimes treatment has to be at this level, e.g. surgery, radioactive iodine if indicated or substances which intervene in physical substance-level functions. The there is the time configuration of the disease. Pathological processes develop at different paces. With Hashimoto's thyroiditis, for instance, the organ may be enlarged for a long time, in other cases there is a rapid transition to atrophy of the thyroid. The powers of thyroid growth and development can be addressed with organ preparations. In the case of atrophic thyroiditis these will help to stimulate etheric activity. The sentient configuration of the disease is reached by the use of plant-based medici-

Chemical and physical properties	"strong water"
water temperature (source) pH	
Elements & compounds (mg/L) Phosphorus (PO4) Na K Mg Ca Cl SO4 SiO2 Lithium Aluminium Chromium Manganese Iron total Cobalt Nickel Copper Zinc Arsenic Strontium Argentum Lead	

Table 1. Composition of Levico Water (chemical analysis from the province's laboratories Personal communication S. Caspari).

nes as described above. In the case of hyperthyroidism therefore with Colchicum, for example, or Bryophyllum with its calming action. The spiritual configuration of the disease, relating to the I's activity, will finally call for metal therapy. As already mentioned, such an approach to treatment creates an inner fruit for the spiritual nature of the individual, gaining new abilities, for instance in coping with the troubling restlessness of an excited astral organization in a case of latent or manifest hyperthyroidism. This active element in dealing with the sickness can be taken hold of from inside with eurythmy or art therapy.

Eurythmy therapy

Eurythmy therapy seems indispensable in the treatment of thyroid disorder. In the case of Graves' disease, Rudolf Steiner referred to "meaningful movement in consonants".(52) In a sequence such as LMS, the L and M with their relationship to breathing are followed by the S. The eurythmy quality of this clearly gives an experience of its fiery, dynamic nature with powers of configuration and form.(53) The gesture of this sound immediately reveals the form impulse needed to oppose the uncontrolled dynamics of florid hyperthyroidism with Graves' disease. "Form" and "fire" come together in this

Here close collaboration between eurythmy therapist and physician can prove particularly fruitful. The picture presented of the nature of Graves' disease, for instance, leads directly to the indications for treatment, in the form-giving quality in the substance-language of chalcosine, for example, just as much as in the movement for the consonant "S" in eurythmy therapy.

The dual nature of the "S" can take us to eurythmy therapy for hypothyroidism. An organism which is growing rigid, tending towards sclerosis and abandoned by warmth, can be set in motion with the "fire quality" of the "S". If the form given to its dynamics is close to Graves' disease, the "fire quality" appears to develop the relationship to hypothyroidism.

The metamorphotically related disease spectrum ranging from Graves' disease hyperthyroidism to manifest hypothyroidism based on autoimmune thyroiditis comes together, as it were, in this one element of eurythmy therapy in the "form" and "fire" of the consonant "S". Here one can see why prescribing the same sequence, again with the "S", as SMIA was suggested for hyper- as well as hypofunction of the thyroid.(54) The "I" in this sequence points to the I-organization's guiding power, the "A" is the sound belonging to copper quality and can address astral activity. "Repeated practice with the "A"" causes the upper light aspect of the soul to be taken hold of and given strength in I-quality. This strength flows through the organic part of the astral body. ..."(55)

Inner work

Powers of soul which restlessly push for conscious awareness in hyperthyroid patients call for form and configuration to be given by the individual character. It will, of course, at first be mainly necessary to use medical treatment to get the I-organization to be sufficiently active. This can then be effectively supported by eurythmy therapy, where practising consonants takes up the form-giving principle, analogous to the crystalline chalcosine. It is beyond doubt that such an illness ask for inner work to be done by the patient, so that individual nature may be the charioteer who masters the dynamics of horses gone out of control. At the inmost level, wholly within the individual's own activity, we then see for the third time the need for a guiding, configuring principle. Individual nature must hold its own within the heightened dynamics of the psyche. This also relates to the biography and events in life which the individual was unable to work through so that they would have a shock-like effect. Patients with Graves' disease show an increased incidence of life crises prior to onset, and in a comprehensive approach to treatment, these need to be inwardly worked through. The same applies to the prognosis and frequency of recurrences with this disease.

When the inner life has grown progressively more apathetic, lacking drive, with hypothyroidism, it is also necessary to rediscover the inner tasks and encourage the patient to take an active part in the recovery process. Thus the warmth and will power of the individual flow into a psyche in danger of growing rigid.

Thyroid disorders reveal areas of inner work where the patient should become active. New abilities may develop as the inner fruit of the illness. The eight exercises given below are not placed at random but form a whole. They let abilities arise which come together to form a kind of organ. The spiritual-scientific view is that this is located near the larynx. It is also called the 16-petalled lotus flower.

Another organism of exercises, the "six accessory qualities" or "accessory exercises", create an organ which may develop from the "germ layers" of thinking, feeling and will. Rudolf Steiner characterized this as the 12-petalled lotus flower near the heart organization. Apart from its significance for every individual's inner development, it can provide healing powers for a morbid heart organization. Healing and development on the road to inner insight are closely connected here, for the more profound aim with any recovery process is not to repair a faulty function but for the human being to develop new abilities.

In a similar way, developing the eight qualities belonging to the 16-petalled lotus flower (56) can be the inner work to be done by someone with a thyroid disorder. It should be possible to find these inner tasks in anthroposophical psychotherapy. Here the eight exercises belonging to this immaterial organ may gain specific significance in bringing healing for someone with thyroid disease (*Table 2*).

The first exercise refers to cultivation of the life of thought and ideas (*I in Table 2*). The thoughts of the hyperthyroid individual, often hectic and restless, need its guidance if they are to be a "true mirror of the outside world". A first step in development, often immediately given in many situations involving sickness.

The second exercise already points to training the will, and this is taken up again in many of the exercises which follow

Every act of will which is not to be involuntary, driven as it so often is in hyperthyroid individuals, but guided by the I, calls for a well-thought-out way of doing things. The conscious decision, conscious motivation, is the second goal in development (II in Table 2).

The mode of speech often changes with hyperthyroidism. Instead of talking calmly and thoughtfully one has rapid, hasty communication. The relationship between content and manner of speech has gone awry. The third aim is to "speak rightly". Things which are significant need to be said. The individual spirit's powers of guidance in speaking develop (III in Table 2).

Many thyroid patients act quickly and precipitately and may be out of step with others around them (*IV in Table 2*). Here attention must be taken out of the rush and pressure of everyday activity and directed towards other people.

Finally the fifth exercise (*V in Table 2*) concerning the balance between excessive activity and indolence appears to be a particular challenge. Thoughtfulness must be brought to one's doing.

The sixth exercise (VI in Table 2) is the endeavour not to be a cogwheel in life, without thought, but to know one's tasks and look beyond the everyday level.(57) Activity loaded with stress, often blind to many things and

I II III IV	Reasoned actions	.Conceptual life as true mirror of the outside world .Decide on even the simplest thing only for well-founded reasons .Only words that have meaning and significance to be spoken .Make sure your actions fit in with those of others and events in the
		world around you.
V	Life in balance where work is concerned	.Excessive activity and indolence are equally avoided.
VI	Endeavour	.Not to do anything beyond your powers, nor fail to do anything which is within them. Goals related to a human being's ideals and sublime responsibilities.
VII	Learning from life	.Anything not perfectly done is opportunity for perfection. Gathering a treasure of experience.
VIII	Looking inward	.Developing and testing principles for life. Go through knowledge in your mind, weigh and consider responsibilities, reflecting on the meaning of life.

Table 2. Eight exercises to develop the 16-petalled lotus flower (eightfold path) (Steiner R. Knowledge of the Higher Worlds)

"like a hamster in its wheel", must change. The exercise relates to the "driven" state of some thyroid patients. It is also necessary to be thoughtful in one's doing, not undertaking things that lie outside one's limits of competence, nor neglecting those which lie within them.

This sixth exercise demands a seventh, which is to learn from life (VII in Table 2). This calls for calm thoughtfulness in one's doing, the only way of developing new degrees of perfection. This quality, too, proves a challenge in connection with thyroid disorders.

The last exercise (VIII in Table 2) finally is given characteristic relevance for thyroid disorders. The psyche is too much directed to the outside. Exophthalmos is like a physical illustration of an inner orientation which is directed too much to the outside. The eighth exercise calls for a reversal of this—the individual must look inward and examine his principles, responsibilities and goals.

No thyroid patient will show all these specific characteristics, some actually have none. Patients who have had the disease for some time may already have gained new qualities. With every patient one meets, it is therefore important to consider the individual configuration of the disease and work with the patient to establish the tasks which are set by considering the given biographical and destiny situation. Talking to patients about the exercises we must not forget that they are being asked to develop abilities which everyone needs to develop, but that their illness does so in particularly definite terms.

Meditation

With some patients, the question of meditation comes up. Here a fundamental distinction must be made between abstract, comparatively intellectual development of the mind, and meditation as an activity. The former metamorphoses vital energies into powers of mind, thus opposing rather than helping the healing principle. Meditation does not lead to destructive processes, for one begins to develop a spiritual activity which separates from the bodily instrument. We are in no way referring to "meditative" practice supported by listening to cassettes. It is an inner spiritual activity developed by the individual, with external stimuli deliberately excluded. The development of the eight exercises and hence a hygienic development of the psyche may be considered to be a healing impulse for thyroid disorders. Meditation can support the supersensible organ which develops in the process.

The thyroid has a special relationship to the human ability to speak. No other organ is filled in the same way with sound development and speech. In speech, a further quality is added to the conceptual and idea-related element of thinking. When different words are used for one and the same concept in different languages (e.g. "head", "Kopf", "téte", "caput") it is evident that in addition to the translatable meaning there is also an emotive element which is difficult to translate. You feel something different with "Kopf", "téte" or "caput". "Speech and language are produced when we fully imbue our thoughts with inner feeling, inner sentience."(58) With meditation, the quality has to be found which links thoughts with feeling, sentience, without losing clarity. "To give thinking warmth as well as clarity" (59) may be considered to characterize this. When an idea becomes ideal, this warmth, this fire added to the idea-content, and indeed born out of it, can clearly be experienced.

Rudolf gave the example of a meditation ("Wisdom lives in the light") to describe a first stage where the sentence is wholly taken into active thinking. This element of light in meditation can be linked to feeling. Warmth is added to light. As it continues, the meditation can be taken into inner activity of the will in thinking as the individual feels his own inner nature to be connected with the radiant power of light. These three stages have an influence on the immaterial human being. The development of the 16-petalled lotus flower is connected with the second. "Someone who through meditation has developed thoughts that are filled with feelings will thanks to this power which he has developed, which otherwise would have been speech, become aware of the "16-petalled lotus flower" in the region of the larynx."(60) Here a power which is otherwise active in speech relates to the power which corresponds to it in active meditation.

The path to higher insight has an inner connection with healing. If patients ask about it, these and other aspects may come into the conversation with the physician.

We thus have an approach at many levels, including physical intervention if indicated, medication, eurythmy and art therapy and also the question of one's inner tasks. It can yield a significant fruit of the illness, an important step in the individual's human development. The shadow side of the illness begins to let its light-filled side emerge.

Matthias Girke, MD Havelhöhe Community Hospital Kladower Damm 221 D-14089 Berlin

Literatur

- 1 Norrelund H, Hove KY, Brems-Dalgaard E, Grethe Jurik A, Nielsen LP, Nielsen S, Lunde Jorgensen JO, Weeke J, Moller N. Muscle mass and function in thyrotoxic patients before and during treatment. Clin Endocrinol 1999; 51 (6): 693-699
- 2 Vestergaard P, Mosekilde L. Hyperthyroidism, bone mineral, and fracture risk – a meta-analysis. Thyroid 2003; 13: 585-593
- 3 Adams RD, DeLong GR. The neuromuscular system and brain (Hyperthyreosis). 885 – 894. In: Ingbar S.H., Braverman L.E.: Werner's The Thyroid. J.B.Lippincott Company Philadelphia 1986
- 4 Volpé R. Pathogenesis of autoimmune thyroid diesease; 747 767. In: Ingbar S. H. Bravermann L.E.: Werner's The Thyroid. J.B. Lippincott Company Philadelphia 1986
- 5 Hashimoto H. Zur Kenntnis der lymphomatösen Veränderung der Schilddrüse (Struma lymphomatosa). Arch Klin Chir 1912; 97: 219ff
- 6 Tamai H, Kasagi K, Takaichi Y et al. Development of spontaneous hypothyroidism in patients with Graves' disease treated with anti thyrroidal drugs: clinical, immunological, and histological findings in 26 patients. J Clin Endocrinol Metab 1989; 69:49;
- 7 Oertel JE, LiVosi VA. Pathology of thyroid gland. 651-686. In: Ingbar S. H. ,Bravermann L.E.: Werner's The Thyroid. J.B. Lippincott Company Philadelphia 1986
- 8 Volpé R. Pathogenesis of autoimmune thyroid disease; 747 767. In: Ingbar S. H. Bravermann L.E.: Werner's The Thyroid. J.B. Lippincott Company Philadelphia 1986
- **9** Ibido.
- 10 Takasu N, Yamada T, Sato A et al. Graves' disease following hypothyreoidism due to hashimoto's disease: studies of eight cases. Clin Endocrinol 1990; 33: 687ff
- 11 Oertel JE, LiVolsi VA. Pathology of thyroid gland, 651 686. In: Ingbar S. H., Bravermann, L.E.: Werner's The Thyroid. J.B. Lippincott Company Philadelphia 1986
 12 Gärtner R. Entzündliche Schilddrüsenerkrankungen. Internist 2002;43:635-653

- 13 Cakir M, Samanci N, Balci MK. Musculoskeletal manifestations in patients with thyroid disease. Clin Endocrinol (Oxf) 2003; 59 (2):162-167
- 14 Elta GH, Sepersky RA, Goldberg MJ. Increased incidence of hypothyroidism in primary biliary cirrhosis. Dig Dis Sci 1983; 28: 971ff
- 15 Volpé R. Pathogenesis of autoimmune thyroid disease. 747-767. In: Ingbar SH, Bravermann LE. Werner's The Thyroid. JB. Lippincott Company Philadelphia 1986
- **16** Counsell CE, Taha A, Ruddel WS. Coeliac disease and autoimmune thyroid disease. Gut 1994; 35:844ff
- 17 Centanni M, Marignani M, Gargano L et al. Atrophic body gastritis in patients with autoimmune thyroid disease. An underdiagnosed association. Arch Intern Med 1999; 159:1726ff
- 18 Taddei S, Caraccio N, Virdis A, Dardano A, Versari D, Ghiadoni L, Salvetti AE, Ferrannini A, Monzani F. Impaired endothelium-dependent vasodilatation in subclinical hypothroidism: beneficial effect of levothyroxine therapy. J Endocrinol Metab 2003 Aug; 88(8): 3731-3737
- 19 Brenta G., Mutti LA, Schnittmann M., Fretes O, Perrone A., Matute ML. Assessment of left ventricular diastolic function by radionuclide ventriculography at rest and exercise in subclinical hypothyroidism, and its response to L-thyroxine therapy.

 Am J Cardiol 2003; 91:1327-1330

 20 Hak AE, Pols HAP, Visser TJ,
- 20 Hak AE, Pols HAP, Visser TJ, Drexhage HA, Hofman A, Witteman, JCM. Subclinical Hypothyreoidism is an independent risc factor for atherosklerosis and myocardial infarction in elderly women. Ann Intern Med 2000;
- 21 Cantürk Z, Cetinarslan B, Tarkun I, Cantürk NZ, Özden M, Duman C. Hemostatic system as a risk factor for cardiovascular disease in woman with subclinical hypothyreoidism. Thyroid 2003. 13: 971-977
- 22 Zettinig G, Asenbaum S, Fueger BJ, Hofmann A, Diemlimg M, Mittleboeck M, Dudczak R. Increased prevalance of subclinical brain perfusion abnormalities in patients with autoimmune thyroiditis: evidence of hashimoto's encephalitis? Clin Endocrinol 59, 2003: 637ff

27

- 23 Gärtner R. Entzündliche Schilddrüsenerkrankungen. Internist 2002.43:635-653
- 24 Steiner R. Pastoral Medicine. 2nd lecture. Tr. G Hahn. Hudson: Anthroposophic Press 1987.
- 25 Matovinovic J. Thyroid carcinoma-general pathogenesis, 768
- 801. In: Ingbar, S. H. Bravermann, L.E.: Werner's The Thyroid. J.B. Lippincott Company Philadelphia 1986
- 26 Souza SL et al. Impact of previous thyroid autoimmune diseases on prognosis of patients with well-differentiated thyroid cancer. Thyroid 2003; 13: 491-495
- 27 Steiner R. The Healing Process. Lectures of 16 Nov. 1923 & 29 Aug. 1924. Tr. C. E. Creeger. Hudson: Anthroposophic Press
- 28 Steiner R. Rosicrucian Esotericism. Lecture of 10 Apr. 1909. Tr. D. S Osmond. New York: Anthroposophic Press 1978.
- 29 Steiner R. Die Mission der neuen Geistesoffenbarung (GA 127). Lecture of 26 Feb. 1911. Not translated into English.
- 30 Adams RD. The neuromuscular system and brain (Hypothyreosis). In: Ingbar S. H. Bravermann L.E.: Werner's The Thyroid. J.B. Lippincott Company Philadelphia 1986
- 31 Steiner R. As ref. 27. Lecture of 28 Aug. 1924.
- 32 Hak AE, Pols AP, Visser TJ. et al. Subclinical hypothyreoidism is an independant risk factor for atherosklerosis and myocardial infarction in elderly women: the Rotterdam study. 2002. Ann. Intern. Med. 132: 270-278
- 33 Haggerty JJ, Stern RA., Mason GA. et al. Subclinical hypothyroidism: a modifiable riskfactor for depression? Am J.Psychiatry 1993;150: 508-510
- 34 Biondi B, Palmieri EA, Lombardi G, Fazio S. Effects of subclinical thyroid dysfunction on the heart. Ann. Intern. Med. 2002;7:
- 35 Winyard PG, Perret D, Harris G, Blake DR. The role of toxic oxygen species in inflammation with spcial reference to DNA damage. In: Wicher J.T., Evans S.W.: Biochemistry of inflammation. 1992, Kluver Academic Publishers S. 109-129.
- 36 Ibido.
- 37 Ibido. Lectures of 16 Nov. 1923 & 29 Aug. 1924.

- 38 Glas N. Behandlung bei Morbus Basedowii, Hippokrates: Zeitschrift für praktische Heilkunde. Organ für die Einheitsbestrebungen in der Medizin. August 1933; Heft 8: 267-270
- 39 Girke M, Kröz M. Colchicum autumnale in der Therapie der latenten und manifesten Hyperthyreose. Der Merkurstab 2001(54)4:244-249
- 40 Pelikan W. Healing Plants. Page 51. Tr. A. R. Meuss. Spring Valley: Mercury Press 1997.
- 41 Weiss RF. Herbal Medicine. Page 279. Tr. A. R. Meuss. Beaconsfield: Beaconsfield 1988.
- 42 Hegi G. Illustrierte Flora von Mitteleuropa. Band IV. Teil I. Verlag Paul Paray Berlin, Hamburg 1986
- 43 Fukao A. Takamatsu J., Murakami Y., Sakane S., Miyauchi, A., Kuma K., Hayashi S., Hanafusa T. The relationship of psychological factors to the prognosis of hyperthyroidism in antithyroid drug-treated patients with Graves' disease. Clin Endocrinol 2003; 58: 550-555
- 44 Zimmermann M.B., Köhrle J. The Impact of Iron and Selenium Deficiencies on Iodine and Thyroid Metabolism: Biochemistry and Relevance to public Health. Thyroid 2002; 12: 867-878
- 45 Heilmittelangaben Rudolf Steiners. Blatt Arsenicum
- 46 Steiner R. Anthroposophical Spiritual Science and Medical Therapy. Tr. rev. G. F. Karnow.
- Spring Valley: Mercury Press 1991. 47 Vogel H.-H. Beiträge zu einer medizinischen Menschenkunde. Band 1, Teil 1 S. 152 Karl F. Haug Verlag Heidelberg 1984
- 48 Pelikan W. Healing Plants. Page 295. Tr. A. R. Meuss. Spring Valley: Mercury Press 1997.
- 49 Simon L. Ein anthroposophisches Therapiekonzept für entzündlich-rheumatische Erkrankungen. Ergebnisse einer zweijährigen Pilotstudie. Der Merkurstab 2001;54 (3): Sonderheft: Rheumatologie: 60-70

- 50 Sommer M. Potenziertes Kupfer bei Alpträumen von Verstorbenen – Wirksamkeitsbeleg an Einzelfällen. Der Merkurstab 2001; 54 (3):146-152
- 51 Heilmittelangaben Rudolf Steiners. Blatt Asperula odorata
- 52 Steiner R. As ref. 46.
- 53 Kirchner-Bockholt M.: Grundelemente der Heileurythmie. Philosophisch-Anthroposophischer Verlag. Goethenaum. Dornach/Schweiz. 3. Aufl. 1981
- 54 Ibido.
- 55 Ibido.
- **56** Steiner R. Knowledge of the Higher Worlds. Tr. G. Metaxa. London: Rudolf Steiner Press 1963.
- 57 Ibido.
- 58 Steiner R. Self Transformation. Lecture of 1 May 1913. London: Rudolf Steiner Press.
- 59 Steiner R. Calendar of the Soul.
- 60 Steiner R. As ref. 58.

Dietary aspects to the treatment of autoimmune diseases

ROMAN HUBER

Translation of "Diätetische Aspekte in der Behandlung von Autoimmunerkrankungen" by Roman Huber. Der Merkurstab 2004; 57/5:366-9. English by A. R. Meuss, FCIL, MTA.

■ Summary

From the viewpoint of anthroposophy, qualitative aspects as the kind of cultivation and the content of etheric forces play a major role in nutrition. Etheric forces can be separated according to their relation to life, sound, light and warmth. Because these etheric forces act also in the human being and can there be stimulated from forces in food, the rationale for a differentiated dietary intervention is given. Patients with autoimmune diseases often have reduced etheric forces. In clinical studies, food containing high amounts of polyunsaturated fatty acids and stimulates etheric forces related to the warmth from the viewpoint of anthroposophy, seems to have positive effects in some autoimmune diseases. Food from animals, which particularly stimulates etheric forces related to life can however aggravate the inflammatory activity in patients with e.g. rheumatoid arthritis. The nutrition of patients with autoimmune diseases should be adjusted to the nutritional performance and constitutional factors.

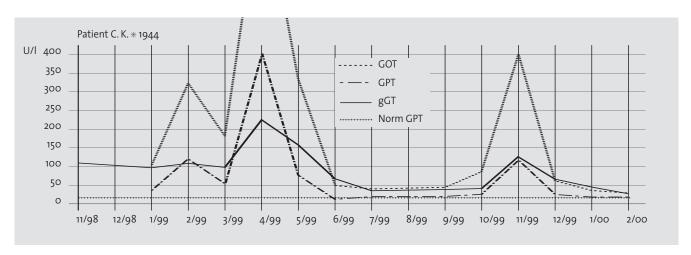
■ Keywords

Etheric forces Vegetables Meat Constitution

ith autoimmune diseases (AI), the immune system reacts to and attacks the body's own structures as if they were foreign. These are acquired disorders manifesting in the course of life. It is not uncommon for them to develop after or during infectious diseases, e.g. as post streptococcal glomerulonephritis or post infectious thrombopenia, panarteritis nodosa with chronic hepatitis B, etc. Quite different drugs (oestrogens, methotrexate, penicillamine, etc.) and radioactive radiation may also cause AI or a condition similar to AI, e.g. pneumonitis following prophylactic irradiation of breast cancer. Apart from such influences on the physical body, the history of patients with AI frequently includes psychic shocks and difficult events in life which the patients themselves also consider to be factors in the genesis of the condition. One woman who had been in good health until her 25th year told how she had become mentally completely dependent on a religious sect. The strict rules and celibacy went against her feelings and a need she felt for love and partnership. Lacking the strength to evade the moral pressure exerted by her teacher she felt her life to be determined from outside and ultimately could see no way out. Then she fell in love again. At that time she noticed that her fingers had turned white and her abdomen brown and hard. It was the onset of severe scleroderma. She died of this seven years later although all possible therapeutic means had been used.

With many AI patients no direct connection with external or inner situations is, of course, discernible. In spite of this, the "trauma hypothesis" can be helpful in understanding AI from the anthroposophical point of view.

A common aspect of physical and mental traumata is that powers of soul directed towards the body can no longer effect integration. These powers, normally providing for a healthy measure of degradation in the organism, can no longer maintain themselves in the physical body and come free in a way. They then address themselves to the structures that have grown foreign and so set the AI process in motion. In addition, the physical and etheric body is no longer properly penetrated and therefore more open to foreign antigens and forces. In conventional medicine, the current view also is that with some AIs such as reactive arthritis, sacroiliitis and the ar-



thritis which accompanies inflammatory intestinal diseases, foreign antigens penetrating from the intestine are an important factor in the pathogenesis. The anthroposophical view is that these "foreign etheric" forces help to maintain the Al.

Psychosomatics and therefore the significance of mental conflict and powers is given recognition in modern medicine. "Powers" or "forces" are not, however, considered for the sphere of vital processes. Measurable and weighable matter is all that counts. Foods are therefore primarily thought of in quantitative terms, referring to their calorie content and composition of carbohydrates, proteins, fats, vitamins and trace elements. Additional criteria are, on the other hand, used in anthroposophical medicine (AM). Apart from taste, tolerance and method of preparation, it is provenance, etheric quality, farming method and the difference between vegetable and animal-based diets which play an important role. The etheric qualities of foods are overcome in the digestive process. Complete degradation alone ensures healthy anabolism, a guarantee that no foreign etheric forces enter into the organism itself. Human etheric powers are stimulated and not replaced by the etheric forces of foods.(1)

Rudolf Steiner identified four types of ether—life ether, sound ether, light ether and warmth ether. (2) These are active in different ways in different foods. Their existence cannot be demonstrated in the usual way, but it is accessible to the intensive concentration on the object under observation which is part of the pertinent inner training.(3) Thus it appears that the life ether is powerfully active in potato. Being a tuber, it relates to the elements of earth and water. There it produces a high concentration of uniform, coarse, embedded starch grains, which provide much energy. It does not have a particular relationship to light and warmth. With lettuces and vegetables on the other hand, the sound of crispness immediately tells us if they are fresh, how fresh they are, and their inner consistency. Sounds sometimes tell us more about the inner state of things than the eye does, e.g. if there is a hairline crack in a bowl. Here the relationship to sound ether can become an inner image. Cereal plants produce radiant structures and one

can sense a connection with powers of light, especially in the case of oats and barley which seem to effervesce in the light. It is interesting that they are the cereals with the highest silica content, a compound which also has a marked relationship to light. A special relationship to warmth is found in plants which produce volatile or fatty oils, especially unsaturated oils such as olive, linseed and walnut oil. There are, of course, also all kinds of mixtures. No food would have just one type of ether activity.

In the view taken in AM, the four ethers are in correspondence with the human being's ether powers. A person may show "emptiness" or "fullness", appear "dry" or "overflowing", thus revealing something abut his vitality. In AM, and also in other medical systems such as traditional Chinese medicine (TCM), treatment is based on such impressions, which we may consider to be reflections of the life ether. Pointers to the nature of the sound ether are gained from the sound of speech, for instance, from the inner "tuning" and an impression of inner harmony or disharmony. Light ether quality is evident from a person's "aura", his luminosity or also an eye from which the light has gone, as well as the symptoms of hunger for light or avoidance of it. The warmth ether is evident in the relationship to warmth and cold, the temperature of hands and feet, and also in a warm-hearted nature. This is just a brief indication that with suitable practice, it is possible to perceive the different ethers in the natural world and also in the human being and use this in planning treatment. The issue has not yet been systematically developed or presented. For AM, this means a specific way of looking at foods from a therapeutic point of view. In this case it is not primarily the clinical diagnosis, however, which points the way but the configuration of ether powers. This may differ greatly among AI patients, which means that there is no standard anthroposophical dietary treatment for AI.

Scientific investigations have shown that with rheumatoid arthritis fasting or a vegetarian diet can definitely improve the symptoms.(4) Personal experience has been that patients with sacroiliitis and others with autoimmune hepatitis responded well to a vegetarian diet, as least for a time. A male patient aged 55 had developed

Fig. 1. Evolution of transaminases GOT (aspartate aminotransferase), GPT (alanine aminotransferase) and gGT (µ-glutamyltransferase) in a 55-year-old male with autoimmune hepatitis. In April 1999, he was on Decortin 50 mg, reducing to 15 mg by Sept. 1999. From Nov. 1999 the patient went on a vegan diet, the dose of Decortin remaining unchanged.

autoimmune hepatitis, probably in connection with intake of a lipid-lowering drug (Fig. 1). Steroids essentially normalized the elevated transaminase levels, but a reduction in dosage resulted in a further rise in transaminase levels. He therefore came to see us. He was evidently stout, a plethora syndrome (overweight, distal extremities very warm, red-faced, etc.), and we advised him to try a vegan diet. This excludes all animal products, including dairy foods. An adequate supply of purely vegetable fats and protein is no problem for adults given proper information. Children and pregnant women should not use this diet, however, as serious deficiencies are possible with it. In this case, transaminase levels returned to normal on a vegan diet, with no changes made in medication. We consider this to indicate efficacy. From the AM point of view, animal foods demand less effort to digest, being more closely related to the human substance, but contain impulses arising from the animal's vital energies and are therefore more likely than vegetable foods to retain their ether forces as a foreign element in the human organism. A vegan diet on the other hand will bind unintegrated destructive psychic powers more in digestion, and this prevents their being active in the inflammatory process. It also stimulates the light and warmth ethers more than an animal-food diet does, which is evident at the substance level in higher vitamin and antoxidant levels, and it contains less foreign ether-

Scientific investigations have shown that a major part of the positive effects of a vegan diet is due to a reduction in arachidonic acid levels, an acid found solely in animal fats.(5) Arachidonic acid does among other things encourage the production of pro-inflammatory eicosanoids (prostaglandins, thromboxan, leucotrines, etc.) which can help to maintain inflammatory Al. It has also been found that multi unsaturated omega-3 and omega-6 fatty acids—from the anthroposophical point of view particularly connected with the warmth ether antagonize the actions of arachidonic acid. This led to the interesting idea of using multi unsaturated acids in the treatment of Al. Apart from a number of vegetable oils which above all contain the omega-3 fatty acid alpha linolenic acid (linseed, walnut and rape oil), therapeutic expectations focus on the omega-3 fatty acids of coldwater fish (salmon, mackerel, herring, tuna). Trials done provide first indications of positive results with rheumatoid arthritis, and also IgA nephritis, for instance.(5, 6) Rheumatoid arthritis is more common in northern latitudes, frequently with aggravation from cold and wet conditions. Light and warmth ameliorate the symptoms, indicating the ether qualities which these patients need. Algae in the cold waters of those regions have a good alpha linolenic acid content which relates very much to the warmth ether and are like a counter agent. Fish feeding on the algae are able to increase the degree of warmth and hence also the number of double bonds in their metabolism, thus producing substances that have therapeutic significance for rheumatic "diseases of coldness".

All in all, therefore, important approaches to treating Al come from the field of nutrition. Treatment should on principle always be based on the given situation. A vegan diet can be continued for some time if a patient with the symptoms of plethora benefits, though unfortunately these symptoms are rare with Al. Patients of this type usually also tolerate a raw-food diet well. Others who are weak, underweight and pale, their vitality reduced, will not usually tolerate raw foods well, and these may indeed be harmful, as they increase the weakness. These patients need hot meals and a diet rich in warmth-etheric quality. They should certainly take dairy produce, fish, and perhaps even meat, as these stimulate the life ether. As with all medicine, it is thus important to be guided by the patient's condition in giving dietary advice—particularly as there are so many dogmas and different beliefs in the field of nutrition—and supporting the needs of the individual patient.

Roman Huber, MD Freiburg University Hospital Natural Medicine Unit Breisacher Str. 60 D-79106 Freiburg

Literatur

- 1 1 Steiner R, Wegman I. Extending Practical Medicine, chapters 9, 10 and 12. Tr. A. R. Meuss. London: Rudolf Steiner Press 1996.
- 2 Anthroposophical Spiritual Science and Medical Therapy, lecture of 12 April 1921. rev. G. Karnow. Spring Valley: Mercury Press 1991.
- 3 SSteiner R. Knowledge of the Higher Worlds or How to Know Higher Worlds.
- 4 Kjeldsen-Kragh J, Haugen M, Borchgrevink CF, Laerum E, Eek M, Mowinkel P, Hovi K, Forre O. Controlled trial of fasting and one-year vegetarian diet in rheumatoid arthritis. Lancet. 1991;338:899-902.
- 5 Adam O, Beringer C, Kless T, Lemmen C, Adam A, Wiseman M, Adam P, Klimmek R, Forth W. Anti-inflammatory effects of a low arachidonic acid diet and fish oil in patients with rheumatoid arthritis. Rheumatol Int. 2003;23(1):27-36.
- 6 Donadio JV Use of fish oil to treat patients with immunoglobulin a nephropathy. Am J Clin Nutr. 2000 71(1 Suppl):373S-5S.