New Method of Treating Multiple Sclerosis
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Case study
Female teacher, born 1963. First episode of multiple sclerosis (MS) in autumn 2003, medical diagnosis in spring 2004, Prednisone treatment, 7 week course. Since then Rebif® 44 injected 3 times per week, numerous side effects. Consequently considered possibilities of naturopathic treatment, initially magnetic field therapy, symptoms began to improve. After switching to energised inhaled air immediate improvement in mobility, patient increasingly felt better, long-term state of health significantly improved with no onset (felt ready to tackle anything). To provide more detail, various symptoms since autumn 2003 which were attributed to MS in 2004 and whose frequency and intensity reduced considerably since beginning Airnergy therapy (sensitivity on lowering the head, tingling in fingertips, no reaction to pinching and pricking in upper abdomen, legs tired easily when climbing stairs, blurred vision, disorders of the bladder/intestines, problems concentrating, permanently tired, mood fluctuations).

From the patient’s subjective viewpoint, while inhaling energised air she felt so tired she could fall asleep; afterwards she felt increasingly fit, resilient, capable and focused. Objectively she continued to find climbing stairs just as difficult, however her symptoms reduced markedly. Following years of therapy with energised inhaled air she concluded that her condition was not cured but that, from a subjective viewpoint, her symptoms had been alleviated significantly on an on-going basis so that she was able to pursue her career. A follow-up examination in November 2005 did indeed reveal minor non-specific biparietal occipital changes to the white matter although these had regressed since 2003 and no pathological disorder of the blood-brain barrier. The findings had not deteriorated in 2007 either in that slack vaguely defined signal increases could still be identified biparietal-occipitally. These were characterised as non-specific and not morphologically typical of MS and there was no indication of rapid advance of the process.

Definition
Multiple sclerosis (MS), also known as encephalomyelitis disseminata, chronic disseminated encephalomyelitis, demyelinating encephalomyelitis, poly sclerosis, sclerosis multiplex and Charcot’s disease. Primarily independent and organotypic inflammatory disease of the white matter of the brain and of the spinal cord with disseminated multilocular topography and varying dynamics due to exogenously (virally) induced and endogenous auto-antigen neuroimmunological processes resulting in selective demyelination. Perivascular and periventricular lympho-plasmacytic infiltrates are apparent morphologically. As the disease progresses, membranolytic processes occur due to the action of lysosomal enzymes with localised discontinuous demyelination and subsequent glia cell proliferation. This leads to multiple and varying neurological symptoms where remissions and exacerbations are both possible and common.

Statistics
Most common neurological disease among young fair-skinned people, especially between the ages of 20 and 40, rare in the under 10s and over 50s. Women are affected more often than men; the ratio is between around 1.2 and 2.0 to 1. Family clusters can be seen in up to 12 percent of cases. Incidence decreases from north to south, in Germany around 50, in Japan/Africa/ South America some 4 cases per 100,000 inhabitants. Likely association with certain HLA allotypes. Symptoms aggravated by poor lifestyle, especially through stress.

Aetiology and pathogenesis
The aetiopathogenesis has not been conclusively explained. In recent years the view has generally been taken that a combination of different factors is present. Genetic immunological factors seem to play a definite part especially human leukocyte antigens (HLA system), a complex codominant hereditary antigen system in humans whose components take effect as histocompatibility antigens of differing strength. Increased occurrence of individual HLA antigens...
has been detected with certain diseases, such as Bechterew's disease, adrenogenital syndrome and MS.
Moreover exogenous induction through viruses is under discussion indicated by the persistence of abnormal paramyxoviruses and lymphotropic retroviruses where viral activation and its expression trigger a secondary immune response.
Ultimately an endogenous autoimmunological process has also been considered since there is evidence of antigen release and typical cellular immune response and antibody abnormality. According to the currently most widely held view, genetic determination together with acquired cell membrane abnormalities could upset immune regulation especially in the face of a so-called slow virus infection with subsequent auto immune response which could take effect as impaired immune tolerance and by sensitising against the body’s own basic myelin protein. Defects in suppressor T cell activity and mediators and antibodies penetrating the blood-brain barrier would be the inevitable consequence and the actual cause of the subsequent symptoms.
The anatomical manifestation of MS relates to disseminated perivascular inflammatory foci and demyelinated patches with destruction of the oligodendroglia, an important component of the neuroglia of the central nervous system which, in the central grey matter, has direct contact with the nerve cells and, in the white matter, forms myelin and builds up the myelin sheath. MS tends to affect the lateral and posterior white column of the spinal cord, the optic nerve and periventricular areas, also tracts of the midbrain and parts of the pons and cerebellum. The cell bodies themselves and also the axons are still intact, at least at the start. Later the axons are affected by the pathological process, a fibrous gliosis giving them a sclerotic appearance, resulting in dysfunction of the central nervous system.

Clinical features
Clinically MS is characterised by multilocular changing symptoms which vary widely and whose severity depends on the number and location of the foci. Typical forms are, on the one hand, the episodic remittent and, on the other, the chronic protracted form. These are all indications that the central nervous system is starting to be affected and it may be months or even years before the condition is finally diagnosed. The syndrome generally progresses and ends with spastic para- or tetraplegia with the primarily chronic protracted and, especially the malignant form, delivering the far less favourable prognosis. Life expectancy is not generally affected except in extremely severe cases.

Certain symptoms generally dominate:

Retrobulbar neuritis
Occurs in around 40 percent of all MS cases. Those affected complain of increased sensitivity to light, painful eye movements and impaired vision or even sudden blindness in one eye which, in the initial stages of MS, generally disappears of its own accord within 2 to 3 weeks. As a consequence of increasing demyelination, papilloedema with accompanying impaired vision may develop in the later stages. Central or paracentral scotoma can also appear as well as double vision as part of transient ophthalmoplegia. As the condition progresses optic atrophy is also possible with temporal pallor.

Brain stem affection
Possible even in the early stages. Subjective reports of double vision, dizziness and nystagmus in 20 to 40 percent of all cases. Trigeminal neuralgia and peripheral facial weakness are also possible.

Internuclear ophthalmoplegia
Classic sign of multiple sclerosis. Paralysed adduction of one or both eyes when looking sidewards is noticed with accompanying nystagmus of the abducting eye. When then looking left, for example, the right eye is left behind.

Involvement of the posterior white column
Complete loss of sensitivity is certainly rare, paraesthesia and dyasiaesthesia can however often be identified in the early stages of MS. When bending the head, an electric shock feeling or a shooting pain can suddenly be felt right along the back and arms (l’Hermitte’s sign). Sense of vibration and of position is impaired. Standing posture with the eyes closed is very unsteady (Romberg's sign). Pyramidal tract lesion: this is the reason for rapid tiredness, muscular stiffness, weakness and
increased muscle tone in conjunction with generally simultaneous increased proprioceptive muscle reflex (e.g. PSR). Brief jerky twitching of individual muscles appears with no or minimal actual movement. When the soles of the feet are stimulated, the big toe moves pathologically upwards towards the knee (Babinski’s reflex).

Cerebellar symptoms
Cerebellar symptoms are present in about 50 percent of all MS cases although rarely in the early stages. Impaired balance, intension tremor generally increasing with target movements (often in conjunction with nystagmus and syllabising: Charcot’s triad), dysarthria and staggering with a tendency to fall are typical indications. Movements become staggering, irregular, tremulous and ineffectual. The gait becomes stiff and unbalanced. Impairment is generally progressive and usually leads to severe disability through a combination of spasticity and cerebral ataxia.

Mental symptoms
These occur in many MS patients and are usually characteristic of the later stages. Apathy, loss of critical ability and lack of attention may occur. Emotional instability such as sudden crying and forced laughter is observed relatively frequently. Convulsions, mania and dementia occur in rare cases. Syllabising is typical of later stages.

Indications of the involvement of the autonomous nervous system
If the spinal column is involved, an urge to urinate, difficulties in passing urine, urinary retention and even incontinence as well as constipation can be expected, in addition to impaired erection in men and genital synaesthesia in women.

Particularly with the episodic remittent form of MS but also at the onset of the chronic protracted form, heat, overtiredness, tension and infections sometimes trigger double vision, synaesthesia and impaired vision, which cannot be regarded as true episodes yet tend to take place through delayed nerve conduction in previously damaged partially demyelinated nerve tracts. These symptoms are apparently highly responsive to treatment.

General treatment
It is true in principle that multiple sclerosis cannot be cured. There is currently no effective or causal treatment. The course is usually inconsistent, unpredictable, yet in most cases remittent. Life expectancy is not generally affected. Initially there may be months and up to 10 years between individual episodes. With time, however, the clear intervals become shorter until a state of progressive permanent invalidity is reached. It is difficult to assess how successful treatment has been due to the possibility of spontaneous remission and fluctuating symptoms. Glucocorticoids are often used to cut short an acute episode and this does indeed reduce the inflammation, swelling and any pain from the acute episode yet does virtually nothing to prevent future episodes and demyelination. Administration of immune-modulating beta interferon as well as azathiprine, an immune-suppressive anti-inflammatory drug, apparently affects the number and severity of the episodes. This is used as long-term treatment and with episodic forms in the hope of delaying invalidity. Cyclophosphamide, a cytostatic agent, has proved more effective with chronic progressive forms where deterioration is rapid.

Some frequently occurring symptoms can be treated symptomatically such as muscle spasms (relaxants), incontinence (bladder treatment drugs), and mobility (physiotherapy and possibly occupational therapy).

Recommended self-help measures include avoiding physical and mental stress as well as high temperatures where the patient is known to be sensitive to heat. Instead regular physical exercise is indicated in sessions which are appropriate for the individual without causing excessive strain. Cryotherapy sometimes brings relief. From a naturopathic viewpoint, a diet consisting of fresh natural, mainly lacto-ovo-vegetarian foods is recommended, avoiding coffee, tea and nicotine as well as sugar, salt, alcohol and white flour, other than in small quantities.

The use of hippotherapy has produced positive results. Naturopathic methods are used by many therapists to treat a number of MS symptoms often with astonishing results. These include acupuncture (to relieve symptoms and slow down the progress of the disease), homeopathy (Agarius muscarius, Alumna, Conium, Manganum aceticum, Secale
cornutum), manual medicine (to eliminate muscular and vertebral dysfunction, to improve microcirculation), Ordnungstherapie [lifestyle/regulative therapy] (to overcome the problem of auto-aggression), orthomolecular medicine (Omega 3 fatty acids, antioxidants, vitamin B, Mg), neural therapy (to remove interference fields), physical therapy (to restore best possible function, activation, gait training, to learn to live independently), electrotherapy and massage (relief from tension, relaxation, analgesics), balneotherapy and climatotherapy (open air rest cure avoiding direct sunlight) as well as certain environmental medical measures (cleansing and/or removal of amalgam fillings).

How energised inhaled air operates with multiple sclerosis

The patient puts it in a nutshell in the introductory case study: as with the various previous therapies, her condition was not cured by the administration of energised inhaled air yet subjectively it had brought significant relief to her symptoms (in contrast to all earlier therapies) so that she was able to pursue her career fully.

What caused this subjective improvement?

To answer this firstly the development of the objective clinical picture of multiple sclerosis and its accompanying subjective feelings of ill health must be explained and secondly the mode of action of energised inhaled air must be analysed as far as this is possible given the current state of knowledge.

MS and accompanying subjective feelings of ill health

Multiple sclerosis is a disease of the nervous system. It primarily affects the white matter of the brain and the spinal cord (pyramidal tract, posterior white column, cranial nerves, brain stem and cerebellum) with initially inflammation and then demyelination appearing from a histological viewpoint. Damage in the area of the spinal cord causes tingling, numbness, myasthenia, spasticity, paralysis and incontinence. Damage to the white matter can provoke tiredness, dizziness, awkward movements, myasthenia, slurred speech, blurred vision, numbness, general weakness and trigeminal neuralgia. Possible theories for the development of MS relate to genetic factors, viral infections and autoimmune processes. The extent to which inactive molecular oxygen itself or its activated non-radical form (singlet oxygen) as well as its toxic forms (radicals) influence this is not clear from the current literature, and can therefore only hypothetically be assumed to be significant. What is quite comprehensible though is that the circulation of the entire brain is around 50 ml/100g cerebral tissue and per minute and the O2 demand is 3 ml/100g/min. Glucose serves almost exclusively as substrate for cerebral metabolism although the cells and their appendices consist predominantly of lipoprotein. The metabolic and circulatory figures for the individual cerebral structures vary considerably, depending upon their particular functional duties and state of activity. Circulation must be adapted to changing demand for the purposes of fully functioning regulation. Control centres and collection points for the different incoming and efferent pathways have a higher metabolism and are more sensitive to injury. This also includes primarily the areas of the midbrain, cerebellum and brain stem with large metabolically active cells.

Airnergy’s mode of action

The body’s cells all rely on a constant supply of oxygen. This also applies especially to the brain cells which need oxygen to produce energy to maintain and control all the vital functions which are, without exception, regulated by the central nervous system.

It is important to have the right amount of oxygen at the right time and at the right place. It is not just the absolute quantity of oxygen supplied which is important but also its distribution and its utilisation. The brain stem plays a particular part in this connection in that the centres for regulating heart rate, blood pressure and breathing as well as for the state of health, sleeping-waking rhythm and many other vegetative functions are located here. These are also interconnected and consequently influence one another.

The development of energised inhaled air was partly inspired by the discovery that oxygen contained in the inhaled air is present in the relatively inert, non-reactive molecular form and therefore its reactivity (exchange process with tissue) must be increased by short-term activation. With energised inhaled air this takes place through the production of singlet oxygen, a stimulated but non-radicalised form. This active state lasts only fractions of a second. The activated oxygen reverts to its original (normal) state even before the air is inhaled. As a result the energy previously absorbed is released again and given off to the surrounding water through which the inhaled air is directed.

Inhaling atmospheric oxygen also supplies the respiratory tract with energised water due to the inhaled air being saturated with water vapour and this leads to the desired improved oxygen utilisation. Of the many positive effects on the body’s systems brought about by inhaling energised air, four stand out as important for application with MS:

- **activation of the immune system**
- **improvement of circulation**
- **effect on protein synthesis**
These could all influence the pathological process through different modes of action although it should be stressed that other conventional methods should not, as a result, be regarded as unimportant or even unnecessary. Only by the interplay between recognised conventional methods and new, not yet evidence-based, methods of therapy can complex clinical pictures be influenced (if at all), especially if it has not so far been possible to explain conclusively the precise cause of their development. A survey of end users of energised inhaled air revealed an increase in general quality of life in all cases with particular emphasis on energy levels (performance, activity, resilience, motivation), state of health (quality of sleep, mood, breathing, digestion, pain, immune state), regeneration (deepening, acceleration, relaxation, pulse calming) and sensory system (smell, sight, skin, giddiness). Therapists reported improvements in functional disorders (poor performance, sleep disorders, deficient immune defence system, poor vision) as well as improvements in organic diseases (inflammations, disorders of the immune system especially autoimmune diseases and allergies as well as pain).

Even if it has not yet been possible to demonstrate accurately the relevant links, the descriptions of individual cases both from therapists and end users make it appear likely or even very likely that these links exist and therefore at least initial attempts should be made to use energised inhaled air.

Descriptions of individual cases
1. 44 year old woman; increasing numbness from back downwards into left leg with onset of paralysis; inflammation of central nervous system diagnosed in university hospital; improvement following cortisone treatment; 1 year later numbness right half of face; diagnosis: MS; injection treatment; symptoms: insomnia, shivering, depression, anxiety, debility; started treatment with energised inhaled air, immediate improvement, miraculous (able to sleep, better health, more energy, resumed work in own business)

2. M.S., wheelchair, care level 2; since receiving treatment with energised inhaled air no longer on cortisone, bursting with vitality, strength increased considerably, spasticity has declined; previously only able to read with magnifying glass (extremely blurred vision), now with normal reading glasses; no colds now unlike before; lastly under additional strain through acutely sick husband so totally thrown back on own resources; unlike before now able to stand for a few seconds without help; during a 3 week cure at a health resort (with no treatment with energised inhaled air) no further improvement, only after returning home and receiving inhaled air energy therapy again was her health markedly improved, increased strength in arms, sits more upright in wheelchair; totally new awareness of life (first trip to the theatre since outbreak of disease); even coped well with intense summer heat.

3. M.S. confined to a wheelchair; since starting inhaled air energy treatment easier to breathe deeply, gets more air; better quality of life, better health.

4. M.S., golf pro in wheelchair, handicap 0: “more restorative sleep, can concentrate for longer; I don’t feel the impairment through the MS so intensely” (since inhaled air energy therapy); energy levels much greater.

5. 40 year old woman; over 18 month period extreme tiredness, dizziness, increasingly confined to bed, numb and tingling feeling in whole body particularly in mouth, stiff joints and increased pressure on optic nerve; began inhaled air energy therapy (3 x 20 mins daily!), vision instantly improved, general state of health improved, permanent tiredness decreased, sleeps better.

6. 31 year old man, diagnosis by university hospital: episodic form of M.S. with residua and acute episodes (spontaneous double vision, unsteady gait, allergic rhinitis); marked increase in ataxia, finger nose test dysmetric on the right as well as sudden jerky hypometric movements especially when looking to the left; treatment with Avonex not sufficient, high dose cortisone and also Natalizumab recommended, prior to this consistent results for years with inhaled air energy therapy, above all good state of health, high activity level, able to pursue career.