

An Overview of Cold and Hot Applications in Clinical Use

By: Manfred Weckenmann

Original title: Ein Versuch, übergeordnete Gesichtspunkte für kühle und warme therapeutische Außenanwendungen zu gewinnen. Der Merkurstab 1997;50(6):343-346.

DOI: <https://doi.org/10.14271/DMS-17161-DE>

This translation is published with the kind permission of the journal Der Merkurstab.

Author's summary of a talk given at the Scientific Congress at the Goetheanum in June 1997. Partly abridged, partly retaining the lively style in the given situation. I was speaking specifically in relation to anthroposophical medicine and therefore the work of Rudolf Steiner, some of it only mentioned in key words for the sake of brevity. Informed readers will know the works. I have therefore not included them in the references but only marked St(einer). It would go beyond the scope of this paper to explain them to those who are new to the subject. Personal experiences have been marked (*), metaphors are in quotes.

Introduction

Rudolf Steiner frequently referred to external applications. Experiences with external applications used in natural medicine are assessed in relation to the principles of spiritual science. The subject will be limited to packs, compresses, partial baths, showers, etc. There are connections with hygiogenesis. The use of metals has been excluded. The external applications under consideration always have a temperature aspect. Issues of hypo- or hyperthermia are not considered, as these tend to be emergency measures used in cryo- and thermotherapy.

Coolth and warmth principles and their indications

The first distinction noted in the literature (2,5,7,10,11,13)(*) and from personal experience was that, as a rule, one uses acid, salt-like or earthy medicines in a cool medium, here called the coolth principle, and mainly alkaline, sulfurous, oily, acrid substances in a warm medium, here called the warmth principle. Examples are cool, white cheese, damp and cool Oxalis, as opposed to hot oil packs and mustard packs. It is difficult to understand such external medicinal actions through modern scientific thinking. It is customary, but unsatisfactory, to explain them using biochemical concepts such as absorption and elimination since the amount of matter transported is minimal.(6) There remains the principle of sensory perception. If this is accepted, one has to think in terms of an unknown, subconscious, sensory sphere, e.g. sensory impression of Calendula. What would this be?

A second distinction was that the coolth principle, as a rule, is used to treat serous, diffuse, superficial, exanthematous inflammatory changes with and without allergy, e.g. urticaria, acute eczema, erysipelas; (7,10)(*) tendency to develop URT catarrh, with and without hyperreactivity in the interval,(12)(*) and for ergotropic asthenics.(7)(*) Here, we have the transition to sea climate, saline and carbon dioxide therapies.(5,6,12)(*)

The warmth principle is mainly used to treat purulent, more granulomatous, inflammatory processes in the periphery, e.g. whitlow, boils(*); purulent processes in the respiratory tract(*), colics and so on, and degenerative processes in the locomotor system(6,10)(*) At first sight, this seems very heterogeneous. Is there an ordering principle behind it?

A third distinction made with external applications has to do with the duration of the application – more or less without interruption, e.g. white cheese compresses until the inflammation has gone down, or in intermittent series, e.g. daily, every second day, with cool showers and fango packs.(5-7)(*) The

pathology reflects this division insofar as the first is used for acute conditions close to the site of application and the second for chronic processes away from the site of application. Examples for close-to-site of application are erysipelas, coolth principle; boil, warmth principle. Away-from-site of application, as with asthenia, coolth principle; metabolic conditions, warmth principle. The question is, what comes to expression in this?

Uninterrupted use for acute processes close to site of application

Concerning the effect of cold applications, the ability to perceive needs to be restored, replacing the pathologic irritation, e.g. of serous, superficial inflammatory changes. In physiologic terms, this means that protopathic sensation should become epicritical perception again.(5) We also may say that with superficial, serous, exudative, catarrhal inflammation,(1,3,8,9) the inherent form process is "broken", and foreign form enters too deeply, e.g. lesions in the catarrhal mucosa during colds or with the Spring process in the natural world [hayfever (St)], eczematous and urticarial surface changes with the "natural process imposing form".

Physiologically, this is as follows: if coolth is applied to the skin, the skin does not grow cold because the coolth penetrates into the skin (cold temperature transport in the skin is minimal) but because vasoconstriction develops, for instance.(5,6) The body actively cools the periphery down. This is primary imitation of the cooling principle by the organism (own coolness). The coolth principle thus addresses the powers of the peripheral human being in the periphery. These are cooling – configuring – perceptive (St).

Serous inflammation, which is loosening and diffuse, is "structured in coolth" in response to a coldness stimulus by the organism's own cooling process; a cool lemon juice poultice would be an example. The inflammatory process is "slowed down" to the point of sense-organ development (development of an eye (St)) or: acid acts forward from behind (St), i.e. via the nervous system, to give form, or: the astral body is introduced into the ether body again (see hayfever (St)); or: the I is connected with its peripheral supporting structure again and consolidates it (St). Therefore, this is treatment consisting of an imitative, local counter-effect imitating the initial stimulus given by treatment, e.g. active cooling following the application of cold; counter action, own forms v. foreign forms; locally: peripheral stimulus for peripheral disease processes.

Warmth works in an analogous way. Granuloma is a typical inflammation with focal development. (1,3,8,9) It is an organ-like form (organoid) of some duration in a functional sphere that should still be largely flowing by nature - seen in the metabolic process, a premature organ or micro-organ development (St). A different form is imposed, e.g. segregation from the blood circulation by stasis, (migrant) cells settling in the granulation wall, increased density, central necrosis (imitation of gastrointestinal organs) in a connective tissue region which otherwise is more fluid. Local heat is applied in this case, e.g. alkaline substances such as a "soft soap bath"(*).

"Self-digestion" is stimulated by the inherent heat of the primary reaction, with the organism's heat core decentralized. A kind of intermediate digestion is stimulated, i.e. change, movement, will, e.g. fluxion instead of stasis. With this treatment, the organism again imitates, as with a cold stimulus, but this time a warming process triggers the heat stimulus (self-warming) but locally stimulates a counter process to the pathological changes - form is dissolved.

Hot applications for purulent inflammatory changes often meet with objections, as people think that when something is hot and you add more heat you get extreme heat; considering heat equal to inflammation, they think the inflammation will increase. That is not the case. Even Kneipp wrote that

heat limited the inflammatory focus.(7) I can confirm this for the heat of inflammation and natural body heat differ in quality. With heat therapy, blue-red stasis changes to pale red fluxion, with the granulomatous process dissolving. I would like to see the tendency to apply ice to any inflammation reduced in light of this.

Serial applications to treat chronic processes distant to the site of application

The secondary reaction to the coolth principle is a reactive hyperemia taking the form of contra-regulation. It follows a circadian pattern. During the day, especially in the morning, reactive hyperemia is weak; toward evening and at night it is marked because the warmth organism tends to centralize in the mornings and decentralize at night. In other words, sensitivity to cold stimuli is greatest in the mornings, sensitivity to heat greatest at night.(4,5,6)(*) This is why procedures to induce sweating (sauna) are effective at night, ischemic reactions in the mornings;(5)(*) (St) thus, the stimulus can be kept to a minimum. The physiological warmth pattern becomes excessive in pathologically ergotropic asthenics (and a rise in temperature brings rigors).

Heat has a counter-regulation similar to that of cold. The skin does not grow hot in a site where local heat is applied because heat penetrates but because the organism is decentralizing its own heat. More heat then radiates off, i.e. secondary cooling as a reaction.(5,6) This is why people like hot showers rather than cold when they have grown overheated in endurance sports. This goes to extremes in trophotropic pyknic patients(*) (and when a temperature goes down).

Serial applications of cool or warm material have a polar opposite action. Application is made in the periphery, the effect is in the central, metabolic sphere. This is evident in someone with a metabolic condition who has problems coping with matter, which provides the basis for colics and degenerative changes in the locomotor system. It is always a matter of movement being inhibited.

What kind of metabolic disorder do we have in an asthenic? His metabolism is rapid, e.g. with ingested fluids rapidly eliminated, tendency to run a temperature, stage fright, etc., but the metabolism does not manage trophotropic body building, so the individual is underweight, weak and easily exhausted. Anabolism cannot extend to the form processes. How does this relate to the world?

Coolth is the sense form that enables us to take root in the temperature aspect of the world. Our senses are rooted in the world (St). (The corresponding part of the plant is the root (St).) It roots in the soil; we root in the temperature aspect. Coolth is its sensory sphere. When Steiner spoke of heat he was always referring to both hot and cold temperatures. He said, for instance, that a cold was heat poisoning (in light of the above: poisoning with an aspect of heat). Coolth is the sense form with which we root or are rooted in cosmic heat. What is the situation if we have a pathologically ergotropic asthenic? He seems to me to be poisoned, overcome by the world's coldness. But why? Because his own heat is too centralized; he therefore tends to overheat at the center, develop stage fright, get heated over his work and on movement,(5) but he does not let this go out toward the world. His periphery is cold, "painfully" exposed to sensory impressions. In other words, the heat configuration of an asthenic is not sufficiently embodied as "heat substance, heat energy". This is a disorder of anabolism at heat level.

The following show differentiation. With eczema and catarrh (v.s.), the form principles of heat themselves fail, i.e. the coolth side of self-configuration (heat ether of the upper organization (St)?). These powers are not weak in the asthenic, but they cannot embody properly because insufficient metabolic heat is there to meet them (measurable temperature) – peripheral "heat malnutrition". The slight build is a consequence of this. It is a weakness of the I acting from inside, struggling to gain mastery again in the central fever (St), mastery of all the external stimuli that beset the asthenic.

Ergotropic asthenics like to be warm, but heat does not have healing properties for them, just as coolth does not for trophotropic pyknics who like it cool.

The therapeutic principle is as follows. Asthenics treated with carefully-measured, serial, cold stimuli will increasingly develop an adaptive tolerance to cold, "learning" to decentralize their body heat in response to a cold stimulus.(5) As a result, they respond to a cold stimulus by warming up the periphery and not with "shock-like cold"(*). It is an exercise and must, therefore, be done in series.(5) It is the method used in natural medicine. Thus, we have a therapy based on polar opposition, the aim being reactive warming. The principle is that the patient must never feel chilly or be cold afterward. Kneipp(7) made his cold stimuli more and more subtle, having found that the most important aspect is getting warm again afterward for this indicates a healing process.

The situation appears to be similar with the application of heat, though as far as I know there is not so much experimental evidence. The reactive periods seen with thermal baths do, however, suggest that a principle of polar alteration lies at the back of it.(5,6) The organism normally produces sufficient heat in the metabolism to enable the I to interiorize the will and change it into action in metabolism (St). People with metabolic disorders do, however, have problems with intermediary "digestion": matter lies inactive in it, e.g. as a "parasitic heat focus" (St); (parasitic, meaning not the body's own); fat, not heat and, therefore, cool - the latter because heat is radiated out in a process of decentralization, cooling down centrally, which has been established by thermometry.

During the night, the decrease in body heat reaches a maximum(4,5) physiologically, and especially pathologically, so that if there is pathology, the central organism becomes subject to matter. Hence the problems people with metabolic diseases have during the night, e.g. colic's and arthritic pain at night, better from movement. In my opinion, the treatment goal is to achieve adaptive alteration of the organism with serial heat therapy so that the central body will not cool down so much during the night. Because of the circadian phases, the treatment should be done at night (vs.), but the patient should not develop a sweat. Steiner prescribed the application of heat at night (which is often a problem in hospitals). He also said, however, that adipose subjects should not develop a sweat (in my opinion, because sweating will enhance the warming-up effect).

Such serial treatments are polar by nature - first, because the stimulus is applied in the periphery while the effect is directed at the central (metabolic) human being; second, because they involve a secondary reaction which is the opposite, in local terms, of the primary reaction; and third, because the interval between stimuli is the actual therapeutic principle.

Respiratory tract diseases

Sea climate as a therapeutic principle for the above-mentioned respiratory tract conditions in the catarrhal/allergic subacute/chronic stage points to the coolth principle. Local and polar actions appear to combine, e.g. if one uses saline and lemon packs(*) - "almost locally" to enhance the lung's own form principles (not those of respiration) and "almost polar" in terms of form nutrition coming from the metabolism in accord with ergotropic asthenia (v. pink puffer).

Purulent bronchopneumonia, is often seen in trophotropic pykno-athletic types. Here, the heat principle seems indicated, e.g. oil, volatile oil, or mustard packs and so on.(10)(*) As with the coolth principle, the approach to treatment appears to be "almost local" and "almost polar" - resolution of inflammatory changes that are more granulomatous, chronic and destructuring and stimulation of a metabolism tending to be sluggish (blue bloater).

Crises

Crises must always be expected, certainly with polar serial treatment utilizing the secondary reaction, because reactive periods are set in motion(*). In view of this, aggravation does not mean the wrong treatment has been chosen.(5,13)

Conclusion

The above is meant to encourage individual inventiveness and experience. This is also why I have not given prescriptions. The principle has proved effective for me but has to be checked in each individual case. Questions that remain include:

What is the situation with "derivative" treatment, e.g. mustard foot baths for migraine?

How should one choose the site of application? Should one apply the coolth principle always cranial to dorsal and the heat principle distal to ventral for polar therapy, or the other way round? Which parts of distal extremities are dorsal and which ventral?

To apply cold things to the body, e.g. cool, damp Oxalis compresses (St), initially goes against the grain. Steiner did, however, say somewhere (I have not been able to find the passage again) that all external herbal applications should be from body temperature to cool, otherwise the action of the herbs is destroyed. Only volatile oils (oils - sulphurous?) might be applied warm. It needs the right dosage for cool Oxalis packs on the abdomen. They should have a slightly cooling action that is local and acute, but the patient should never feel chilly;(7) otherwise, the body's own cooling process maybe replaced by foreign cold. Asthenics need serial applications, possibly also to the abdomen, but in such a way that reactive warming occurs.

A personal experience may illustrate this. I tried to take cold showers all through the Winter because of cold extremities. In fact, I did something even "worse" and tried to walk barefoot in the snow to the hospital every day, hoping to retrain my cold feet so that they would be "Eskimo" feet and immediately develop reactive warmth in the cold, more or less like dogs' paws. It did not work. The reason was that I did not take account of something which I have now taken into account this winter. I put my clothes on the central heating body and immediately put on warm clothes after the cold shower. Then it worked well. Kneipp(7) said one should use cold applications but then put the patient to bed once more in the morning (this was something I could not do).

Derivative treatment tends to be seen as a mechanical matter of blood distribution. I do not think so. As stated above, all thermal stimuli address primarily the human heat organization, with the blood taking its lead from this. It will follow warmth and "shy away" from cold. The first is a process of interiorization taking the form of movement, the second one of exteriorization taking the form of stasis (St). The stimulus applied on the outside always encounters the human I, for the action of the I via the warmth organization is in will and metabolism or in sensory perception and form processes. This may indeed be the reason why Steiner considered external applications so important.

Do we now have an answer to the question of the sensory stimulus of Calendula? If treatment is via heat/cold, the medicinal agents added must be in accord with this. This has been found to be so empirically. Earthy, salty, more or less sour principles prove to be "coolth substances", oils, acrid principles, etc. "warmth substances". In the right medium - warmth/cold - added agents can develop their medicinal powers. The medium selects the medicinal powers but always in terms of heat qualities. Because of microcosm-macrocosm correspondence (St), these powers act on the human being via the

polar heat organization - the coolth principle of the externally-applied medicine directly on the neurosensory organization, the heat principle in a polar way on the metabolic organization.

Manfred Weckenmann, MD
Filderklinik
D-70794 Filderstadt
Germany

References

- 1 Buchner F. Allgemeine Pathologic. Munchen: Urban & Schwarzenberg 1950.
- 2 Dinkelacker C et al. (n.d.) Praxisintegrierte Studie zur Darstellung der Fruhwirkungen von Ingwer (*Zingiberis officinalis*) als aussere Anwendung. Manuskriptdruck
- 3 Hecht A. Kreislaufstorungen some Ohre Ursachen, pathogenetische Grundlagen und Morphologie. In Hecht A, Lunzenauer K, Schubert E. Allgemeine Pathologic. Berlin, VEB Verlag Volk und Gesundheit 1977.
- 4 Hildebrandt G. Chronobiologische Aspekte der Physiotherapie. Zschr Physiother 1979; 31:17398.
- 5 Hildebrandt G. Therapeutische Physiologic, Grundlagen der Kurortbehandlung. In Amelung W, Hildebrandt G (Hrsg.) Balneologie und medizinische Klimatologie Bd 1. Berlin: Springer 1985.
- 6 Hildebrandt G. Balneologie. In Amelung W, Hildebrandt G (Hrsg.) Balneologie und medizinische Klimatologie Bd 2. Berlin: Springer 1985.
- 7 Kneipp S. Meine Wasserkur. Munchen: Franz Ehrenfried 1954.
- 8 Kucsko L. Entzundung und Regeneration. In Holzer JH (Hrsg.) Allgemeine Pathologic. Munchen: Urban & Schwarzenberg 1976.
- 9 Lunzenauer K Die Entziindung. In Hecht A, Lunzenauer K, Schubert E. Allgemeine Pathologic. Berlin: VEB Verlag Volk und Gesundheit 1977.
- 10 Thuler M. Wohltuende Wickel. Worb: Maya Thuler 1988.
- 11 Weckenmann M Die aussere Anwendung von Rosmarinol am Beispiel der Thrombophlebitis. Beitr Erw Heilk1978; 31 130-4.
- 12 Weckenmann M. Ein Versuch, ubergeordnete Gesichtspunkte far die Verordnung von Heilbadern zu gewinnen. Beitr Enw Heil 1979; 32: 198-98.
- 13 Weckenmann M, Adam G, Rauch E, Schulenberg A. Verlaufsbeobachtungen wahrend einer Lokalbehandlung ben Patienten mit varicosem Symptomenkomplex. Erfahrungsheilkunde 1987;36:4/201-10.