IMMUNE-TYPES IN RELATION TO A UNIFIED THEORY OF 'CONSTITUTIONAL HEAT' AND PROPOSITION OF A NEW THERMOMETER FOR MEASURING BODY TEMPERATURE

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INTRODUCTION

Consequent on attempts to understand the riddle of the individualistic nature of human response to homoeodrugs, the author (Ramayya, 1968) had provided evidence on the existence of what were termed as eight immune-types in human population. They were determined on the basis of persons' curative response to homoeodrugs against suffering from Cold-I (or rhinitis; see Ramayya, 1972 for his classification of common colds). The immune-types were for convenience named after the drugs curing the Cold-I (Ramayya, 1968 & 1972) Gradually the immune-types could also be determined on the basis of homoeodrugs correcting other colds as Cold-II, III and IV (see Table III). But since in this approach the immune-types of persons could not be established unless one had suffered from an ailment such as one or other of the colds and hence required much time, it has been the endeavour of the author to determine them, if possible, on the basis of some simple obvious colligative features of human body associated with the character of the immune-types, so that the latter, like blood-groups, could be directly recognised in healthy persons which has the potential to lead to straight prescription (without repertorisation) in Homoeopathy as in other medicines.

For this purpose the author initiated recording, among others, of the following features in all persons under his treatment:

(1) Temperature during and after cure,
(2) Preference for sweet and non-sweet taste, and
(3) Modality for posture.

Data on these parameters in hundred persons whose immune-types were being determined as opportunities arose to cure them against colds, were collected. On a careful study they revealed that each of the immune-types was usually associated with the above characters in a particular combination and hence they could be identified directly. In this respect the differences in the temperature regimens of the immune-types were of special value. The present paper is, therefore, intended to expound this new approach to the identification of the immune-types, especially signifying the role of the body temperature, regimens and to discuss the overall implications of the results in relation to homoeopathic as well as other therapeutic systems.

TERMINOLOGY AND ABBREVIATIONS

In this paper the following terms are used in the same sense as defined earlier by the author (Ramayya, 1972). The terms are: Immunogenes, immunogenetic system, immunity, immunity system and immune-type.

Earlier, in all eight immune-types were recognised (Ramayya, 1972), out of which the Calc. sulph-type is now doubtless considered to have been a wrong determination. On the other hand a new one, Ars. alb.-type has been freshly encountered which makes up the immune-types again to eight in number. The eight immune-types thus finally recognised with their names abridged are as follows:

(1) Bryonia (Bryonia alba)
(2) Hepar (Hepar sulph)
(3) Lyco (Lycopodium clavatum)
(4) Natmur (Natrum muriaticum)
(5) Natsulph (Natrum sulphuricum)
(6) Silica (Silicea)
(7) Arsenic (Arsenicum album)
(8) Merc (Mercurius solubilis)

In the text hereafter the abridged names mentioned outside the brackets would only be used. For convenience, the immune-type names depending on the situation, will be employed either for referring to the types themselves or also to the persons possessing them.

The following abbreviations are used in the text where considered necessary.

IT = Immune-type
TPT = Temperature-Posture-Taste
LT = Low temperature
HT = High temperature

As in the past (Ramayya, 1972), the respiratory tract complaints will be referred to as follows:

Cold-I = (Rhinitis)
Cold-II = (Sinusitis)
Cold-III = (Laryngo-pharyngitis)
Cold-IV = (Tracheo-bronchitis)

The four respiratory complaints together would be referred to as mere 'colds'.

MATERIAL AND METHODS

The present data are based on observations made on about 200 persons during a span of about 15 years, but more intently since 1968, when the concept of immune-type was first proposed by the author (Ramayya, 1968). Last year has been especially notable in that the immune-type of several cases, first concluded on TPT characters, could be confirmed by subsequent treatment of their colds with homoeo-drugs. It may be mentioned here that

the TPT characteristics have been assessed several times in some cases and author's family members have been objects of especially repeated observations.

The temperature regimens were recorded (or obtained in the case of distant patients) in sitting position and before any cold or hot edibles or alcohols, analgesics, etc., all of which can alter the body temperature on consumption, had been taken.

The temperature was noted by keeping the thermometer for a minute or more below the tongue in closed mouth or in arm-pit in the case of children (1). The temperature regimens, of each of the immune-type categories (Table I) hold good from late forenoon onwards as, before the latter, they are normally somewhat lesser. Aged persons usually show, as expected (Chatterjee, 1973), half a degree less than the normal regimen.

The treatment in all cases was with centesimal homoeo-drugs. Cases were repertorised following the traditional practice of considering the general and particular symptoms including modalities and sensation. Complementation and where necessary antimiasmatic treatment was undertaken to stabilise the cure. The author largely depended on Boenninghausen (1935) for repertorisation, besides referring to Hering (1971).

OBSERVATIONS

The TPT characters of eight immune-types representing hundred persons are given in Table I. The sensation for ambient temperature as expressed by number of them is also provided in the Table I as this was found to be a fairly good index of their natural temperature regimen. For example, persons with 98.0°F or above, usually express preference for chilly conditions whereas those, especially below 97.6°F, cannot tolerate the cold weather.

The temperature of the immune-types represents their condition in healthy state and this is true of their preference for taste. The posture modality was

TABLE I—IMMUNE-TYPES AND THEIR GENERAL TPT CHARACTERISTICS

S. No.	Immune-types	Temperature regimen		Posture preference	Taste preference	No. of cases determined
		Range	Sensation			
1	Bryonia	96.0°F-97.6°F	Chilly	Lying	Sweet and/or non-sweets	8
2	Hepar	„ „	„	„	„	10
3	Lyco	„ „	„	„	Non-sweet (2)	16
4	Natmur	„ „	„	„	Sweet (2)	1
5	Natsulph	„ „	„	Motion	„ (2)	17
6	Silica	„ „	„	Lying	„	9
7	Arsenic	98.0°F-98.6°F	Warm (4)	Motion	Non-sweet	20
8	Merc	„ „	„	Lying	Sweet	19

assessed obviously during the state of suffering and it was in relation to mostly the symptom of pain of the concerned part.

DISCUSSION

(1) *General*

Though differences in the temperature regimens of healthy persons displayed by clinical thermometer, is a familiar phenomenon, they have not been regarded of any significance and much less in therapeutics in any system of medicine. Further, the notion that 98.6°F is the normal oral temperature has gone so deep into our thinking that variations from this have come to be at best attributed to external stimuli such as exercise, food, temperature, etc. Present author's interest in recording of TPT characters started, as stated earlier, with the objective of determining immune-types, like blood-groups in normal health, since the concept was first presented (Ramayya, 1968). Careful study of the data collected and the repeated nature of observations brought the realisation that the TPT differences between individuals represent their specific characters and they are also generally correlated with their immune-types.

As shown in Table II, 12 of the 100 persons did not show correlation between the IT and one or the other of the TPT characters indicating about 12% disassociation. Among these seven persons were those whose temperature regimen was 96.0°F-97.6°F, but had always expressed their tolerance for chillier conditions and the opposite was observed in three others who had a temperature regimen of 98.0°F-98.6°F, but clearly expressed their intolerance for chillier conditions and hence used heavy coverings. Though not given here, disassociation was also observed in one or two cases between their IT and posture character. These anomalous cases obviously are difficult for direct determination of their immune-type. However, from a genetic viewpoint, the IT-TPT relationship including the deviations in sensation pointed above are understandable.

First it is proposed that IT-TPT characters are gene-regulated. They are also not sex-linked and in 88% are inherited en bloc and hence the con-

TABLE II—CASES SHOWING ABSENCE OF LINKAGE BETWEEN THEIR IT AND ONE OR OTHER TPT CHARACTERS

S. No.	Nature of non-linkage	No. of cases
1.	Immune-types of LT category, but feeling warm	7
2.	Immune-types of HT category, but feeling chilly	3
3.	Immune-types of non-sweet character, but liking sweets	2

cerned genes are situated on one and the same autosome. However, they do not seem in close-fit and hence to the extent of 12% genic cross-over occurs leading to the observed deviations.

Or the anomaly in the subjective sensation of warmth or chill with reference to their temperature regimen in some instances might be due to factors associated with their peripheral circulation, because in a few instances the sensation became corrected in conformity with their temperature regimen in course of treatment.

From the viewpoint of mere temperature regimens the immune-types (Table I) excluding the 12% exceptions, are interesting in that they can be distinguished into two classes; the first six, viz. Bryonia to Silica (Table I) being of lower range varying between 96.6°F-97.6°F, whereas the remaining two, the Arsenic and Merc-type of high range, being 98.0°F-98.6°F. These two are, therefore, designated as LT and HT categories respectively.

Within the six LT immune-types, the Natsulph-type is relatively more tolerant for chilly conditions with a temperature regimen of 97.0°F-97.6°F, whereas all others are less tolerant to chilly weather and usually maintain 97.0°F. If the deviations already discussed are overlooked, a key for the identification of some of the immune-types on the basis of their TPT characteristics is as follows:

Temperature regimen of the LT range (96.0°F-97.6°F)

Prefers sweets; amelioration usually in motion or sitting: Natsulph-type (5)
Prefers sweets; modality for posture uncertain: Silica-type
Prefers sweets as well non-sweets; modality for posture uncertain: Natmur-type, Bryonia-type, Hepar-type
Prefers non-sweets; better on rest: Lyco-type.

Temperature regimen of the HT range (98.0°F-98.6°F)

Prefers non-sweets; better on motion or sitting: Arsenic-type
Prefers sweets; better on rest and lying: Merc-type

It should be stressed that from the key it may appear as if determination of the immune-type is quite easy and it is so indeed in regard to cases unvitiated by crossing-over. But often one tumbles down in the analysis due to disassociation of IT and TPT characters, patient's incapacity to provide suitable answers and to perplexing variations in the temperature regimen due to varied factors. As is equally clear distinction between Natmur; Bryonia; and Hepar-types is also difficult on TPT basis.

(2) Proposition of a unified theory of 'Constitutional Heat' and necessity for a new thermometer

Though temperature regimens constitute an important parameter in the identification of the immune-types (see above), it is obvious that the difference between the LT and HT immune-type categories, being only of about

half a degree, is very narrow and indeed this must have been responsible for non-recognition of its clinical importance.

Among the ancient systems of medicine, in Ayurveda, (and possibly others) however, an analogous concept distinguishing persons into hot (pitta) and chilly (vata and sleshma) conditions is recognised in studying the human body even in healthy state. But the determination of the hot and chilly conditions was done upto Vakbhata times by touching the patient (Kutumbiah, 1969); later it came to be determined by pulse. But so far there has been, however, no attempt made by any ayurvedic physician or institution to establish the veracity of the hot and chilly types on the basis of any scientific device or test. In this context the value of the classification of persons into LT and HT regimen categories already discussed is relevant. In the light of the present evidence the author considers that each person is characterised by a constitutional heat or temperature regimen of his own in healthy state which, as already stated is mainly gene-regulated. This concept for the first time and on a scientific basis unifies the notions prevalent in Ayurveda based on the *Tridosha* theory and the homoeo therapeutic concept of sensation for ambient temperature. In this context it may be pointed out that what ayurvaids generally recognise as a chilly (vata and sleshma) constitution belongs to the LT-regimen whereas the hot (pitta) constitution to the HT-regimen. Thus the simple clinical thermometer can now be made use of also by homoeopaths as well as ayurvaids as a direct tool for determining the constitutional heat levels of persons; this can be further confirmed by the pulse method.

As previously remarked, the LT and HT immune-type categories differ only by half a degree as measured by the present clinical thermometer which is insignificant, often obliterating distinction between them. But this difference is further slashed and to practically nothing in the Celsius scale-based clinical thermometer being introduced by Government of India. In the Celsius scale the present minimum difference between the two categories of the immune-types which is about 0.4°F (98.0°F-97.6°F) becomes reduced to a little over 0.1°C (36.6°C and 36.5°C), which in practice would be of little value. In the light of this it is imperative to have a thermometer that at least doubles the existing difference between the two temperature regimens. Therefore, a new scale is proposed here which divides the temperature difference between the freezing and boiling points of water into 400 degrees starting with zero and ending up in 400. Derived from this the new clinical thermometer will have a range from 140° to 175° and in which the normal temperature regimens for LT and HT categories would be 145.8° and 148.0° respectively corresponding to the present 97.6°F and 98.6°F.

Further particulars of the new and existing (Fahrenheit) clinical thermometers are as below:

	New clinical thermometer	Fahrenheit clinical thermometer
Length	21.5—23 cm (8½"—9")	10—11.5 cm (4"—4½")
Total range	140.0°—175.0°	95.0°—110.6°
LT range	142.3°—145.8°	96.0°— 97.6°
HT range	146.7°—148.0°	98.0°— 98.6°
Minimum difference	0.9° (146.7°—145.8°)	0.4° (98.0°— 97.6°)
Maximum difference	2.2° (148.0°—145.8°)	1.0° (98.6°— 97.6°)

The new thermometer will bear markings at both 145.8° and 148.0° to indicate the maximum of the LT and HT regimens respectively. It will display a minimum difference of nearly, 1.0° between the maximum of LT and minimum of HT regimens thus enabling easier distinction between them unlike in the present thermometer. The new device can obviously be useful for physicians of all systems of medicine.

(3) Some other Implications.

In 1968, when the author first presented evidence for the existence of immune-types in human population, it was observed that this would enable preparation of inventories of homoeopathic remedies against ailments of each of the immune-types. In 1972 this was demonstrated by publishing remedies against certain colds of the immune-types. Since then some of the gaps remaining in the cure of these colds have been completed and hence the up-to-date information is provided in Table III. Due to shortage of space details of the symptoms of the colds including modalities, etc., in relation to each of the immune-types are not being given here. But this clearly confirms the proposition made by the author. One of the implications of this approach is obvious and that is straight prescription, as in other systems of medicine, is now feasible in Homoeopathy though it would take some more period

TABLE III—IMMUNE-TYPES AND REMEDIES OF COLDS

S. No.	Immune-types	Cold I (Rhinitis)	Cold II (Naso-pharyngitis or sinusitis)	Cold III (Pharyngo-laryngitis)	Cold IV (Tracheo-bronchitis)
1	Bryonia	Bryonia	Silica	?	Phosphorus
2	Hepar	Hepar	Sulphur	Merc	Bryonia
3	Lyco	Lyco	Natmur	Calc. carb.	Iodium
4	Natmur	Natmur	?	Iodium	Sepia
5	Natsulph	Natsulph	Lyco	Gelsemium	Calc. carb.
6	Silica	Silica	Calc. carb.	Sulphur ?	Arsenic
7	Arsenic	Arsenic	Hepar	Silica	Sulphur
8	Merc	Merc	Phosphorus	Lyco	Ant. tart. / Hepar.

Note : Complementation and antimiasmatic treatment should be given if found necessary to stabilise the cure

before remedies for a larger number of ailments in the case of each immune-type are established.

Knowledge of the heat regimen of a person in state of health may be significant to physicians in general including the allopaths in dietetics. For instance constant consumption of items like chicken, mango, cashew-nut, garlic, dried ginger, pepper, mustard, high doses of vitamins (including vitamin C) etc., can adversely affect the health of HT persons so that they may eventually suffer from complaints such as nose-bleeding, sunstroke, cracking of soles, and possibly blood-pressure due to rapid hardening of arteries. Hence in the case of HT regimen persons, continuous consumption of items like the above should be discouraged.

The author considers that determination of whether a person belongs to LT or HT has strategic significance. Those belonging to HT category may be more efficient for deploying in low-temperature habitats whereas those of LT category may be appropriate for tropical conditions. In factories also, this may have far reaching implications in posting of workers to different job-works.

Lastly it might be relevant to mention here that the immune-type character could be significant in transplantation surgery as it is a genetic character. If this be established, the importance of immune-type concept needs hardly any emphasis.

SUMMARY

The objective of the present investigation has been to determine the immune-types of persons earlier demonstrated by the author (Ramayya, 1968) on the basis of some simple and easily detectable colligative features of the human body. For this purpose three characters, the temperature regimen, posture modality and taste preference (TPT) were studied in 100 persons of known immune-types. It has been found that 88% showed correlation with the TPT characteristics and therefore a key for identification of the immune-types is presented. The 78% showing deviation between their immune-types and one or other of the TPT characters is considered to result from genetic cross-over.

Like the immune-type, the TPT characters are proposed to be gene-regulated and since they appear en bloc in heredity without sex linkage, the genes concerned are concluded to occur on one and the same autosome.

On the basis of repeated observations made it is proposed that every individual is characterised by a specific temperature regimen. In the light of the fact that besides in Homoeopathy, in Ayurveda and other systems of medicine also an analogous concept of body temperature characteristic of each person is prevalent, a unified theory of constitutional heat or temperature regimen is proposed.

Based on the data collected people are distinguished into two temperature regimen categories:—(i) those with low temperature regimen (LT) and

(ii) others with high temperature regimen (HT).

Of the eight immune-types, six—the Bryonia, Hepar, Lyco, Natmur, Natsulph and Silica fall under LT category whereas the Arsenic and Merc belong to the HT category. In Ayurveda what are recognised as the vata and kapha types belong to the LT category, whereas the pitta type to the HT category.

Since in the clinical thermometer currently in use, the difference observed between the LT and HT regimens is negligible, a wider scale of 400° is proposed. Derived from this a new clinical thermometer with a range of 140°—175° is proposed which could clearly demarcate LT and HT regimens. In this thermometer the LT and HT maxima would be 145.8° and 148.0° respectively both being marked out for convenience. This scale will provide the much desirable, a little over two degrees difference between the two regimens. In the light of the above the recent change-over to Celsius scale in India and elsewhere is considered to be not in the right direction as it obliterates the naturally occurring difference between the constitutional heat or temperature regimen of the LT and HT people. The new thermometer will be useful for physicians of all systems, and its readings can be supplemented by pulse method in accordance with the *'Tridosha'* theory.

Among other implications of the present study, its value is stressed in dietetics, army deployment in relation to climate, allotment of work in factories and lastly in transplantation surgery.

CONCLUSION

The findings presented in this paper are of a radical nature and are against some of the established notions, specially in the modern therapeutics, but as the implications are deeper they need universal affirmation. This is practicable because every home could be considered a laboratory and the TPT characteristics of the members can be ascertained. Apart from the TPT characteristics, it is possible that several other parameters may also show correlation with the immune-types leading to easier recognition of the latter. But the most pressing need is for identification of suitable chemical criteria so that in state of health, immune-types of persons like blood-groups are firmly determinable.

Besides the phenomenon of individualistic nature of human response with which the author has been concerned, homoeo-therapeutics pose several challenges to science, e.g. the problem of repertorisation or drug selection, selective nature of the action of homoeodrugs on immunogenes, nature of pharmacons in succused ultradilutions (see Rawson, 1976), problem of restoring 100% health in chronic derangements, management in multiple health break-downs.

Among the educated, homoeotherapy is generally not well received, but this is largely due to lack of familiarity with it. However, matters are gradu-

ally changing for better with appearance of increasing iatrogenic break-downs stemming from specially the use of antiboitics prescribed even in ordinary health impairments.

Homoeopathy can be looked at as a creative therapeutics not bound by time and space limits. It offers the most elegant tools for regulating immunogenes and hence its value cannot be overlooked even in morrow's synthetic-gene therapy. There is thus a real need for understanding homoeotherapeutics in depth. In this context the efforts made by Government of India, the only country which accords official recognition to Homoeopathy, are greatly appreciable, but these do not touch even a fringe of its exploitable potential.

The author, therefore, would like to draw the attention of Government of India (of specially its R & D Wing, ICMR, CCRIMH and BARC), of Governments of other countries, and of UNESCO and WHO for establishing research centres in a truly big way equipped with modern analytical tools so that the varied areas in homoeotherapy are fully explored. In this effort there is no doubt that techniques from other fields such as molecular biology, immunology, genetics and others are of immense use. The author visualises the time when with better understanding of the ultradilution therapeutics it should be possible not only to protect the health of the individual, but also of the human race from its possible natural decline.

At the end it may be appropriate to invoke here the Vedic prayer: 'From death lead me to immortality', which summates one of man's most ardent desires in life and this paper is dedicated towards realisation of that end.

Editorial comments: (1) Axillary temperature is generally lower than the oral temperature by about one degree Fahrenheit. We are in a little confusion how both of these temperatures could be taken as one of the basic data of this study.

(2) We are in further confusion with respect to the following data which are inconsistent with the facts of materia medica and repertory as well as our experience:

Lyco. has no aversion to sweets rather strong desire for the same.

Nat. mur. has desire for sweet in the third grade, it has rather strong desire for *salt*.

Nat. sulph. is indifferent to sweet or non-sweet.

Arsenic is chilly in general and with respect to all symptoms except some of the head.

These confusions have much devalued the formula so labouriously worked out for us, by the learned author. So we expect some clarification from him.

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