

DISEASE EVOLUTION

TABLE (DET)

The DET table is divided into three main vertical sections: **HEALTH** (left), **DET** (center), and **DISEASE** (right). The DET section is further divided into **Humoral Phases** (top) and **Cellular Phases** (bottom).

- Humoral Phases:** Excretion Phase, Inflammation Phase, Deposition Phase.
- Cellular Phases:** Detoxification Phase, Dedifferentiation Phase.

Organ Systems/Tissue:

- EXTRACELLULAR:** Skin, Subcutaneous Tissue, Musculoskeletal System, Nervous System, Endocrine System, Respiratory System, Digestive System, Urinary System, Genital System.
- ENDODERMAL:** Gastrointestinal Tract, Liver, Pancreas, Biliary System, Kidneys, Bladder, Uterus.
- MUSCULAR:** Skeletal Muscle, Smooth Muscle, Cardiac Muscle.
- CELLULAR:** All Cells.

Status of Regulation: Self Regulation, Self Healing Effects, Irreversible Progression.

Evolution: Progression, Recovery, Regression, Unstable Progression.

2.2 Therapeutic Considerations/Consequences

The DET phase location of the patient's pathological state or clinical diagnosis is, in Homotoxicology, the most important consideration for establishing a correct therapeutic approach. In addition, homotoxicological treatments are based fundamentally on 3 pillars:

- 1st – Drainage & Detoxification
- 2nd – Immunomodulation (Regulation Therapy)
- 3rd – Organ & Cell Support

Thus, the utilization of the 1st or the 1st & 2nd or all 3 pillars will depend essentially upon the DET phase in which the patient's disease is situated.

Now, if we focus our attention on the **Left side** of the DET division, we will realise that the homotoxins are basically still in the extra-cellular compartments, site from which they can exhibit their effects. This means that the homotoxicological intervention at this point may require only the use of the first 2 pillars of treatment, that is:

- 1st – Drainage & Detoxification
- 2nd – Immunomodulation (Regulation Therapy)

Pathological processes that have passed the DET Division and are thus located on the **Right**, have homotoxins that are affecting the cells themselves, either because they have penetrated

into the cells, and/or are negatively influencing the cellular functions from the ECM. Now obviously cells, tissues and organs require external support in order to better deal with the toxins. Homotoxicologically, this is achieved through the addition of the third pillar of the therapeutic regimen:

- 3rd – Organ & Cell Support

Additional Phase Considerations:

By phase, we can state that the following pillars in homotoxicological treatments are to be considered seriously:

- **Excretion phase:** Drainage and Detoxification can accelerate the physiological processes, and reduce the likelihood of recurrences.
- **Inflammation phase:** Immunomodulation is needed. In mild and acute conditions, drainage and detoxification may be optional, but becomes mandatory if recurrences occur.
- **Deposition phase:** Drainage and Detoxification are mandatory. If the Health Recovery process induces a pronounced inflammatory response, than Immunomodulation should ideally be added.
- **Impregnation, Degeneration and Dedifferentiation phases:** These phases require all of our efforts with the 3 pillars of homotoxicological treatments in order to prevent as much as possible further cellular damages, and hopefully stimulate those still active natural healing processes directed to re-establishing physiological functions and relative health, if the intra-cellular damages have not become completely irreversible.

3. Conclusion

The Disease Evolution Table (DET), especially in its latest version, will represent the most practical and useful tool not only in research projects but also in any Homotoxicological Medical Practice, independently of the scope or the specialty.

Uses and applications are numerous, such as:

- Rapid phase identification of patient's pathology
- Identifying the patient's regulation capabilities
- Immediate insights on prognosis
- Guide in formulating therapeutic strategies or protocols
- Assessing the treatment outcomes
- Follow the patient's progress and therapeutic adjustments accordingly. For example, if a patient is being treated, a movement (evolution) is expected from the right lower part of the table to the upper left, or from the phases on the right to those on the left. If the evolution is in a different direction, or there is no evolution (movement) at all, then the treatment must be adjusted.

Rightly so, we dare to state that the DET will become a most appreciated and valuable instrument in your daily medical practice. It will inspire you to interpret therapeutic results in a completely different light and direct you into a more complete biological approach to your patients.

Disease Evolution Table (DET)

Manual

(Brief guide on how to use the DET)

1. Introduction

The Disease Evolution Table (or DET) is a 2-dimension graphic representation of the progression, or regression, of illnesses in 6-Phases in response to how the body's defense system reacts to the presence of homotoxins (exogenous and/or endogenous):

- On the horizontal axis, the phases of diseases in order of severity
- On the vertical axis, the different tissues/organs according to their embryological origin

Theoretically, each presenting clinical condition or disease state can be classified within this 6-Phase DET.

In consulting the DET it is important to bear in mind that in the presence of homotoxins, the body will activate its natural defense mechanisms at 3 major pathophysiological levels or phases (*Humoral, Matrix, Cellular*) in attempts to inactivate/detoxify and eliminate the toxins at each level. Each of these major pathophysiological phases is further sub-divided into 2 other phases. If not successful at the first stage, it will attempt again in the next phase, etc. The illnesses will become more serious and the attempts to treat them increasingly difficult as the phases progress toward the last phases on the right.

2. How to Use the Disease Evolution Table (DET)?

The Disease Evolution Table (DET) is a very useful conceptual and practical means for clinically evaluating and following the natural tendency or evolution of the biological disease processes in the patient. To be able to classify the current status or stage of a patient in such a table, and to be able to follow the patient's clinical history, it is necessary to become familiar in the interpretation of each axis in the DET. Depending upon the location on the DET in which the patient is found, specific antihomotoxic therapeutic strategies will need to be enacted in order to induce positive curative changes.

Therefore, not only does the table indicate the stage and severity of pathological processes, it becomes also the basis for determining or planning what therapeutic approach(es) is/are best needed to accomplish an amelioration of the patient's health status.

2.1 Locating the Patient on the DET: Merging Between Phase and Tissue

Simply finding the point of intersection of the vertical axis (tissues/organs involved) with the horizontal axis (phase of evo-

lution of the pathological process) will immediately indicate the physio-pathological status of the patient at that stage of his disease process evolution. We could also say that in the DET, the horizontal axis represents the ontogenetic way with which the body has learned to deal with homotoxins. On the other hand, the vertical axis would represent the phylogenetic (embryological) classification of a tissue/organ in which homotoxins may have reached. The DET could represent the environmental imprint and indicates the patient's ability to regulate in view of this imprint. More precisely, the first 3 phases (*Excretion, Inflammation, Deposition*) relate to how the body reacts to intoxications and how it could initially deal with them. The 3 last phases (*Impregnation, Degeneration, Dediifferentiation*) relate more to what the intoxication could induce the organism to do.

2.1.1 The Six Phases

The six phases on the Disease Evolution Table are the *Excretion, Inflammation, Deposition, Impregnation, Degeneration* and *Dediifferentiation* phases.

Excretion Phase

The excretion phase covers all the hyper-secretions (endocrine) and hyper-excretions of the body in different organs and tissues. As those secretions and excretions are increased in comparison to the normal standards in the population, they should perhaps be seen as a first stage of disease. Of course the presence of homotoxins is a dormant danger, and elimination and detoxification is needed, but in normal conditions detoxifying organs and excretion systems will eliminate them without any significant clinical signs and symptoms manifesting, as this is merely an amplification of a physiological process.

In this case, although there is a certain charge of intoxication, by the normal way of living, the body almost passively deals with it without really causing any clinical manifestations typical of defensive reactions. Thus, the elimination of toxins goes over as a normal increased excretion process, and the patient has no other clinical complaints at all.

Inflammation Phase

Once homotoxins manage to reach extra-cellular and/or intra-cellular levels, the body will begin to mount some form of a local defence reaction to counter the 'intoxication' status. The appearance of this local 'inflammatory' reaction is the reason for which in acute inflammations the patient is considered to be in an '*inflammation phase*'. Thus, obviously all acute inflammations are classified within this phase.

Important is the fact that we must see this first inflammatory reaction as a welcomed, natural and physiological attempt of the organism to try to do away with the toxins. Furthermore, the activation of phagocytes and phagocytosis should be seen as the first reactive step of detoxification.

All of the classical characteristics of inflammation might be present: *swelling, redness, pain, temperature increase, and loss of function* in the affected tissue.

Inflammation could be seen as a ‘cleaning’ process of the matrix. The cell is not involved yet, although the inflammatory processes can passively damage the cell (e.g. free radicals released by “frustrated or over-zealous” neutrophils).

Deposition Phase

This phase is an expression of the body’s incapacity to eliminate (excrete) homotoxins and in which predominate events within the extra-cellular matrix and regulation disorders. It is reached when the body has to temporarily store (deposit) toxins. This may occur for a number of reasons:

- The inflammatory process (previous phase) was not adequately activated or was blocked/suppressed (e.g. by anti-inflammatory drugs).
- The excretion mechanisms are either hypo-functional or the toxic load excessive.

Therefore, if inflammation pathways are blocked or the amount of homotoxins get out of hand, the organism will choose a process of (temporary) storage or deposition of the homotoxins. Clinically, this phase is a relatively silent process with very few clinical signs and symptoms, but a quite dangerous process. It is only a question of time before the homotoxins will impregnate into the cell or from outside the cell interfere with and have many effects on normal cellular functions.

Impregnation Phase

Once the homotoxins begin to “impregnate” in the ECM or within the cells or have intracellular effects, diseases of the impregnation phases appear. Homotoxins practically become part of the structural components of the connective tissue and the matrix. Some toxins (e.g. viruses) may also directly penetrate cells within the connective tissues and/or cells of the parenchyma. Toxins that will reach this stage will begin to induce functional changes in both the matrix and in cells, such as blocking enzymes, metabolic pathways, compromising mitochondrial respiratory chain, etc. We see less efficient functioning of the cell and the reactions of the organism towards the homotoxins are often not purposeful anymore, and a minimal load of a specific homotoxin produces an overreaction of the organism’s defence mechanisms (asthma, hay fever, migraine, gastric ulcer,...). Histologically, some changes in structural components begin to become evident. Clinically, the appearance of signs and symptoms are indicative of cellular damages.

Impregnation phases can be reached in a very short time span. It depends on the characteristics of the homotoxins.

Most viruses will try to get into a host cell and proliferate rapidly, and although the organism will try to develop a specific defence (Immunoglobulins) and eliminate the infected cells (T-cell activity and NK-cell induced elimination), the acute situation is an impregnation phase due to the intra-cellular presence of the homotoxins (viruses). Even if afterwards there is a full restoration of the tissue and the lost cells are replaced, the viral condition remains an impregnation phase for the time the virus is present, if the virus gets incorporated into the genetic material of the cell host. In post viral syndromes this situation might last for a long time, even for years.

Degeneration Phase

The natural defence system is no longer able to eliminate or excrete toxins from the cells and/or the matrix. Intracellular structures, including genetic components, cellular membranes, groups and systems of cells become increasingly and seriously damaged. In this phase predominate cellular damages. The progressing intoxication causes complete functional loss of the affected cells, till they die. In the long term we see tissue loss and a limited function of the whole affected tissue. By definition, degeneration phases accommodate chronic degenerative diseases, most of them irreversible in time.

Dedifferentiation Phase

The dedifferentiation phases accommodate all diseases in which abnormal cell proliferation (tissue growth) is the main characteristic. Cells loose their specificity and dedifferentiate to omnipotent cells (inversed embryological specificity) that can easily also loose their restrain control and begin to migrate to other locations in the body (metastases). In this phase of complete degeneration, the body becomes also increasingly influenced by endogenous homotoxins, that is from toxins generated within the body through cellular destructions. All malignant tumours, cancers, are classified here.

2.1.2 Evolutions or Phase Changes on the Table

The patient’s disease position on the DET is subject to migrate or shift from one phase to another and from one embryological tissue to another. The possible directions are four, but with two predictable outcomes:

- **Progressive** – from Left to Right and/or from Top to Bottom (Disease Evolution)
- **Regressive** – from Right to Left and/or from Bottom to Top (Health Recovery)

2.1.2.1 Disease Evolution

The patient’s pathological status progresses (evolves) on the DET towards more serious conditions, too often for iatrogenic reasons.

Progression in the patient’s signs and symptoms from the left to the right on the table or from the top to the bottom or even a combination of both is a condition of worsening, and is called a “*Disease Evolution*”. The inhibition or suppression of natural biological defence mechanisms (e.g. the indiscriminate use of anti-inflammatory drugs) is frequently responsible for

the progressive involvement of the body in other pathologies.

When toxins are inhibited from being excreted, they will not only impregnate locally, but will easily also be transferred to other tissues, even to great distances far from the original focal point:

- In a linear progression, i.e. to other tissues of similar embryological origin.
E.g. Angina (lymphodermal) → Polyarthritis (cavodermal)
→ Nephritis (nephrodermal).
- In a disordered progression, skipping phases and entering tissues of different embryological origins locally and/or at a distance.

Here, the disease tends to evolve negatively in the ontogenetic and phylogenetic sense.

2.1.2.2 Health Recovery

A regression in the patient's pathology with the relative signs and symptoms (and actually with the re-appearance of old signs and symptoms) from the right to the left on the table, or from the bottom to the top or even a combination of both is an indication of an ameliorating process, and is called "*Health Recovery*".

In these cases, the disease tends to evolve positively in the ontogenetic and phylogenetic sense.

2.1.2.3 Regulation/Compensation Division

Between the 3rd (*Deposition*) and 4th (*Impregnation*) phase there is the so called ***Regulation/Compensation Division***. It is an artificial dividing line between the two phases that refers to the demarcation point that separates the pure accumulation of toxins and the actual event of their integration or bindings with the structural components of the matrix (proteoglycans, glycoproteins, glycosaminoglycans). This boundary is very important physiologically, pathologically, and clinically, and thus therapeutically, because it is the separating line ***between the phases in which simple excretion of toxins is still possible, from the Impregnation phase in which simple excretion becomes no longer achievable, at least spontaneously.***

This line also refers to the differences in the body's reactions to the intoxication by the homotoxins. At the **left side** of this line, the body will show **regulation** abilities. At the **right side**, the regulation abilities are progressively lost and we see **compensation** as the main strategy of the body in dealing with the homotoxins.

We could state that the ***Regulation/Compensation Division*** may represent a dangerous point of no return, as on the right side of this line cell damages begin to occur. We will start to see degenerative processes of tissues. Degenerations eventually become irreversible and cell death inevitable, the reason for which we must adapt completely **different therapeutic strategies** in order to try to limit the progressive damages. Different therapeutic approaches are necessary to deal with deregulations at the left side of the division, where the prognosis is more favourable.

DISEASE EVOLUTION TABLE (DET)			
Organ System/Tissue	Status of Regulation / Deregulation		
	Humoral Phases	Matrix Phases	Cellular Phases
ECODERMAL	Ecdysterone	Interferon Phase	Deposition Phase
ENDODERMAL	Glucocorticoids	Prostaglandins	Prostaglandins
MESODERMAL	Leukotrienes	Thromboxane	Thromboxane
REGULATION / DETERIORATION			
ECODERMAL	Interferon Phase	Deposition Phase	Deposition Phase
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DETERIORATION / REGULATION			
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Compensation/Indicates/aggravation/Uncertain Prognosis			

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