



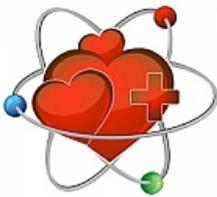
A Science of Medicine
The Art of Care

The Challenging Response of Physis to Inflammation

Part 4: Inflammation: Tibb vs. Conventional Approach

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Inflammation appears to be connected to almost every known chronic disease - from heart disease to cancer, diabetes to obesity, autism to dementia, and even depression. Other inflammatory diseases such as allergies, asthma, arthritis, and autoimmune disease are increasing at dramatic rates.

One of the most prevalent underlying beliefs about health in the Western world is that illness is a mistake, and that symptoms of a disease must be eradicated to restore health.

Although Tibb recognises the various biochemical and pathological processes, it is vital to treat the underlying humoral imbalance for a true cure, as this is the cause of the disease, instead of killing off the excess microorganisms. In the latter case, the cure may be only temporary and the disease will recur.¹

Tibb views signs and symptoms, such as vomiting and diarrhoea, as natural responses of the body to purge itself of the toxins, whereas conventional medicine views it as discrete illness conditions, which need to be halted. This action impedes the process of Physis, which results in qualitative changes that may cause chronic illness.

Hippocrates (469-377 BC) was a Greek philosopher and physician who is known as the Father of Medicine. He conceptualised the theory of humours, on which much of Tibb is based. The Tibb philosophy maintains that each individual person has his own ideal combination of heat, moisture, coldness and dryness in the body, with predominance in one of these qualities, and a sub-dominance of another, and less of the other two qualities.

These four humours circulate in the body, and they determine the unique physical, mental and emotional characteristics of an individual, which became known by Galen as Temperament, namely: Sanguinous, Phlegmatic, Melancholic and Bilious.

Each temperament has its own combination of the qualities of heat and moisture, coldness and moisture, coldness and dryness and heat and dryness, respectively.

In Tibb, health is determined by the interaction, co-operation and functioning of all parts of the body as a whole, from the chemical constituents, to the cells, tissues and organs of the body. The cells of the body will function to its optimal capacity when the internal and external environment is in harmony with one another. A wound will not heal satisfactorily if, for example, a diabetic person were to have a frequent excess intake of sugar (lifestyle factor). This will alter the internal homeostatic environment by raising the insulin levels in the body, thereby interfering with the process of granulation, preventing the healing process. This puts the immune system on high alert. Hormones in the body, called Eicosanoids, which act as anti-inflammatory agents, become imbalanced when insulin levels are high.

Imbalances in these humours, he believed, caused disease, by the interaction between man and his environment. He carefully studied and compared different symptoms of the body and he laid down the foundation for clinical medicine based on diet and rest.

Hippocrates is reputed to have stated that the purpose of medical care was to assist the patient's natural recuperative powers – the doctor within, thereby rejecting the disease and restore health. Hippocrates stated that: **“Nature heals, and the physician is only nature's assistant.”** Terms, like oedema, which are still used to describe inflammation, were introduced by Hippocrates. He also regarded inflammation as an early component of the healing process after tissue injury.²

Hippocrates developed the theory of Physis, meaning “the organism in its unity”. He postulated that life entails a reciprocal relationship between the organism and its environment, and imbalances in these humours, he believed, caused disease. Physis will assist in the elimination of any excess of material in the body, and it will assimilate the necessary nutrients.¹ He believed that health is the expression of a harmonious balance between the various components of man's nature, the environment and lifestyle. He maintained that the relationship between the individual and the environment is a dynamic process of consuming and retaining what is necessary to support life, and then efficiently eliminating the waste that has accumulated.³

Hippocrates recognised rheumatic diseases; the term ‘rheuma’ was used to indicate a flow of pain through the joints of the body.⁴

The Tibb Approach to Inflammation

Tibb believes that a disease or condition of the body results from an alteration in the temperament, humour, structure and function of a cell, tissue or organ of an individual from any internal or external cause. Pathology is viewed by Tibb as a state of imbalance in the body which affects the body directly. This imbalance alters the stability of the internal environment of the body, also referred to as homeostasis and may be brought about by internal or external factors.

Waste products are toxic and accumulation in the body is the biggest contributory cause of illness, which is contributed by poorly managed lifestyle factors. Elimination can only be efficient if and when all the metabolic functions are in order. This is reliant on well managed lifestyle factors and functions are normal. The body may produce a fever in an effort to eliminate the mucous and other superfluous excesses from the body. This may be in the form of a nasal discharge, sneezing, sweating, vomiting, tears, urination or diarrhoea.

The expulsion of substances that are not required by the body, such as by-products of infections or toxins, is the action of Physis, protecting and healing the body. There is a natural tendency for the body to restore humoral quality and balance if this becomes disturbed in some way.

Hippocrates said that the purpose of medicine was to assist nature's recuperative power to throw off disease. He relied on the body's own self-healing mechanism rather than introducing external agents.

Greek physician Galen (130-201 AD), Galen also believed that seasons, periods of life, occupations and geographic regions all influenced the nature of the Humours that were formed. Disease was caused by an imbalance of the Humours, or dyscrasia, while health was considered to be the balance of the Humours, or eucrasia. The quality of the Humour also influenced the outcome of an individual's health or nature of disease. For example, yellow bile caused warm diseases while phlegm caused cold diseases.

Galen promoted the idea that inflammation, especially pus, was a beneficial response of the body to injury.⁵ He also elucidated the role for the percolation of blood, and he also contributed to elucidating the four cardinal signs in the inflammatory process. While these early concepts about inflammation were largely derived from intuition rather than careful scientific investigation, the controversial observations described by the ancient cultures provided the framework for critical experimentation in the later centuries.²

Avicenna (Ibn Sina) is known as the 'Prince of Physicians,' who lived from 980-1037 AD. He saw an integral relationship between the spirit and the soul on the one hand, and the soul and the body on the other.⁶ According to Avicenna, any diagnosis of an illness was faulty and incomplete unless all aspects of the patient's life had been taken into consideration.

The human spirit and its drive to overcome adversity, is mostly what is responsible for a person's healing.

The purpose of Tibb is to maintain the human body in a state of balance, harmony and vigour; - the treatment of the physical, mental and spiritual forces of human life.¹

What is defined negatively as 'pathology' by western medicine is often the body's attempt to reach for health.⁷

The Physis Response

“Every patient carries her or his own doctor” (Albert Schweitzer).

Mistrusting the body’s ability to self-heal itself, results in a deep and widespread fear of illness. In order to change the paradigm of a disease-based approach to a person-centred one, a conscious shift from fearing symptoms to understanding the innate healing ability of Physis to restore internal balance is needed.

The relationship between temperament and health or disease is based on the change in the ideal qualitative state required by the temperament of the person. Any changes to this ideal state occur from the individual (microcosm) and the environment (macrocosm).

When a person’s optimum qualitative state is disturbed, then a trend towards disease begins. If this trend is not corrected by the person’s Physis, then the signs and symptoms of a particular disorder will appear. The ideal qualitative state associated with a person’s temperament will predispose the person to certain states of health or disease.

“What is impossible to see from the viewpoint of those who believe in cures is the very symptoms the good doctors have suppressed and turned into chronic disease, were the body’s only means of correcting the problem! The so-called ‘disease’ was the only cure”. (Dr Philip Chapman, 1981)

The Tibb philosophy believes that each person carries within himself/herself an inherent wisdom, a mechanism that allows the body to heal itself. This remarkable ability of the body is known as **Physis**. It maintains health, preserves life and cures disease. Tibb views inflammation as an essential part of the body's attempt to heal itself and beneficial response to injury, rather than a superimposed pathology.

Physis is the innate inborn intelligence which continuously surveys the body for the presence of the invasion of foreign bodies, or substances. Innate immunity is the first line of defence against invading pathogens.⁸

This Humoral theory proposes that the initial inflammatory response arises from the tissue fluids and the blood. In Tibb, inflammation is a Physis response to a change in the structure of the body or activity, either due to a:

- **Qualitative imbalance** is either due to an excessive or sudden change, or a
- **Humoral imbalance** which is due to an excessive or abnormal change.⁹

The process of inflammation begins first with irritation, which progresses to an inflammatory state. Irritation is a natural, systematic self-defence (Physis) mechanism which attempts to stop or limit the process.⁹

Inflammation is seen as a mechanism of innate immunity. Our innate immunity is what is naturally present in our bodies when we are born, and not the adaptive immunity we get after an infection or vaccination. Innate immunity is generally non-

specific, while adaptive immunity is specific to one pathogen; an example of the latter is whooping cough.¹⁰

The response of Physis is aimed towards correcting the imbalance and reducing the effects of any possible damage, for example:

- A person who goes outside from a warm environment to a cold one, may present with a running nose and watery eyes, as well as any other symptoms associated with colds.
- A person who eats an excess of spicy foods, or who is sensitive to spices, may present with the same symptoms of a running nose and watery eyes, together with perspiration.

In both examples the mucosal secretions protects the epithelial mucosal tissues from the sudden changes that can lead to inflammatory conditions. Although in Tibb most inflammatory conditions are the result of excessive heat, and to a lesser extent cold, they can also be caused by the qualities of moistness, as in rheumatoid arthritis, or dryness, as in osteoarthritis.⁹

From the Tibb point of view, the symptoms of the cold are due to a series of Physis responses. The coughing, sneezing and runny nose is the way our body expel the offending microbes from our body. The headache is a safeguard to prevent us from doing too much in the way of physical activity. It slows us down, so that the microbes that triggers the cold is not spread around the body, where it might cause further problems. If we develop a chill, it is Physis acting to reduce the loss of heat from our bodies.¹¹

The Bilious humour is less plentiful in the body. It is hot and dry, yellow or red and bitter. It is closely associated with the nervous system and acts to increase its rate of function. It has a warming effect on the body. It moderates moisture and prevents the body from becoming heavy, sleepy and dull. It stimulates the intellect and increases physical and mental activity and courage. Its receptacle is the gall bladder. However changes in the qualities of heat and dryness, especially an excess, results in pathology.

The humours are the primary fluids that are manufactured from the digestion of food and drink, which are processed and transformed in the liver. Any dysfunction in the liver will affect the quantitative and qualitative balance of the humours.

- If the quality of food is associated with heat, more Bilious humour will be produced. If there is an **excess of heat** in the liver, the humours produced will be excessively hot and dry and can completely oxidize/burn the humours towards coldness and dryness. In hepatitis, for example, the Bilious humour may be excessively hot and dry and result in symptoms of nausea, jaundice and pruritus.
- If there is a **deficiency of heat** in the liver, as a result of increased moistness, such as in conditions like obesity which produces a fatty liver, then weak bilious humour is produced.

Excessive Heat causes:

- A decrease in moistness, resulting in an increase of dryness.
- An imbalance in the Sanguinous humour.
- Stimulation of the Bilious humour (heat and dryness). Excessive or uncontrolled anger is associated with the Bilious Temperament, and increases heat and dryness in the body.
- A decrease in the Phlegmatic humour.

An excess of heat will not only negatively affect epithelial tissue, but it will also reduce the appropriate moistness required by tissues or organs associated with the brain and the nervous system (moistness), but this affect will be gradual.⁹

The influence of glands, mucous or any other processes involved in the smooth functioning of an organ will also be negatively affected in the event of any excess in the respective humours and qualities:

- For example, the stomach secretes a form of mucous, which prevents the stomach lining from being digested by the pepsin and hydrochloric acid. The mucous provides moisture and protection from disorders such as gastritis, ulcers and hyperacidity.
- Conversely, an abnormal increase in the quality of moistness can lead to indigestion.

Disease is the result of an **excess**, or plethora, which is called an 'obstruction'. Such excess is said to exist either as an overabundance of the quantity or quality of the humour. The humours may be healthy in temperament, but excessive in quantity, causing the channels, bearing the humours, to become overburdened and overfilled, running the risk of rupture. In those areas where the excess exists, the pressure builds up, causing a choking off of life force. This is the perfect breeding ground for bacteria and viruses to thrive.

Too much bile can produce various fevers, and too much phlegm can cause epilepsy or angina. Other examples of disease due to this excess are, amongst others: influenza, cardiac arrest, and apoplexy. **“Everything in excess is opposed in nature”** (Hippocrates).

Disease also occurs due to a deviation in the quality of the humour, causing the natural nutritive faculties of the body to become overwhelmed, because the capacity of the digestive processes is made inefficient. This results in chronic and degenerative diseases, such as cancer, emphysema and arthritis.

Inflammation is regarded as an increase in the quality of heat and dryness, which is prone to aggravations of excess heat, which oxidises both the Sanguinous and Bilious humours. This is brought about by the burning or charring of the humour by excess metabolic heat. Charred gall is bile that has been baked, thickened and hardened by excessive heat and dryness. The caustic and inflammatory charred gall thickens and congeals in the gall bladder, causing gall stones. This charred gall irritates the gall bladder causing cholecystitis, and a weak, irritable and colicky gall bladder. Spasms

and colic in the gall bladder can trigger or aggravate colicky and spasmodic conditions throughout the gastro-intestinal tract.¹²

Morbid, oxidized forms of yellow bile first affect the liver and gall bladder, and secondarily the stomach, duodenum and small intestine. From there, they can spread to affect any part of the organism. Oxidized forms of bile, fats and cholesterol are responsible for a lot of arterial plaque formation and cellular damage caused by oxidized fats, or free radicals.

Heat and dryness can also unduly thicken or solidify bile, causing stagnation, obstruction and stone formation. The most common causes of yellow bile aggravation are dietary, such as hot, spicy peppers and chilies, greasy fried foods, sharp aged cheeses, vinegar, tomato sauces, salty or sour foods, and some fermented foods.¹² However the effect of other foods and drink such as alcohol, chicken and grapes, which increase the qualities of heat and dryness, will affect a person who has a dominant Bilious Temperament the most.

An excess of the Bilious humour first accumulates in the liver, gall bladder and hepatobiliary tract. From there, it affects the stomach and duodenum, causing ulcers, hyperacidity, acid reflux, and reflux oesophagitis. Alternatively, aggravated bile can spread from the hepatobiliary tract downwards, into the small intestine and colon, to cause irritable bowel or soft, smelly or burning stools. From the hepatobiliary system, Bilious vapours can spread systemically to affect any part of the body.

If a person is subjected to **external** influences which lead to an excess of heat and dryness, this will cause an imbalance of the Bilious humour, for example, a person may eat an excess of Hot & Dry foods; be exposed to hot weather, and/or experience emotions of anger. This imbalance originated externally, but it may become the cause for the **internal** conditions, such as inflammation of the liver (hepatitis) – which can result in the symptoms of nausea, vomiting, shivering, jaundice and fever.⁹

Depending on the qualitative changes of heat and dryness, heat and moistness or moistness and heat, the resulting conditions will be evident, such as:

- Rhinitis and conjunctivitis have qualities of heat with dryness.
- Pharyngitis and blepharitis have qualities of heat and moistness.
- Sinusitis and tonsillitis have qualities of moistness and heat.

Yellow bile is hot, sharp and caustic; it is also light, subtle and penetrating. Its subtle vapours can penetrate every nook and cranny of the organism, causing sallow, jaundiced, feverish, irritable, inflammatory, choleric conditions on a systemic level, or anywhere in the body.¹²

It is possible to have an acute phase during a period of chronic inflammation. This is called a flare-up.⁹

The Cellular Approach to Inflammation

Virchow described the inflammatory process in his book of Cellular Pathology, as an “increased activity (nutritive irritability) of the cell to find the appropriate source of food in the surrounding tissues. The inflammatory reaction is a consequence of an excessive intake by interstitial cells, of food from the liquid part of the blood, filtering through the vessel wall.” This results in degeneration or hypertrophy of the cells, whereby the cells undergo a process of multiplication to form the inflammatory tumour.¹³ During the inflammatory process the cells protect the body against microbial infection.

The Conventional Approach to Inflammation

Health is a state of optimal physical, mental and social wellbeing; the popular idea that it is merely an absence of disease and infirmity is not complete.¹⁴ **Disease** is any deviation from or interruption of the normal structure or function of a part, organ, or system of the body, as manifested by characteristic systems and signs; the aetiology, pathology, and prognosis may be known or unknown.¹⁴

In conventional medicine inflammation is characterised by a localised protective response elicited by injury or destruction of tissues, which serves to destroy, dilute, or wall off both the injurious agent and the injured tissue.¹⁴

- Inflammation is a vascular and cellular response to trauma, which initiates the healing process of the damaged tissue.
- It facilitates the body to get rid of micro-organisms, foreign material and dead tissue, thus enabling the process of the repair of the damaged tissue.
- It protects the body from external and internal factors (infection) by localising and removing the source of the damage.

The immune system involuntarily mobilises an inflammatory response to get rid of pathogenic threats. If the inflammatory response is either deficient or excessive, it will have dire consequences, as follows:

- If there is a **deficient response** to the invading organism or substance this will result in an immunodeficiency, leading to infection and cancer.
- If there is an **excessive response** this will result in mortality and morbidity, such as in rheumatoid arthritis, diabetes and Alzheimer’s disease.¹⁵ The body tries to prevent collateral damage to tissues due to excessive immune activation.^{8,15}

Conventional medicine treats off inflammation with aspirin, anti-inflammatory medication, steroids and increasingly more powerful immune suppressing medication, with serious side effects. However the underlying cause to the inflammation is not the main focus of attention, but rather the halting of its process in the belief that it will cure the disease or condition. Hidden allergens, infections, environmental toxins, an inflammatory diet, and stress are the real causes of these inflammatory conditions.¹⁶

Conventional medicine is largely based on drug-based training, and their solution for signs and symptoms would be to prescribe medication, not natural therapies that could bring about healing. A 'cure' for a disease, by finding and eliminating the causes of inflammation in diet and environment, as examples, may be dismissed as a 'spontaneous remission' by conventional doctors. The emphasis of treating inflammatory conditions may be focused on pain reduction and control of inflammation; however, these approaches have no effect on the natural course of the disease.

Summary

The influence of conventional medicine considers disease to be caused by micro-organisms or physiological/bio-chemical malfunctioning, and it focuses on a '*disease that an individual has*', rather than the Tibb's approach of an '*individual with a disease*'.

The conventional approach focuses mainly on signs and symptoms and a morphological diagnostic approach, whereas Tibb focuses on the individual, considering all aspects of the physical, mental, emotional, social and spiritual being. Tibb incorporates Temperaments, Humours, Physis and lifestyle factors, as well as utilising a functional diagnostic approach. Disease is viewed as a disturbance in the balance of those factors.

Various approaches to managing inflammation vary according to the conventional or other complimentary health disciplines. Interfering with the natural inflammatory response can result in pathology and chronic inflammation.

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