

Qualities in Pathological Process

As qualitative changes to humours are integral in understanding Tibb pathology, information on the role of qualities in pathological processes is provided below.

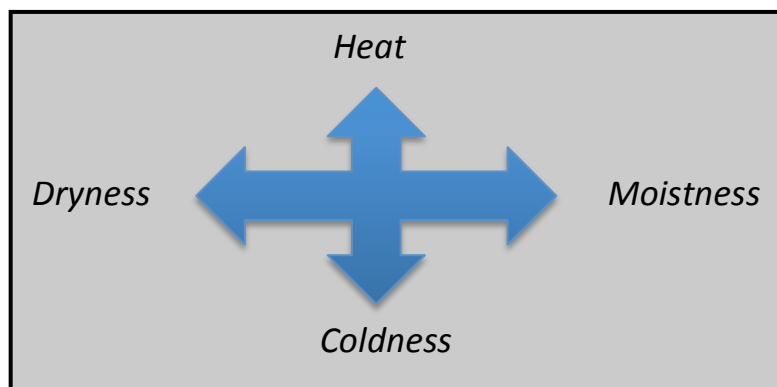
Understanding qualities in pathological processes

The concepts of Physis, temperament, humours and Lifestyle Factors have a common denominator that enables a comprehensive understanding of the pathological processes. This is the qualities associated with each of them. By interpreting qualities, the early Tibb philosophers were able to understand pathological processes and apply appropriate treatment appropriately.

According to Tibb philosophy, the qualities *heat and coldness* are said to be the *active* qualities. The qualities *moistness and dryness* are said to be the *passive* qualities.

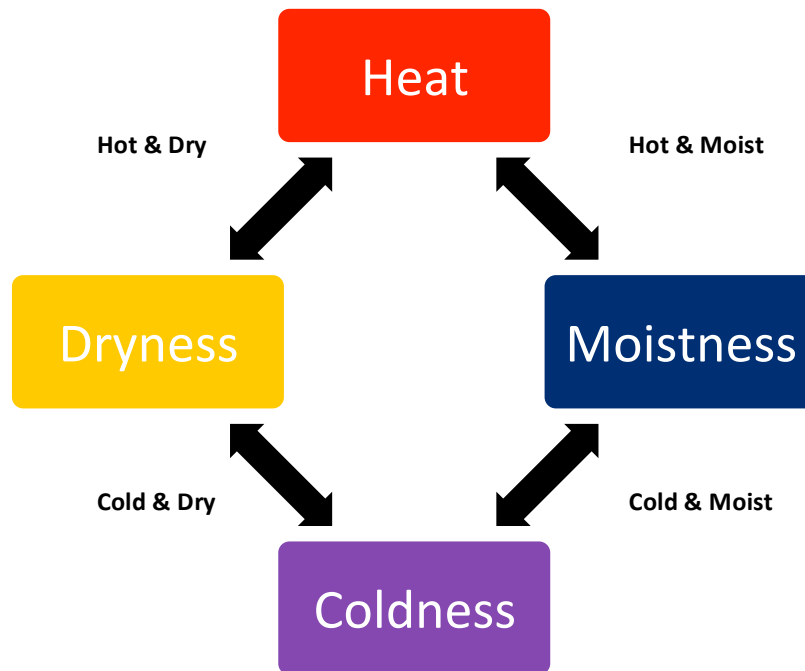
In order to appreciate the influence that these qualities, and indeed the Lifestyle Factors, have on health and disease, it is necessary to identify the interaction of qualities in nature.

Their interaction is shown below:



The quality of heat has an effect opposite that of coldness; and the quality of moistness has an effect opposite that of dryness.

Opposing qualities cannot exist simultaneously. Nothing can be Hot and Cold at the same time, nor Moist and Dry. This means that an *active* quality can only be combined with a *passive* one. The result is that only the following combinations are legitimate: *Hot & Dry, Cold & Dry, Hot & Moist, and Cold & Moist*. Furthermore, *Hot & Dry* is opposite to *Cold & Moist*, and *Cold & Dry* is opposite to *Hot & Moist*.



The significance of the above diagram in pathology is that illness conditions with Hot & Dry qualities will be treated by lifestyle changes, medication and/or other therapeutic interventions which possess Cold & Moist: that is, *opposing* qualities.

Qualities and disease processes

Most, if not all, illness conditions begin with an excess of one of the four qualities of heat, coldness, moistness and dryness, and this is invariably followed by a combination of qualities. An example of this is the common cold and flu, which typically develop in the colder seasons of the year. If this cold imbalance is not corrected, flu-like symptoms develop, and are often associated with an increase in mucous production (runny nose, productive cough, for example). Colds and flu, therefore, are associated with qualities of coldness and moistness. Similarly, constipation is linked to qualities of dryness and coldness resulting in hard, dehydrated stools.

Note: the combination of qualities associated with the illness conditions, whether at the onset of the condition or after the condition has developed fully *is not absolute*. It can vary from patient to patient, depending on the temperament of the patient, their humoral composition, as well as from the influence of the Lifestyle Factors.

The temperament of an individual also has an influence on the qualities associated with a specific illness conditions. For example in osteoarthritis, which is associated with qualities of Cold & Dry, a person with a dominant/sub-dominant melancholic/bilious temperament will be more prone to osteoarthritis, from Lifestyle Factors which will increase the quality of *dryness*. In contrast, a person with a dominant/sub-

dominant melancholic/phlegmatic temperament will be more prone to osteoarthritis from Lifestyle Factors which will increase the quality of *coldness*.

However, it does not mean that the dominant/sub-dominant melancholic/bilious temperament, who over indulges in an excess of cold and moist foods, and heavy exposure to a cold environment, the dominant quality associated with his/her arthritis can move from dryness to coldness.

It is imperative for Tibb practitioners to look at the whole picture of pathology before establishing qualitative states to illness conditions.

Listed below are a few examples of qualities associated with different ailments.

CONDITION	QUALITIES
Colds & flu	Cold & Moist
Osteoarthritis	Cold & Dry
Hyperacidity/ulcers	Hot & Dry
Hypertension	Moist & Hot
Diabetes type 2	Moist & Hot
High cholesterol	Cold & Dry
Asthma (phlegm related)	Moist & Cold

Pathological processes in Tibb

Tibb perceives the onset of illness in three distinct ways:

- By means of a *sudden change/excess in qualities* or temporary cause;
- By means of an *accumulation of excess or abnormal humours* which progresses over a period;
- By means of an *infectious agent*.

(a) The first refers to sudden change or excess in qualities due to Lifestyle Factors.

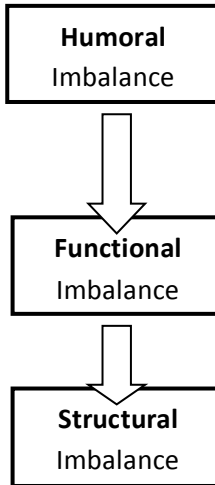
These include emotional, dietary or environmental excess. For example, they can arise from shock, excessively hot food, badly disturbed sleep, or sudden changes in weather.

These sudden changes result in symptoms which arise immediately, and may impair the functions of the body. If, for example, we leave a warm room and go into a freezing outdoors without adequate clothing, we will most likely show symptoms which are typical of the common cold – runny nose, watery eyes, and shivering. Similarly, if we eat hot, spicy foods we will perspire profusely. If these influencing factors are not restricted, then we are at risk of developing more serious illnesses. If we change (or counteract) these negative factors, it allows Physis overcome these sudden excess in qualities, and so restore health. Conditions in this category are most of the self-limiting conditions, such as the common cold, mild diarrhoea, indigestion and headache.

(b) The second is due to an accumulation of excess or abnormal humours.

The accumulation of excess or abnormal humours takes place over an extended period of time. It is the result of Physis' inability to restore homeostasis. Remember that from birth until death, just as our metabolic rate decreases, so does the ability of Physis to restore balance. Illnesses that arise from this accumulation are invariably all chronic illnesses such as hypertension, diabetes mellitus, atherosclerosis, and arthritis.

These illnesses progress in three distinct stages:



Stage 1: This operates at the vascular level in the body's humours. This results in a definite imbalance in the person's humours. This occurs when humoral quality or quantity is altered as a result of the influence of the Lifestyle Factors. If this process is not reversed, with time the second stage will be reached.

Stage 2: This is the functional imbalance stage, in which definite distortions take place in the body's operations: for example, in the blood circulatory system, digestive enzyme activity, and nerve conduction.

Stage 3: When the excess or abnormal humours invade tissues or organs, structural damage will ensue. This final stage is associated with serious disease.

According to Tibb, when evaluating the pathology of different illnesses, the changes in qualities and/or humours that have progressed to physiological malfunctioning or structural damage are taken into account.

(c) The third is from infectious agents.

Tibb views illness from infectious agents differently to that of conventional medicine. Without the technology of today, Tibb physicians were unable to recognize the link between an infective agent (viruses, bacteria, fungi, etc.) and disease (such as the link between *M. tuberculosis* and tuberculosis, and *Pneumococci* and pneumonia). However, they were aware of the nature of infection, or as they termed it: putrefaction.

In Tibb philosophy, infection due to micro-organisms is possible only when an imbalance occurs at the humoral level, so providing a benign environment in the body's tissues and fluids for the pathogenic microbes to survive, multiply and prosper.

Tibb believes that a change at the humoral level provides a medium for microbes to reproduce, spread and cause infection. This explains why some people are susceptible to bacterial infection, whereas others are not.

Very often blood tests are negative, yet the symptoms persist. Why? This indicates that humoral imbalance existing within the body, but not to the extent that infection has set in. Many so-called viral infections are indicative of this initial humoral imbalance. The typical signs and symptoms of colds and flu are soon reversed by Physis, provided that the humoral imbalance does not allow for infection to set in. Management of the Lifestyle Factors effectively assists Physis in restoring balance that will overcome most 'viral' conditions.

Pathological Pathways

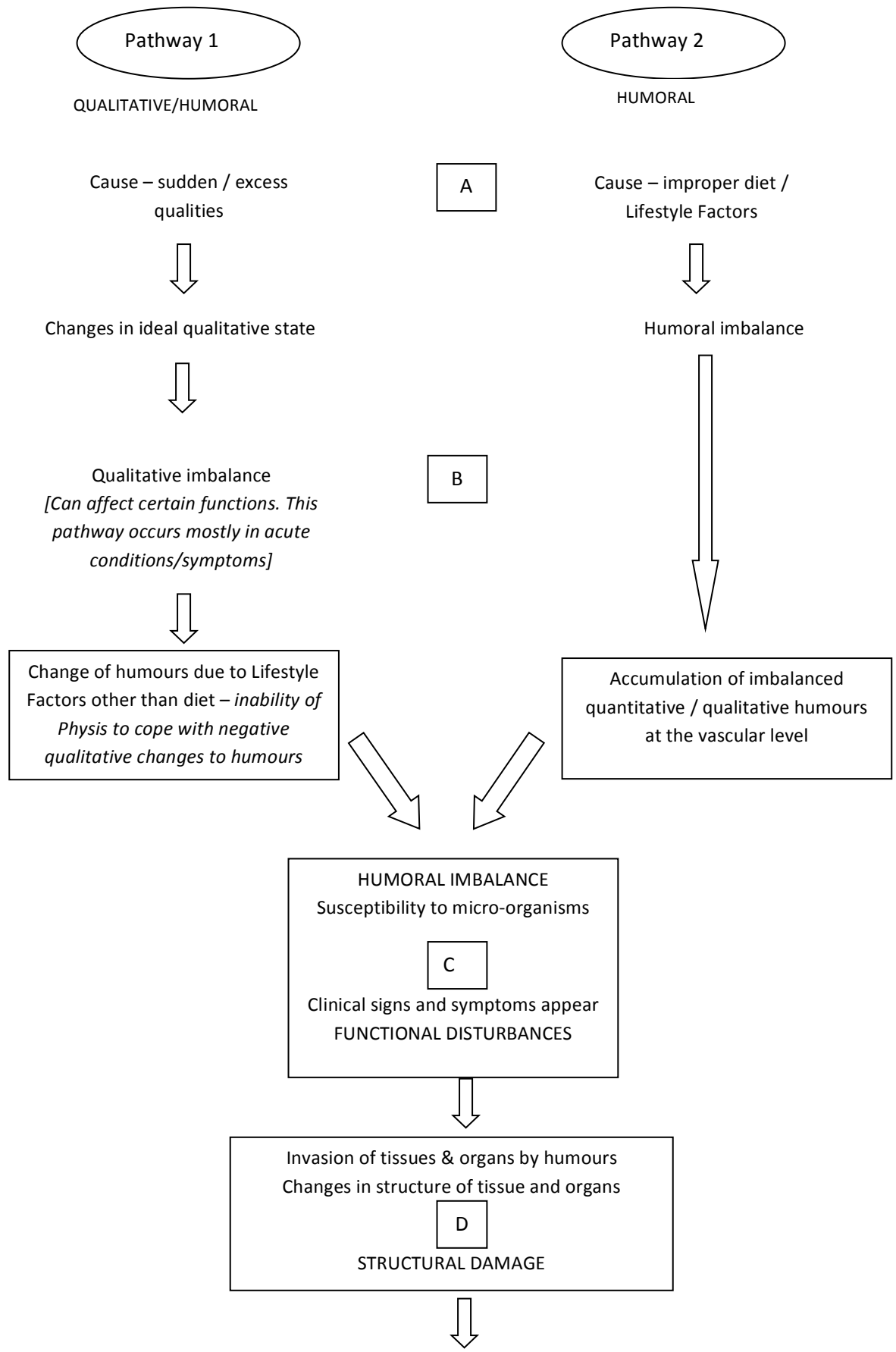
Pathological processes take place along two pathways:

- **Pathway 1:** Qualitative changes (sudden or excessive): These result in most acute conditions manifesting at the qualitative level. After a prolonged duration without correction, however, this leads to chronic disorders involving a humoral imbalance as well.
- **Pathway 2:** Humoral changes (longer term) at the humoral level: This usually results in most chronic conditions.

Pathway 1: **Qualitative** ⇔ **functional** ⇔ **humoral** ⇔ **functional** ⇔ **structural**

Pathway 2: **Humoral** ⇔ **functional** ⇔ **structural**

The diagram on the next page illustrates the two pathways.



A – Stage 1: The initial disturbances are caused by sudden / excess qualities or improper diet
 B – Stage 2: Negative qualitative effects
 C – Stage 3: Humoral imbalance at vascular level occurs / susceptibility to infection
 D – Stage 4: Chronic morphological changes in the tissues or organs appear.

Pathway 1: Qualitative/humoral imbalance

- The changes arise from the onset of a sudden, but temporary, excess of one of the qualities: heat, coldness, moistness or dryness. These sudden changes or excess of qualities will bring with it the onset of certain symptoms or conditions.
- The change in qualities is associated with most acute conditions, and can affect certain functions. The effect of the qualitative changes, if not reversed, can lead to changes at the humoral level.
- In Pathway 1, where the cause is a sudden excess qualitative change, Physis can easily restore health once the causative excess quality has been counter-acted. For example, this pathway is common in most cases of self-limiting illnesses, such as colds and flu (which affect the respiratory system), and diarrhoea, vomiting, and dyspepsia (which affect the digestive system).

Pathway 2: Changes at the humoral level

- The changes at the humoral level can take place initially at the quantitative level, which also affect the qualitative composition of the humours.
- Quantitative humoral imbalance arises as a direct result of excess of particular foods which enhance the production of the respective humour. This humour in excess alters the ideal ratio of humours, resulting in the two pathological states described below.

Excess humours can cause two pathological states:

1. The excess humour with its particular *quality* will change the overall quality of the combined humours, so that they are not in harmony with the *ideal qualitative state* required by the person's temperament. This humoral imbalance can lead to functional disturbances.
2. The excess humour (quantitative), if not corrected, can lead to a build-up of abnormal humours which can result in functional and/or structural damage in the tissues and organs.

In both Pathway 1 and 2, pathological states can arise from changes in humours, which can cause either functional imbalance or structural damage, or both.

Possible outcomes of Pathways 1 and 2

Pathway 1:

A *qualitative imbalance* of Cold & Moist qualities leads to symptoms typical of colds and flu, plus their associated functional disturbances, *viz.*, running nose, cough and blurred vision. If the effect of these Cold & Moist qualities is prolonged the humoral balance will be affected, changing it towards Cold & Moist. This will lead to conditions associated with a phlegmatic (Cold & Moist) humoral imbalance, such as sinus problems and bronchial asthma, with their own functional and structural abnormalities.

Pathway 2:

A *humoral imbalance* due to an excess of a particular humour leads to conditions associated with it. For instance, an accumulation of the melancholic humour may lead to arteriosclerosis, kidney stones, osteoarthritis and psoriasis. Similar outcomes occur for the other humours. In addition, humoral imbalance from abnormal states of the different humours can lead to many different conditions, depending on the abnormality of the humours.

Pathological processes associated with humoral imbalances

Changes associated with humoral imbalance exert a wide range of outcomes regarding the function they affect. They also depend on the particular tissue or organ they invade.

All possibilities are dependent on, and in line with, different causes associated with temperament, qualities, humours and functions, which in turn are dependent on the management of a person's Lifestyle Factors.

Pathological processes associated with humoral imbalances can arise from:

- a) Quantitative imbalance (excess of specific humours)**
- b) Qualitative imbalance (abnormal forms of specific humours)**

Quantitative imbalance (excess humours)

Excess of humours refers to over-production of a respective humour as a result of poor diet, faulty lifestyle and certain habits. For example, a person with a dominant sanguinous temperament who over-indulges in Hot & Moist foods may build up an excess of the sanguinous humour. Similarly, a rise in the bilious humour may occur in someone with a dominant bilious temperament who eats too much Hot & Dry food.

The general signs and symptoms for humoral excess are listed below:

Sanguinous humour

- Feeling of heaviness especially behind the eyes, over the head and across the temples.
- Sweet taste in the mouth, with a red tongue.
- Frequent bleeding – gums, haemorrhoids, nose (epistaxis).
- Flushed complexion, angiomas, spider naevi.
- Urinary tract infection, thick yellow urine.
- Reddish or shiny complexion.
- Emotions: Lust, gluttony, indulgence, debauchery, jaded appetites, and immoderation.

Phlegmatic Humour

- Excessive pallor.
- Cold and moist skin.

- Excessive salivation and viscosity of saliva.
- Lack of thirst, especially in the elderly.
- Pale urine.
- Excessive sleepiness.
- Flabbiness of muscles.
- Mental lethargy.
- Heaviness, lethargy.
- Swollen, puffy eyelids.
- Frontal headaches.
- Runny nose, congested nose, nasal discharge, post nasal drip.
- Sinus congestion.
- Productive cough (clear/ white phlegm).
- Swollen tongue.
- Pale lips.
- Indigestion, weak digestion, sluggishness and drowsiness after meals.
- Pale skin, white complexion, cold clammy skin.
- Poor muscle tone.
- Swollen, tender glands.
- Cellulite, congestion of lymph glands.
- Leucorrhoea.
- Amenorrhoea.
- Slow, deep, soft pulse.
- Emotions: passivity, indifference, emotional subjectivity, hypersensitive, rejection and surrender.

Bilious Humour

- Bitter taste in the mouth.
- Rough and dry tongue.
- Excessive thirst.
- Nausea with bilious vomiting of green or yellowish colour.
- Migraines, unilateral headache.
- Oral ulcerations.
- Inflamed, yellow coat on tongue.
- Hepatitis.
- Stomach hyperacidity, acid reflux, gastric/duodenal ulcers.
- Sensation of burning at stool.
- Red sensitive skin, hives, rashes.

- Inflammatory conditions.
- Dark or rusty coloured urine.
- Feeling of burning when urinating.
- Full, rapid, bounding pulse.
- Emotions: Anger, impatience, irritability, forceful attitude, agitation or restlessness, stress, rage, frustration, envy, jealousy, argumentative, corrupt, impulsive, critical unforgiving, and intolerant.

Melancholic Humour

- Thick, dark blood.
- Hyper-pigmentation.
- Vertigo.
- Light headedness.
- Nervous exhaustion.
- Insomnia.
- Tinnitus.
- Splenomegaly.
- Irregular, nervous eating and food cravings, anorexia, poor appetite.
- Flatulence.
- Constipation.
- Clot forming emboli.
- Cold, dry, rough, cracked skin.
- Arthritis, rheumatism, neuromuscular complaints, stiffness, aching, sciatica, numbness in extremities, tremors, tics, cramps, spasms.
- Nervous sexual dysfunction.
- Emotions: Nervousness, moodiness, cynicism, fearfulness, depression, sobriety, reflection, withdrawal, somber, loneliness, grief, pensiveness, anxiety, austerity, guilt, and rigidity.

Qualitative imbalance (abnormal humours)

Qualitative imbalances result from variation in the different humours from the normal to the abnormal states and also from excess humours.

Most diseases, especially the chronic ones, result from a complex culmination of both qualitative and quantitative imbalances.

Described below are examples of chronic diseases associated with excess and/or abnormal states of the four humours. These also indicate progression of the illness from one qualitative state into another, as well as (where applicable) the signs and symptoms associated with it.

Imbalance of the *sanguinous* humour

As the concentration of the sanguinous (Hot & Moist) humour is the highest of all humours, illnesses associated with the sanguinous humour are often the result of the increased volume linked to the sanguinous humour. *Primary hypertension* is a good example of this.

Primary hypertension

Primary (also termed *essential*) hypertension is the result of increased blood volume (*hypervolaemia*), brought on by *excess sanguinous humour*.

The blood volume is influenced by moistness associated with the phlegmatic temperament. Moreover, if a hypertensive patient has a temperament which is either dominant/sub-dominant sanguinous or phlegmatic (that is, sanguinous -phlegmatic, or phlegmatic-sanguinous), the severity of the hypertension will probably be more severe. This is because of increased blood volume arising from the common moistness quality in his/her temperament.

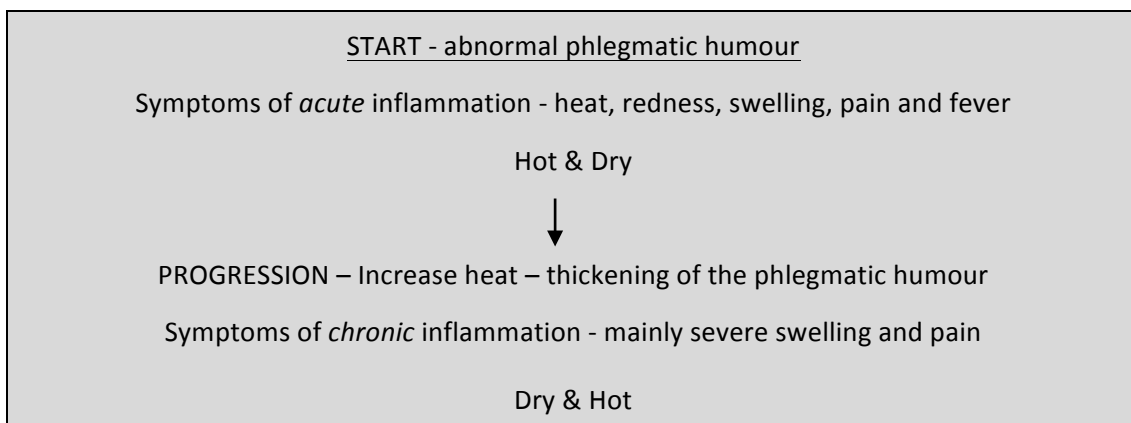
Excess moistness is therefore an important target when treating hypertension. This is reflected in the use of diuretics in its management, either alone or in combination with other agents.

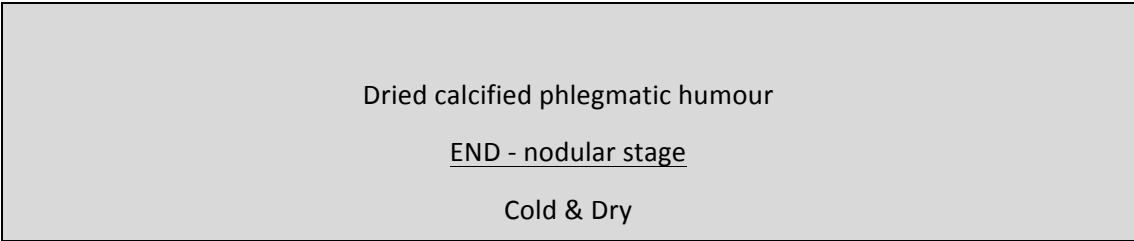
Imbalance of the phlegmatic humour

Typical illnesses associated with quantitative and qualitative changes to the phlegmatic humour are *rheumatoid arthritis* and *diabetes*.

Rheumatoid arthritis (Hot & Dry to Cold & Dry)

The onset of rheumatoid arthritis is characterised by abnormal phlegmatic state/salty phlegmatic humour with qualities of heat and dryness. This state lacks the soothing properties of the normal phlegmatic humour, so resulting in signs and symptoms of acute inflammation in the joints. As the disease progresses, an increase in heat dissipates the moistness of the phlegmatic humour. This causes the phlegmatic humour to thicken, with qualities of dryness and heat. The heat oxidises the abnormal *phlegmatic* humour to an abnormal *melancholic* humour, with qualities of coldness and dryness. The formation of fibrous tissue and subcutaneous nodules begins.

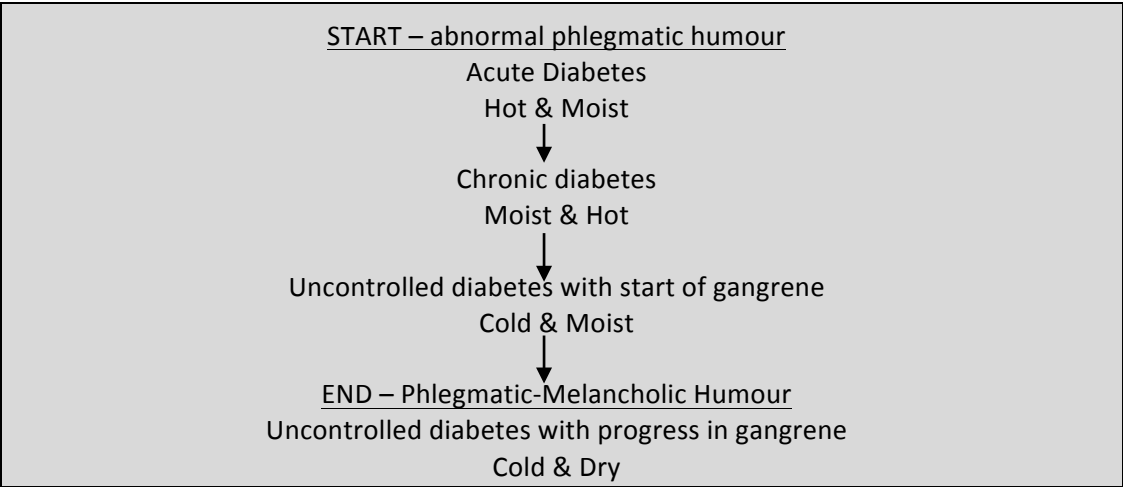




This scheme shows that the signs, symptoms and clinical features of rheumatoid arthritis vary during the different stages of the imbalanced phlegmatic humour. This means that treatment needs to be tailored according to the particular phase the patient is in.

Diabetes mellitus (Moist & Hot, to Cold & Dry)

Diabetes mellitus is associated with Moist & Hot qualities. If uncontrolled, the excessive moistness will completely diminish heat, so deteriorating the condition towards coldness and moistness. If the condition continues to degenerate, coldness will predominate, causing poor blood circulation. This results in complications like gangrene, which is linked to the qualities of coldness and dryness.

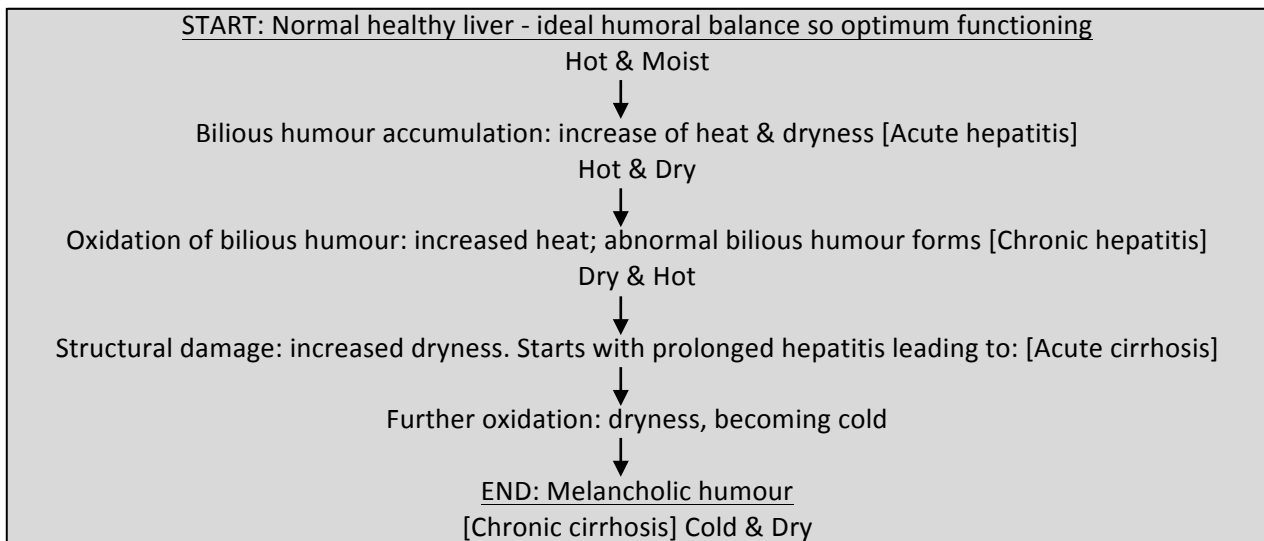


Imbalance of the bilious humour

Excess bilious humour and/or its abnormal states disturb the temperamental and functional harmony of the liver. These imbalances can lead to its inflammation. If not corrected in good time, the disorder can deteriorate further, causing serious structural damage, a life-threatening situation.

The flow chart (*below*) illustrates the progression of the liver from its normal healthy state to a state where serious structural damage has developed. It shows the sequence of changes of normal bilious humour to excess levels, to abnormal states of the bilious humour (which includes a melancholic state), and its clinical consequences.

Abnormal/excess bilious humour on the liver



This clearly illustrates how a progressive illness linked to excess bilious humour develops. There is the final conversion of the abnormal bilious humour by oxidation into abnormal melancholic humour. The signs and symptoms reflect mild inflammation, progressing to more severe forms. However, the causes and risk factors associated with its onset and progression will, to a large extent, remain the same. However, the causes will continue exerting their influence for a prolonged period.

The signs, symptoms and other clinical features of arthritis vary during the different stages of formation of the imbalanced bilious humour. Accurate assessment of the patient and the qualitative state is necessary to employ effective treatment.

Imbalance of the melancholic humour

Illnesses associated with the melancholic humour invariably develop from (a) excess melancholic humour, or (b) from the abnormal states of the melancholic humour derived from all four humours. Illnesses typically associated with changes to the melancholic humour are *osteoarthritis*.

Osteoarthritis (Cold & Dry)

Osteoarthritis results from a melancholic imbalance associated with the qualities of Coldness & Dryness. The onset of osteoarthritis is often the result of excess melancholic humour, and/or abnormal states of melancholic humour arising from the other humours.

Additional guidelines on pathological processes

The guidelines below provide additional information on pathological processes from a Tibb perspective.

Pathology in relation to temperamental predisposition is not absolute

There is a definite relationship between temperament and clinical disorders. For example, an individual who has a dominant sanguinous sub-dominant temperament is inclined to disorders that have a

dominance of moistness (such as diabetes). This principle applies broadly to other temperamental types.

However, it is important to note that if the ideal qualitative state associated with a person's temperament moves from the original dominant quality (as a result of poor lifestyle management) into another qualitative state, the person will be inclined to illnesses that are associated with the new qualitative state. This means that even for a short duration the person may be inclined to acute conditions of that new quality. An even longer duration will incline the person to chronic disorders associated with the new quality.

Below is an example that supports the above.

Mrs M has a dominant bilious with a subdominant sanguinous temperament. Being a typical, active, dominant bilious personality, she develops endometriosis (Heat with Dryness condition) at the age of 35. By the age of 45, she starts gaining weight, slows down somewhat, and as a result develops hypertension (Heat with Moistness condition). By the age of 50, with increased weight gain, and unable to manage additional worries, her metabolism slows down considerably, and she develops diabetes (Moistness with Heat condition). This gradual movement from the ideal qualitative state required by temperament can lead to other illness conditions.

This highlights the relationship between qualitative changes, the person's temperament, the pathological processes which proceed, and the resulting clinical consequences. It also stresses the importance of adjusting the Lifestyle Factors according to age, so maintaining the ideal qualitative state associated with temperament. The movement from one quality into another will have a direct bearing on the development of certain illnesses. For example, not respecting the qualitative and quantitative changes which occur whilst ageing has profound pathological implications for a person's health.

Diet and humours in pathological processes

Humours are produced from food and drink. The effect of diet on the production and type of humour, and their relationship to associated disease is therefore very important. Obviously diet increasing a specific humour to excess will result in illnesses associated with the respective humour.

- **Hot & Moist foods** increase the **sanguinous humour**. This may cause or aggravate disorders such as hypertension and dysmenorrhoea.
- **Hot & Dry foods** increase the **bilious humour**. This may cause or aggravate disorders such as hepatitis, pancreatitis and hyperthyroidism.
- **Cold & Moist foods** increase the **phlegmatic humour**. This may cause or aggravate disorders such as colds and flu, and anaemia.

- **Cold & Dry foods** increase the **melancholic humour**. This may cause or aggravate disorders such as fibrosis, psoriasis and kidney stones.

The typical Western diet of milk, beef, potatoes, lettuce salads, refined white sugars, cheese, butter and margarine etc. are all cold foods. And cold foods lead to an imbalance of the phlegmatic humour, and cause a list of complaints that are epidemic around the western world – migraines headaches, menstrual cramps, lung and chest problems, arthritis, constipation etc. And as the indiscretion in food consumption is continued, in time the other humours become imbalanced. When such imbalances progress, abnormal melancholic humour is produced, and diseases such as cancer, arteriosclerosis, emphysema, and others arise. Heating foods are necessary for the body to achieve and maintain a complete metabolic digestion of foods. Food is the source of heat, the fuel for the body. The body's digestive process are also in a continuous effort to heat or 'cook' the nutrients so that they may be broken down into component parts, utilized by the body, and then eliminated completely.

The secret of human health and wellness is not only in maintaining a balanced diet, but also in the avoidance of excess food and drink. "The stomach is the home of disease" is a statement of the essence of medicine, made by the Prophet Muhammad (PBUH) more than 1400 years ago. More recently, some prophetic-minded physicians have agreed with this dictum. Hippocrates believed it. Galen believed it. Avicenna established it as a law of medicine. Yet today it is ignored. Since the human body's metabolism causes nutrient substances to become the human body (including its disease-fighting mechanisms), the ultimate origin of most illness is in food, or diet.

Movement of illness conditions from one qualitative state to another

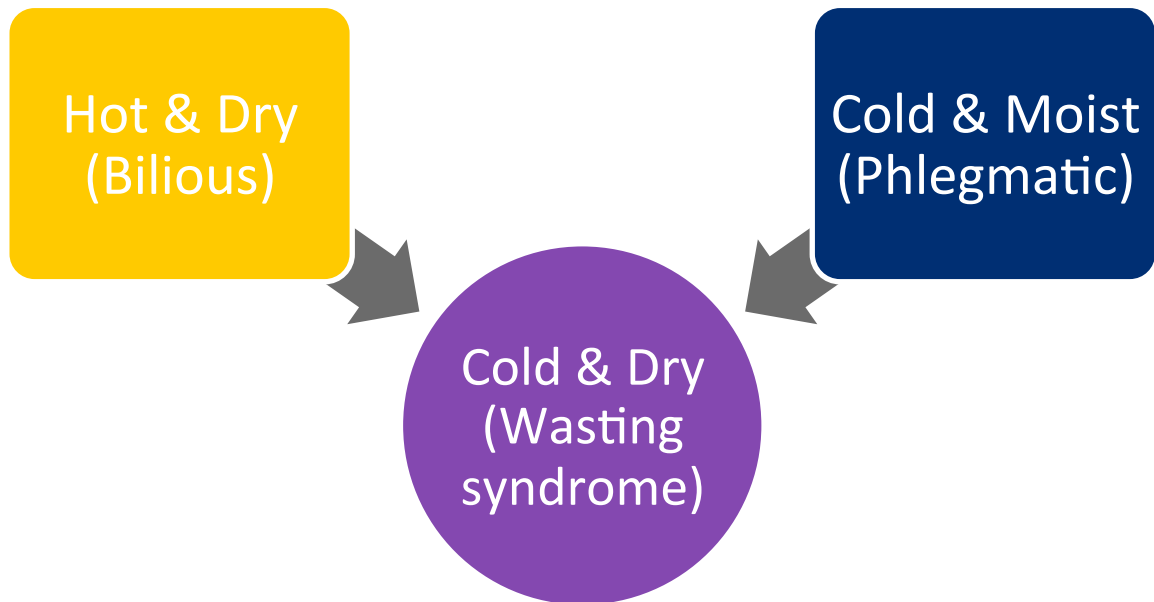
Regression or deterioration of a person's disease results in movement from one qualitative state to another. An example is the case of people infected with the HI virus.

Patients infected with the HI virus suffer from suppressed immunity. As a result, they become susceptible to opportunistic infections irrespective of their temperament. However, differences in temperament provide an explanation why people who are HIV positive respond differently to infections or other illness conditions.

According to Tibb, HIV-positive people with a dominant/sub-dominant **bilious** temperament, associated with Hot & Dry qualities, will present with signs and symptoms such as tuberculosis (TB), night sweats, dry cough, weight loss and other inflammatory conditions.

However, HIV-positive people with a dominant/sub-dominant **phlegmatic** temperament, associated with Cold & Moist qualities, will present with signs and symptoms which include vomiting, diarrhoea, thrush and weight loss. These people will deteriorate and develop full-blown AIDS more rapidly as increased moistness increases the risk of opportunistic infections.

However with time both temperamental combinations, if untreated adequately, will deteriorate to full blown AIDS, characterised by the wasting syndrome, which is associated with Cold & Dry qualities.



Influence of age and gender on pathological processes

The significance of the life cycle is the qualities associated with each stage of the life cycle and its relevance to pathology. For example, during infancy and babyhood the dominant quality of the period is moistness which results in conditions with excessive moistness such as vomiting and diarrhoea. At the other extreme is senility, with its typical qualities of coldness and dryness. These are associated with the characteristic illnesses osteoarthritis and osteoporosis.

Similarly gender differences, where females are somewhat colder than males will be more inclined to diseases associated with excess coldness, such as depression and a number of reproductive system problems.

Indirect influence of one humour on another humour

The indirect influence of one humour on another is illustrated in the pathology resulting in high cholesterol levels. The word cholesterol is derived from the words *chole* meaning bile, and *steros* meaning freeze. An appropriate concentration of the bilious humour is essential in maintaining required cholesterol levels by ensuring that the “freezing” of cholesterol does not occur.

Balanced heat and dryness – resulting in efficient bilious humour functioning



Balanced levels of fat and cholesterol



Imbalance in heat levels leads to improper bilious functioning



Leads to accumulated fat and a high level of cholesterol



Deposition of cholesterol in the arteries



Leads to atherosclerosis and finally arteriosclerosis

The development of increased cholesterol levels is not only dependent on the concentration of the bilious humour. It can also result from an increase of coldness/moistness, from Cold & Moist foods (excess phlegmatic humour) and Cold & Dry foods (excess melancholic humour), and/or other Lifestyle Factors which increases the cold/moistness.

Pathological processes due to synthetic, chemical medication

Many patients present with conditions that result as a side effect or metabolic response to short-term (*acute*) or long-term (*chronic*) treatment with conventional medication. Often, multiple regimes of additional medication are prescribed to counteract the side effects caused by the original prescribed drug. An example is ACE inhibitors, commonly used in the treatment of hypertension, have side effects of coughing for which theophylline or other antitussives are given to suppress. Another example is the use of thiazides or loop diuretics in the treatment of hypertension, oedema or cardiac failure. A patient may develop gout as a side effect and thus be prescribed allopurinol. Each time a new medication is added, the side effect profile increases, which often requires management with an additional drug. Also, as aforementioned, suppression of the symptoms only results in the manifestation of abnormal humoral states and more serious illness conditions.

The role of Physis during pathological processes

Throughout the pathological process, beginning when a person moves away from the ideal qualitative state associated with his or her temperament, Physis strives to restore balance. Symptoms such as fever, sneezing, runny nose, diarrhoea and vomiting are typical examples of Physis response.

Physis not only attempts to restore balance at every step of the disease process, but also acts to minimise the possible damage that might ensue. An example of this is the occurrence of a nosebleed that relieves the pressure in the cranial area, in order to avoid a brain haemorrhage.

Throughout the pathological processes, Physis strives continuously to reverse pathological processes and restore homeostasis.

Physis Response, or Signs and Symptoms?

When dealing with patients to make an accurate diagnosis and administer the correct treatment plan, that signs and symptoms are differentiated from a *Physis response*. For example: a female patient, age 40, with a melancholic/bilious temperament presents with a sore, dry throat. She subsequently develops

an unproductive cough which is worse at night and when lying down. On examination, inflammation of the pharynx can be observed as well as an accumulation of mucus indicative of post-nasal drip. In this patient, the symptom of post-nasal drip, may in fact be a Physis response to the increase moistness in reaction to the excessive dryness underlying the pharyngitis, as mucus is produced to moisten the inflamed pharynx.

Recognising the Physis response, whether it is aimed at healing or for protection, is an important factor in understanding pathological processes, and their impact on diagnosis and subsequent treatment.
