

Genesis of Disease: An Overview from perspective of Naturopathy

Dr. Jyoti Keswani

Assistant Professor

B.N.Y.S, M.A. (Yogic Sciences)

S.H.M. College of Naturopathy & Yogic Sciences, Bhopal (M.P.)

ABSTRACT: W.H.O. definition of health describes health as a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity. Thus, health is the level of optimum functional or metabolic efficiency of a living organism. In humans, it also represents an ability of individuals to adapt and self-manage when facing physical, mental or social challenges. Health can also be described as a state when there is perfect harmony among all the systems and components of the body, when the body is free from pathogenic toxins, morbid matter or other harmful agents. Toxins are organic or inorganic substances which are formed as a result of metabolic processes taking the place within the body or ingested from external environment. According to Dr. J.H. Tilden, the process of toxin building in the body starts from a state of low energy. This state of lowered vital energy is known as enervation. This state of enervation is mainly responsible for toxin accumulation because in such states, the body reduces the function of toxin elimination. These toxins are accumulated in extracellular spaces and gradually affect the functioning of related areas. This initiates pathological changes leading to faulty functioning of organs. Although body tries to metabolize or eliminate these toxins, sometimes the toxic load exceeds the body's eliminative & curative capacity.

Dr. Henry Lindlahr has also considered three main causes of disease. They are:

1. Accumulation of morbid matter in the body
2. Abnormal composition of blood and lymph
3. Reduced Vital Energy

If analyzed carefully, these causes are cyclical in nature. One cause leads to another in a cyclical manner. Thus, accumulation of morbid matter can lead to abnormal composition of blood and lymph which reduces the vitality. Reduced vitality again causes reduced elimination of morbid matter and favors accumulation of morbid matter.

The present work will provide in depth analysis of the different causes of enervation and toxemia and how they result in genesis of disease. It will also discuss the mechanism and pathophysiological changes leading to organic changes in the body.

Keywords: Enervation, Morbid matter, Naturopathy, Toxemia, Vitality

Introduction

Health can be described as a state of complete harmony among all the systems and processes of body. W.H.O. definition of health describes health as a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.

Ayurveda considers health as a state when all the doshas (humours), dhatus (elements) and malas (excretory products) are in balance.

*Sama dosha sama agnishcha samadhatu mala kriyaaha /
Prasanna atma mana indriyaha swastha iti abhidheeyate //*

//Sushruta Samhita I. 2//

'Health is a state where in the Tridosha, Digestive fire, all the body tissues & components, all the physiological processes are in perfect unison and the soul, the sense organs and mind are in a state of total satisfaction (*prasanna*) & content'

Thus, it can be stated that according to modern & traditional views, health is the level of optimum functional or metabolic efficiency of a living organism. In humans, it also represents an ability of individuals to adapt and self-manage when facing physical, mental or social challenges.

Naturopathy is a relatively new system of health care which also believes that health is a state when all the systems of body are functioning optimally, when the blood is free from toxins and toxin producing pathogens and the vitality is such that the individual possesses the capacity to get rid of pathogens & toxins naturally without use of external aids like medicines.

Naturopathy or Nature Cure has been defined by Dr. Henry Lindlahr as a system of man building in harmony with the constructive principle in Nature on the physical, mental and moral planes of being. The constructive principle is that principle in nature which builds up, improves and repairs, which always makes for the perfect type

According to Dr. Henry Lindlahr, Health is normal and harmonious vibration of the elements and forces composing the human entity on the physical, mental and moral planes of being, in conformity with the constructive principle of nature applied to the individual life. The basic factors which are required to maintain the body in a healthy condition are:

- (i) Innervation which means a copious influx of life force and an adequate nerve supply from the centers in brain and spinal cord.
- (ii) Nutrition of the tissues and normal composition of blood, lymph and other fluids of the body.
- (iii) Proper drainage of waste products from cells & tissues and through venous & lymphatic circulation.

On the other hand, he has defined disease as abnormal or inharmonious vibrations of the elements and forces composing the human entity on one or more planes of being, in conformity with the destructive principles in Nature applied to individual life.

Thus, we can say that disease results when the various systems & functions of the body start working haphazardly and are not in sync with one another. This inharmony may be result of a number of factors ranging from hereditary causes to lifestyle related. But Naturopathy believes that all the diseases originate due to a single cause i.e. toxemia. This toxemia results when the individual goes against the nature. In other words, the primary cause of disease is *Violation of Nature's laws*. When nature's laws are violated, it results in:

- Lowered Vitality
- Abnormal Composition of blood & lymph
- Accumulation of waste & morbid materials and poisons in the body.

These conditions tend to lower, hinder or inhibit normal functions by promoting destruction of living tissues. This is manifested in the form of disease.

Toxemia: The Primary Cause of Disease

According to Naturopathy, the cause of every disease is toxemia. Toxemia is the morbid state of blood and tissues resulting from the accumulation of un-eliminated toxins. These toxins can be external i.e. introduced from outside like ingested food, chemicals from pollutants or internal as a result of our own metabolic reactions. Toxins lead to abnormal composition of blood and lymph and damage of organs leading to acute and chronic diseases. According to this concept, micro-organisms are not the primary causative agents. Diseases caused by them are only secondary to toxemia.

Toxins can also be generated due to psychological reasons. Toxins generated due to negative mental impulses cause psychological imbalances and lead to endocrinal disturbances generating physical toxins causing psychosomatic diseases.

To maintain normal homeostasis in the body, these toxins must be regularly eliminated through the eliminative channels of the body i.e. kidneys, large intestine, skin and lungs.

According to famous naturopath, Dr. J.H. Tilden, everything that enters the body is neutral, toxic or nutritive in its composition and nature. These substances get filtered through the liver and are metabolized appropriately.

In case of toxins, the following process is carried out by liver:

The toxic matter is metabolized by liver and is converted into a protoxin which is a complex of a protein and a organic or inorganic toxic material. Depending on the chemical composition of toxic matter, protoxins can be organic or inorganic. This complex is then transported to eliminative organ like kidneys to be eliminated from the body.

When the blood gets saturated with the toxins due to excessive intake in the form of pollutants, drugs and fermented toxins produced by internal pathogens, these toxins cannot be immediately eliminated and start getting accumulated in interstitial spaces. Gradually, the interstitial spaces surrounding the cells are logged with the toxins. These toxins then interfere with the proper oxygenation and nutrition of the cells. As the toxic load at these sites increase, the cells begin to change in form and function in order to survive.

The pathologists are identifying the toxins by staining methods. One example is a waxy fibril protein called Amyloid.

Pathology of Diseases caused due to Toxemia

According to Naturopathy, there is a single cause of disease i.e. Toxemia. This principle is called Unity of disease. Any disease due to toxemia progresses in seven stages:

1. Stage One: Enervation

Vitality is the inherent power in an individual that preserves & promotes health and also prevents & cures disease. Enervation is insufficient nerve or vital energy required to carry out day to day functions at optimum level. Lack of this energy due to improper lifestyle, unhealthy diet and stress adversely affect the body functions particularly elimination. As un-eliminated toxic wastes accumulate in body, toxemia results.

2. Stage Two: Toxemia

Toxemia is the morbid state of blood and tissues resulting from the accumulation of un-eliminated toxins. When elimination of toxins is impaired and the interstitial spaces are clogged with morbid matter, the vitality of the body further reduces as the vital energy is consumed in combating the inflow of toxins. These combating efforts of the body are manifested in the form a short duration illness which is called *Acute disease*. Thus, acute diseases are result of internal cleansing efforts of body.

When these efforts of body are suppressed by the use of drugs repeatedly, it results in certain degenerative changes in the body and finally leading to irreversible pathological changes which we call as *Chronic diseases*.

3. Stage Three: Irritation

As the enervated body keeps on accumulating more and more toxins, they start getting deposited in the interstitial spaces. This accumulation results in drawing of water towards the site of accumulation in order to dilute the toxins. This causes the tissues to become water laden. This wet state shows unhealthy state of the tissues. According to Guyton's textbook of Physiology, dry state is the healthy state of tissues. So, when the tissues are in wet state due to waste products, it interferes with the proper oxygenation and nutrition of the cells.

4. Stage Four: Inflammation

As the toxemia further progresses with clogging of tissues with waste matter, a number of cellular and functional changes start taking place in body. These changes have been explained under the heading of inflammation. These changes manifest in the form of redness (rubor), pain (dolor), increase in temperature of the part (calor), swelling (tumor) and loss of function.

5. Stage Five: Ulceration

Cellular changes which have taken place in 5th stage i.e. inflammation lead to degeneration of tissues which is manifested in the form of ulceration. Ulceration can occur in any body tissue but is more common in the digestive tract. Ulcerative conditions are painful.

6. Stage Six: Induration

As the body is carrying the ever-increasing toxic load and the cells starts ulcerating, induration results. Induration is the thickening and hardening of the tissues in an effort to protect themselves.

7. Stage Seven: Fungation

The final stage of result of toxemia is the state of fungation. In this state, the affected body cells or structures assume a fungal form or start growing rapidly. This is sometimes termed as Cancer.

Thus, Naturopathy strongly believes that the toxic matter lead to the causation of pathological changes through lowered vitality, abnormalities in normal composition of tissues and other functional disturbances. These conditions in turn facilitate more and more accumulation of toxic matter and in this way, pathological changes set in the tissues & organs. Such changes are manifested in the form of disease.

Inflammation

Inflammation and inflammatory processes are natural manifestation of the healing and corrective forces acting in the body. Therefore, they should not be suppressed. The repeated suppression of such processes results in changing of acute, constructive reactions into chronic disease conditions.

Inflammation always follows presence of some form of obstruction or causative agent which presents a challenge to the corrective forces within the body. Such excitants of inflammation may be systemic poisons, dead cells, blood clots, fragments of bones, metabolites of various biochemical reactions, residue of drugs, foreign bodies like dust, soot, stone etc or micro-organisms. These excitants trigger a protective response in the form of a reaction which opposes the healing forces of the body. This response includes a number of circulatory changes in the affected & surrounding tissues and activation of defense mechanism by blood cells. Body also starts producing certain germ killing substances, defensive proteins like obsonins and alexins along with antibodies and natural antitoxins. All these changes can be observed in the form of certain signs which have been termed as

Cardinal symptoms of Inflammation. These signs include redness (rubor), pain (dolor), increase in temperature of the part (calor), swelling (tumor) and loss of function.

Any acute inflammatory process takes place in five successive stages. They are as follows:

- 1. Incubation:** The time between exposure to an infectious agent and its development. During this stage, morbid matter starts accumulating in certain parts of body and starts interfering with the normal functioning of that part.
- 2. Aggravation:** During this period, the body's reaction with the morbid matter progresses to an extent when it manifests in the form of cardinal signs of inflammation, mainly fever.
- 3. Destruction:** The body's protective reactions destruction of morbid matter present in the form of pathogens and also of the phagocytes, blood vessels & tissues of affected area. Deposition of exudates, formation of boils, abscesses etc. are observed. This stage either ends in the form of healing crisis or disease crisis.
- 4. Abatement or Absorption:** If the organism's healing forces are in ascendancy, the inflammatory reaction will end in elimination of morbid matter followed by building up of tissues, increased vitality and regaining of health as the symptoms of fever will subside.
- 5. Reconstruction:** With cleaned system and increased vitality, the body starts the task of reconstruction of damaged tissues, capillaries and other components. The normal composition of the blood is also regained gradually.



Ref: Stages of inflammation (Philosophy and Practice of Nature Cure, Dr. Henry Lindlahr, P. No. 86)

This theory is even accepted by the allopathic system of medicine. Dr. Thomas Powell from Los Angeles has added new concepts to the theory of inflammation. According to him, during the period of aggravation, the congestion of the blood in the area is caused by accumulation of morbid matters or pathogens in circulation which obstructs the tiny capillaries in the affected parts. The accumulation of pathogens in these parts is due to lowered vitality, lowered resistance and also due to some kind of irritation or obstruction.

It is important to mention stress at this point. Long standing or chronic stress also reduces immunity or vitality. This is proved by reduction in Galvanic Skin Resistance (G.S.R.) in the stressful conditions. In such states, the defense mechanism of the body are weakened and allows a number of pathogens to flourish in the body manifesting in the form of recurrent infections & inflammations. Stress affects bacterial growth by significantly reducing the mucosal production of mucopolysaccharides and mucins, which are important for inhibiting the adherence of pathogenic organisms, and by decreasing the production of immunoglobulin A (IgA), which play a crucial role in their elimination. Neurochemicals produced upon psychological stress can also directly enhance the growth of pathogenic organisms. For example, norepinephrine stimulates the growth of *Y. Enterocolitica*, *P. Aeruginosa*, and gram-negative bacteria such as *E. coli*.

Some examples of diseases which support morbid matter theory

Theory of Toxemia and Leaky Gut Syndrome:

Leaky Gut Syndrome is a condition in which the intestinal lining is more permeable than normal. The abnormally large spaces present between the cells of the gut wall allow the entry of toxic material into the bloodstream that would, in healthier circumstances, be repelled and eliminated.

The gut becomes "leaky" in such a way that bacteria, viruses, fungi, parasites and their toxins, undigested foods such as proteins, nerve and connective tissue, fat and waste normally not absorbed into the bloodstream in the healthy state, pass through a damaged, hyper-permeable, porous or "leaky" gut.

The main causes of Leaky Gut Syndrome are certain toxins or morbid matters in the language of naturopathy which lead to inflammation of the gut lining. Some of the toxins include:

- Antibiotics which lead to the overgrowth of abnormal flora in the gastrointestinal tract like bacteria, parasites, *Candida*, and fungi

- NSAIDS (non-steroidal anti-inflammatory drugs) such as aspirin, ibuprofen and pain medications; drugs like corticosteroids or birth control pills
- Alcohol and caffeine which are strong gut irritants
- Gluten and other proteins from wheat, Mould and fungal mycotoxins in stored grains, fruit and refined carbohydrates
- Foods and beverages contaminated by parasites like giardia lamblia or bacteria such as helicobacter pylori, klebsiella and others
- Chemicals in fermented and processed food
- Highly refined carbohydrate diet (e.g. candy bars, cookies, cake, soft drinks, white bread)

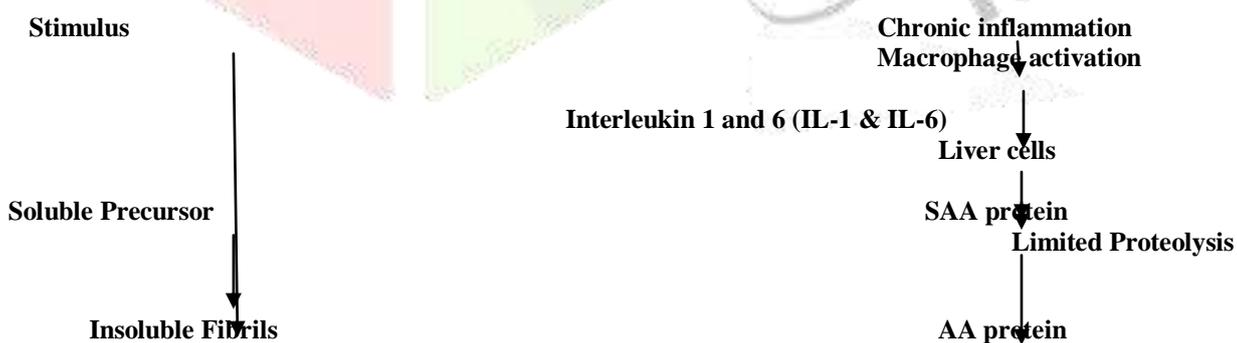
Naturopathy has always considered the above substances as morbid matters or toxins. Regular intake of refined & fermented foods and repeated or prolonged use of certain drugs can alter the permeability of the intestinal mucus membrane and thus resulting in the Leaky Gut Syndrome.

It is now clearly understood that broad spectrum antibiotics are the primary cause of Leaky Gut Syndrome. Antibiotics wipe out all the friendly gut bacteria that otherwise provide protection against fungi and amoebic infections, help the body break down complex foods, and synthesize vitamins such as B12 and biotin. Since this friendly bowel flora is killed off, the body now has no local defence against the parasites or fungi that are normally held in check. This then causes an inflammatory reaction leading to Leaky Gut Syndrome.

The consequences of Leaky Gut Syndrome are a variety of allergic and autoimmune conditions of the body. Due to the enlarged spaces or holes between the cells of the gut wall, larger than usual protein molecules are absorbed before they have a chance to be completely broken down. Therefore, the immune system begins treating the protein molecules as if they are foreign, invading substances which must be destroyed. This triggers production of antibodies against these otherwise harmless substances. These antibodies created by the leaky gut phenomenon against these antigens can get into various tissues and trigger an inflammatory reaction when the corresponding food is consumed or the microbe is encountered. Auto antibodies are thus created, and inflammation becomes chronic manifesting in any condition ranging from Rheumatoid Arthritis to Chronic Fatigue Syndrome.

In addition, it results in the nutritional deficiencies, recurrent infections as the bloodstream is constantly invaded by bacteria, fungi and parasites that, in the healthy state, would not penetrate the protective barrier of the gut. These microbes and their toxins, if present in large enough amounts, can overwhelm the liver's ability to detoxify.

Theory of Toxemia and Amyloidosis: It is a condition characterized by deposition of an abnormal proteinaceous substance known as *Amyloid* between cells in many tissues and organs of the body. Amyloid is a protein which can have different chemical compositions. The causes of the deposition in many cases is still not clear but it is believed that repeated or chronic inflammations leading to protracted breakdown of cells is the main cause of amyloidosis. Longstanding tissue destruction and inflammation leads to elevated levels of SAA (serum amyloid-associated protein) which is synthesized in liver cells under the influence of cytokines such as IL-6 and IL-1. Incomplete breakdown of SAA is believed to produce insoluble AA molecules responsible for Amyloidosis.



Probable Pathogenesis of Amyloidosis (Ref: Basic Pathology, Kumar-Kotrans-Robbins, 5th edition, P.no. 166)

Many naturopaths believe that amyloid molecules are forms of morbid matter only which are formed due to repeated or chronic inflammations. These inflammations can be due to pathogen or toxins entering the body due to faulty lifestyle habits.

Theory of Toxemia and Increased Serum Uric Acid levels:

This is a condition where Monosodium urate (MSU) crystals from supersaturated body fluids start precipitating in the body especially joints. It is characterized by increased serum uric acid levels. This condition is caused due to increased production of serum uric acid because of faulty purine metabolism or due to reduced uric acid excretion because of renal abnormality.

According to basic principles of naturopathy, any substance which is normally completely metabolized or excreted acts as a morbid matter or toxin if starts accumulating in the body. Thus, uric acid also acts as a toxin which should be eliminated. If this does not take place, it interferes with the normal functioning of the body and produces signs of ill health.

Theory of Toxemia and Hypersensitivity

Many naturopaths trace the root cause of hypersensitivity reactions to accumulation of toxins in the body as a result of faulty lifestyle and dietary habits. Toxin accumulation leading to abnormal composition of blood can induce hypersensitivity reactions in otherwise normal individuals. Such toxins mainly include environmental pollutants or endotoxins produced by pathogen already present in body.

Thus, it can be concluded that toxins are the primary cause of disease and not the germs. Nature cure has always believed in this theory. Therefore, it always advocates methods of promoting elimination in order to cure any disease.

“UNITY OF DISEASE AND UNITY OF CURE”

References:

- [1] Guyton A.C., Textbook of Medical Physiology, Eleventh edition, Elsevier Saunders Publications
- [2] Jindal Rakesh, Science of Natural life, Arogya Sewa Prakashan, Modinagar
- [3] Kumar Kotrans Robbins, Basic Pathology, 5th edition, W.B. Saunders Company
- [4] Lindlahr Henry, Philosophy and Practice of Nature Cure, Sat Sahitya Sahayogi Sangh, Hyderabad
- [5] Lindlahr Henry, Practice of Natural Therapeutics, Sat Sahitya Sahayogi Sangh, Hyderabad
- [6] Tilden J.H., Toxemia

