

On the Role of Emotion in the Pathogenesis and Clinical Treatment and Rehabilitation of Cancer

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Abstract

Based on the understanding of the causes of disease in the Yellow Emperor's Classic of Internal Medicine, the pathogenesis of disease is mainly divided into two aspects: internal injury and external sensation. However, the strength of the body's positive qi determines whether the disease is invaded by the six external sensations and therefore emphasizes the dominant role of internal causes in the pathogenesis. Cancer is a malignant disease caused by the dysfunction of the internal organs of the body. It is not caused by external evil, but by the abnormal internal growth of the body. By analysing the important influence of emotions in the process of cancer development, it is suggested that in the clinical treatment and rehabilitation of cancer, focusing on the regulation of emotions can help improve the internal environment of the patient's body as a whole and promote the recovery of cancer.

Keywords: emotion, cancer, morbidity, treatment, rehabilitation

1. The Way in Which Diseases Begin

Although clinical illnesses are complex, with many different types and symptoms, there are certain patterns that can be followed. In terms of etiology, the pathway to begin disease is through both external and internal injuries. Among all the causes of disease, the first one is emotional, i.e., internal injury, which damages the vital energy of the internal organs. When external evil attacks the body, it takes advantage of the "deficiency" and enters the body, i.e., when the body's vital energy is deficient, evil can only attack and enter the body. It can be seen that without the deficiency of the positive qi, the evil qi will not enter.

The human body is an organic whole, with the five viscera system as the core, connecting with six internal organs, by the meridians, muscles, skin, etc. to form layers of barrier contact into a whole. If the internal organs are full of vital essence and energy, the qi and blood run through the meridians, and enrich the muscles and guard the surface, they are less likely to be invaded by external evil. If a person is injured by emotions, the vital essence and energy of the internal organs is damaged, the flow of Qi and blood is impaired, and the positive Qi is unable to enrich the meridians, veins, muscles, and the surface of the body, when invaded by the six lewdnesses, the evil Qi enters from the outside and travels from the surface of the body through the meridians to the internal organs, thus forming the pathway for diseases to start. Therefore, the disease enters body through a certain pathway, penetrating deeper and deeper along the body's surface, muscles and meridians to form foci of disease.

Cancer is one of the hundreds of diseases, and its occurrence and evolution is in line with the rule of "the first of the hundred diseases and the three classifications". In the classics of Chinese medicine, the term "cancer" was not mentioned in the Nei Jing until the Song dynasty when the name "cancer" was first recorded. Similar to the characteristics of cancerous lesions, other names appear in the Nei Jing, such as "accumulation", "intestinal

tumour” and “stone obstruction”. The formation and pathogenesis of “accumulation” is discussed in the chapter “Ling Shu Jing—The Beginning of All Diseases”, where the formation of “accumulation” is based on the internal injury of emotion, and the internal injury of sorrow and anger leads to the reversal of qi, and the inhibition of yang qi in the meridians, resulting in the accumulation of yin, blood, cold and fluid. Lei Jing—Thirteen Volumes further explains, “This must be the case for many people with perverse emotions.” (Zhang Jiebin, 2016) It is suggested that people with perverse emotions are more prone to this syndrome.

2. Cancer Is the Evil of Diseases

Cancer is one of the malignant diseases among the hundred diseases in terms of its characteristics, evolution and degree of aggression to the human body. Its development is characterised by gradual growth, damage to the vital essence and energy of the internal organs of the body, destruction of the physiological functions, and dynamically rapid development. In terms of the progression of cancer, it is clinically characterized by increasing damage to the internal organs and qi and blood, and if prolonged, it may lead to the failure of the organism, depletion of the vital essence and energy and death.

Cancer has a strong toxic effect on the organism, and its disease is dangerous and difficult to cure. As the disease develops and the body’s positive energy is gradually lost, the cancer gradually invades and spreads to the surrounding areas, or spreads along the meridians, and new lesions will occur in other areas under suitable conditions. According to the pathways of disease transmission contained in the Nei Jing, it is clear that after the formation of cancer, the spread of evil qi can occur via the collaterals and the meridians, and then invade the internal organs and tissues.

Modern research has identified a number of external factors regarding cancer such as chemical, physical and biological factors. As far as chemical carcinogenic factors are concerned, more than a thousand chemicals are known to have different carcinogenic effects, such as polycyclic hydrocarbons, nitrosamines, etc. There are many types of chemical carcinogens, but chemical carcinogens can be effectively prevented by improving production processes, taking appropriate protective measures and strengthening the prevention and removal of moulds and toxins from foodstuffs, (Hong Meiling, 1992) etc. Physical carcinogenic factors are mainly related to ionising radiation and can be effectively prevented through health education and reliable protective measures for work exposed to radioactive substances. Biological carcinogenic factors are mainly related to viral infections, certain fungi and parasitic infections, which can also be prevented through hygiene protection to avoid infection. Thus, prevention of objective carcinogenic factors in the external environment can now be achieved through effective control. However, the occurrence of cancer despite the avoidance of the relevant external carcinogenic factors may indicate that external causes alone are not the major contributors to cancer. In addition to the role of external factors, there are internal factors that play a dominant role in the body. According to the Nei Jing, which describes the pathways through which all illnesses begin, the pathways through which internal illnesses develop in the human body are mainly due to internal injuries to the emotions. Modern medicine has conducted extensive research into the physiological and pathological changes that occur as a result of internal injuries and has revealed the pathological mechanisms of internal injuries from the perspectives of human neuroendocrine and immune functions.

3. The Influence of Emotions on Carcinogenesis

Up to now, with the advancement of science and technology, it has been discovered that some genes in biological cells have considerable homology with viral oncogenes that have cancerous properties and are closely related to cellular transformation and carcinogenesis. Therefore, such cellular genes are called cellular oncogenes, and this has led to the development of oncogene-related theories of carcinogenesis. Proto-oncogenes and oncogenes are present in the normal human body and are normal genes that maintain human development. The activity of the two is in dynamic balance and together they maintain the health of the body. Under normal physiological conditions, proto-oncogenes do not cause cancer but also have important physiological functions. Thus, the body produces thousands of cancer cells every day, but few of them become cancerous, profit from the body’s own defence mechanism. The process of cancer development can be divided into three major stages: initiation, development and evolution. The activation of a single oncogene often does not allow the cell to acquire all the necessary traits for cancer to develop, and it is the mutation of multiple oncogenes accompanied by the inactivation of cancer suppressor gene that can lead to cancer.

The human body is an organic whole. When the balance between growth and decay in the body is disrupted, the imbalance of internal environment becomes a key factor in the development of cancer. It can be recognised that the occurrence of cancer is also a natural phenomenon. When the internal environment of the human body becomes unregulated and the conditions suitable for its production are reached, the risk of cancer increases, and cancer tends to occur. Emotional stimulation can cause the body’s internal environment to become unstable and the autonomic nervous system to become disturbed, thus causing uncontrolled cell growth. It also affects the body’s endocrine system, altering the body’s endocrine secretion through the action of neurotransmitters and

disrupting the balance of the body's internal environment. In terms of immunity, the human body has the function of monitoring and stabilising the internal environment, but bad moods can suppress the immune function and prevent the immune system from detecting and destroying mutated cells in time. As we can see from the above, emotional trauma can damage the body's neuro-endocrine-immune network, causing a decrease in immune function, which can easily lead to cancer development.

The onset of cancer continues to affect the body's original internal environment through a series of mechanisms and behaviours that tend to establish an ecological environment suitable for the long-term survival, development, invasion and metastasis of cancer cells. Therefore, cancer is not just a localized lesion, but a comprehensive manifestation of the dysregulation of the body's internal environment. In other words, the dysregulation of the body's internal environment contributes to the appropriate conditions for the occurrence of cancer, and the occurrence of cancer will continue to aggravate the dysregulation of the body's internal environment, thus forming a vicious circle. In this way, a vicious circle is formed. It can also be deduced from the above discussion that when the body's environmental regulation is in balance and the conditions for the development of cancer are avoided, the purpose of preventing the occurrence and progression of cancer can be achieved.

4. The Role of Emotion on Clinical Treatment and Rehabilitation of Cancer

The seven emotions of joy, anger, sadness, contemplation, grief, and fright are the internal causes that tend to trigger internal injuries in the human body. These seven emotions lead to the dysfunction of the body's internal environment, causing damage to the entire internal environment and creating the right conditions for the development of cancer. The impact of cancer on the physiological mechanisms of the human body, coupled with the presence of adverse emotions, will accelerate the development of cancer. Based on the pathways and pathogenesis of cancer, it is clear that internal damage to the emotions is the internal cause, the imbalance in the activities of the body's internal organs and essence is the basis of the internal environment, and the formation and spread of cancer becomes the result. Therefore, in clinical treatment, the internal causes of the disease must be eliminated and the state of the body's internal environment must be improved in order to stop the development of cancer at its root and achieve effective recovery.

4.1 Clinical Treatment

The standardised treatment protocols adopted for cancer in modern clinical practice to some extent ignore the differences and the changing development of patients, and examine the problem less from a holistic perspective. (Guo T H, 2020) Often the damage caused to the human body by surgery, radiotherapy and chemotherapy is also a factor that aggravates the dysregulation of the internal environment of the human body. Therefore, clinical treatment needs to focus on the regulation of the patient's abnormal emotions and spirit, so as to improve the internal environment of the patient's organism as a whole and help the recovery of cancer.

In ancient Chinese medical texts, various types of cancer are named accordingly because of their different clinical characteristics. Different cancers have different sites of occurrence and different main clinical mechanisms, and the influence of emotions on different cancers is also different. Cancers that are closely related to the emotions are mostly related to inappropriate desire, anger and depression, and excessive thinking, and have their onset from the emotions. For cancers that are not so closely related to the emotions, complementary therapies can also be used to enhance clinical recovery.

The reason why cancer patients have negative emotional reactions and poor lifestyles is closely related to their cognitive patterns, outlook on life and values. The cognition can change their bad emotions and behaviours. Therefore, the treatment of the disease needs to arouse the person's own health consciousness, adjust his or her cognitive style, take advantage of the nature of people who hate death but enjoy life, and mobilise the person to participate actively in the recovery of the disease. Psychological interventions, musical relaxation, educational guidance, physical exercise and other treatment methods are used as appropriate to the patient's condition. The common methods used in traditional Chinese medicine, such as persuasion and enlightenment, transferring emotions, hinting and solving confusion, and following emotions and desires, are intended to inspire and induce patients and build their confidence in overcoming illness and evil. By bringing into play the positive role of the human emotions, and at the same time nourishing the body's positive energy as support, the overall state of the body's internal environment is improved, reversing the trend of disease progression and promoting cancer recovery.

In the treatment process, the patient is the main role, and the doctor plays a supporting role. When cancer occurs, it is difficult to achieve the desired therapeutic effect if drugs alone are used and the patient's emotional role in overcoming the disease is neglected. Even in the advanced stages of cancer, the miracle of recovery can often be achieved by stimulating one's motivation through good emotions. As mentioned above, the regression of cancer depends on the balance of the body's overall internal environment. If the cause of the disease is not removed, the internal organs of the overall internal environment will not be able to carry out their life energy activities

properly.

4.2 Prognosis and Rehabilitation

The prognosis and rehabilitation of cancer is different from that of other diseases, as it is far more difficult and is easily affected by mood swings. The mental burden of cancer is increased by the pain of surgery, radiotherapy and the high cost of medical treatment, which can lead to increased stimulation of poor emotional well-being and is therefore detrimental to the prognosis and rehabilitation of cancer patients. Studies have shown that patients with a firm diagnosis of cancer often have a poor prognosis despite early treatment, while those with a suspected tumour diagnosis have a relatively good prognosis; many patients have been clinically found to have experienced sudden emotional stimulation within the first 6-12 months of cancer recurrence. (Wu Chengjun, 2004)

After clinical treatment, although the cancer has been controlled to a certain extent, the homeostasis of the internal environment of the patient's body has not yet been re-established, and the activity of the internal organs and essence has not yet reached the state of health. Moreover, the fear of cancer recurrence and metastasis has caused a certain degree of psychological stress, which has a significant impact on the prognosis of cancer recovery. Emotional and psychological regulation can play a special role in the recovery of cancer that cannot be replaced by other therapies such as radiotherapy and medication. Through the regulation of emotion, the internal causes of the disease can be eliminated, the internal emotion can be harmonized, the causes of the disease can be eliminated, and the internal organs and vital energy can gradually return to a normal state of functioning, which can effectively prevent the recurrence or metastasis of cancer.

When one's spirit is kept in a tranquil and ethereal state, one will not be moved by external circumstances, life and social events, one will not have greedy and indulgent desires, and one's emotions and mind will be calm and peaceful. This is conducive to the recovery and prognosis of cancer.

In the Yellow Emperor's Classic of Internal Medicine, there are many kinds of emotional therapies, such as the method of shifting the essence and changing the qi, the method of winning over the emotion, the method of persuasion and guidance, the method of following the emotions and desires, and the method of suggestion, which can be applied to the recovery process of cancer to achieve good clinical recovery effects. For example, the method of shifting the essence and changing the qi refers to improving the patient's mental state by shifting the patient's attention to obsess over life events. According to the principle of the five elements, the five elements can be used to regulate one kind of emotion and correct another kind of excessive emotion, so as to adjust the qi flow in the internal organs. The method of persuasion and enlightenment means that the patient's condition and psychological state are addressed through the use of language in order to untie the knot, remove his or her concerns and psychological burden, and actively cooperate with the treatment. The method of obedience to desire is a way of resolving the emotional and psychological causes of the illness by satisfying the patient's physical and psychological requirements. The suggestive method is a subtle, indirect way of influencing the patient's emotional and psychological changes, helping to relieve the patient's doubts and thus achieve treatment. The use of emotional therapy varies from person to person, and is based on the individual's temperament, cognitive and ideological tendencies, and the root cause of the negative emotions, so that the ideal effect of emotional regulation in the rehabilitation phase can be achieved.

5. Conclusion

All diseases begin with internal injuries and external sensations, and internal injuries to the emotions are the intrinsic cause of the disease. Therefore, in the clinical treatment of cancer, we need to pay attention to the causes of internal injury to the emotions, promptly regulate the patient's negative emotions, eliminate the influence of internal causes. And at the same time, cultivate the righteous energy, regulate the internal environment as a whole, actively restore the balance of the physiological activities of the body's internal environment, avoid the internal conditions of cancer progression, and thus promote the change of cancer regression. In the process of recovery and prognosis, focusing on the influence of emotions on cancer and promoting the recovery of mental and physical health through emotion regulation can effectively avoid the risk of cancer recurrence and improve the recovery and prognosis of cancer.

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