# Clinical Study on Rheumatoid Arthritis Treated by Combination of Traditional Chinese and Western Medicine

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Abstract: Rheumatoid arthritis is a disease that is harmful to human health. After illness, it will affect the life and actions of patients for life, especially the human immune system and health, and it is almost irreparable. In recent decades, medical researchers and scholars from all over the world have carried out decades of research and exploration for this purpose, and have achieved great medical research results. The introduction of traditional Chinese medicine treatment on the basis of western medicine treatment can achieve the goal of efficient treatment of Chinese and western medicine, and this achievement has been confirmed by experiments. This paper discusses the whole process of treating rheumatoid arthritis with integrated traditional Chinese and western medicine, and will investigate and study the pathology of rheumatoid arthritis, analyze the characteristics of disease treatment, analyze the treatment theory of integrated traditional Chinese and western medicine, and finally put forward some treatment schemes.

#### 1. Introduction

At this stage, it is undoubtedly ideal to introduce Chinese and western medicine treatment. The disease can be treated by TCM conditioning and anti-inflammatory treatment of western medicine, so as to reduce the impact of the disease on patients' physical and mental health. Therefore, in the process of treatment, patients should actively participate in the treatment, actively cooperate with doctors for treatment, work and rest on time, exercise, enhance the body's immunity, pay attention to the body's nutrient intake, and at the same time make preparations for keeping warm, as stated in Neijing. In this way, inflammation can be better controlled, which is conducive to joint recovery, helping to reduce bone damage and improve the quality of life of patients. This paper will discuss and analyze from the perspective of traditional Chinese and western medicine theory. One is to explore the pathogenesis of rheumatoid arthritis; The second is to explore the observation and research process of clinical treatment of rheumatoid arthritis, and put forward a feasible treatment plan based on syndrome differentiation of traditional Chinese medicine and disease differentiation of western medicine to replace the original single treatment plan of traditional Chinese medicine and western medicine.

# 2. Overview of Rheumatoid Arthritis

Rheumatoid arthritis (RA) is a disease caused by autoimmune factors. At present, the cause of the disease has not been proved. The disease can occur at any age, but it frequently occurs in women of childbearing age, with middle-aged women as the main body. According to relevant data research, the incidence of the disease is 0.32%~0.36%, and it usually manifests as chronic, progressive and chronic arthritis. Systemic diseases characterized by inflammatory synovitis [1]. Rheumatoid arthritis is characterized by symmetrical swelling and pain of bilateral finger joints, wrist joints and small joints of the foot, which often causes inconvenience to patients' life and movement. When the disease worsens, it will lead to bone destruction and joint deformity, resulting in limited or even loss of joint function. It is a disease with high disability rate, often accompanied by physical fatigue and low fever symptoms, and morning stiffness is more than 1 hour or even 3 or 4 hours. It can also lead to the involvement of patients' extra-articular organs such as heart and lungs. Laboratory examination: high titer of serum rheumatoid factor was positive, anti-ccp

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antibody was positive, and inflammatory indexes such as ESR and C- reactive protein were increased. According to the literature, although the pathogenesis of rheumatoid arthritis has not been fully proved. However, researchers generally believe that the cause of the disease is closely related to physical infection or genetic factors and the decrease of sex hormones in the body. These factors affect the immune system and produce a large number of inflammatory factors. The onset of rheumatoid arthritis will cause inflammatory cell proliferation in synovium of joints, or a large number of inflammatory cell infiltration in stroma, vascular proliferation, vascular diseases, etc., and then erode periosteum and bone, leading to bone destruction. This disease is essentially a systemic autoimmune disease with synovitis as its basic pathological manifestation, and its duration is usually positively correlated with the severity of inflammation. When inflammatory cells invade extra-articular tissues, corresponding extra-articular manifestations will appear, and the most commonly affected organs are heart, lung and nervous system.

### 3. Rheumatoid Arthritis and Its Disease Classification and Joint Function Classification

### 3.1 Classification of Rheumatoid Arthritis

The stages of rheumatoid arthritis can be roughly classified into three categories. One is the early stage, in which synovitis is the main part of the patient's joints, but there is no cartilage damage, which is equivalent to the window period of the disease; Secondly, in the middle stage, it has exceeded the window period, synovitis still recurs, joint bone is destroyed, and there is no obvious extra-articular manifestation; The third is the late stage. During this period, the joint structure of patients is seriously damaged due to the continuous invasion of diseases, and the joint function is seriously limited. Some people can't take care of themselves, and often have heart, lung, nervous system and other target tube damage, but the symptoms of synovitis are relatively not obvious.

### 3.2 Joint Function Classification

Joint function can be divided into four levels, including: I, II, III and IV, including the following. Grade I, the joints and joints have not been damaged, so they can be kept in a relatively good state, and they can complete their own activities or engage in related tasks.

Grade II, the patient has symptoms of discomfort in the affected area, or limited activities in the joint area, such as moderate limitation, and can engage in all activities normally.

Grade III, the patients at this level are severely limited in joint parts, but they can still engage in certain production activities and can barely take care of themselves in life.

Grade IV, patients at this level have basically lost their basic mobility. At this time, patients need to rely on wheelchairs for a long time to live and move. Some patients can complete their daily activities, and their life is seriously limited. Some patients need to rely on wheelchairs to live.

## 4. Etiology and Pathogenesis of Rheumatoid Arthritis

# 4.1 Etiology and Pathogenesis Analysis of Rheumatoid Arthritis in Traditional Chinese Medicine

The pathogenesis of rheumatoid arthritis is complicated, and the theory of arthralgia in Su Wen says: "Wind, cold and dampness are mixed, and they are combined into arthralgia. The winner of the ethos is arthralgia, the winner of coldness is arthralgia, and the winner of dampness is arthralgia ".The external reason is the evil of wind, cold and dampness, and the internal reason is the lack of vital qi of yin and yang, qi and blood. The empirical manifestations are mostly wind-cold-dampness and rheumatic fever, and the deficiency syndromes are mostly deficiency of blood, deficiency of both qi and blood, and loss of liver and kidney. The nature of this disease is deficiency in essence and excess in substance, spleen deficiency in liver and kidney as the basis, and dampness stagnation and blood stasis as the standard. The basic pathogenesis of this disease is deficiency of the essence and body, deficiency of qi and blood, deficiency of liver and kidney, obstruction of veins by pathogenic wind, cold and dampness, and flowing into joints. If the arthralgia persists for a long

time, it can be confined to the zang-fu organs, resulting in damage to the liver, spleen and kidney, and subsequent loss of qi, blood, yin and yang of the zang-fu organs. The disease is located in bones, joints, tendons and muscles. At the beginning of the disease, exogenous pathogens invade, and most of them are pathogenic factors. Long-term illness with pathogenic factors remaining in the body can lead to deficiency of qi and blood and deficiency of liver and kidney, which can lead to the weakness of qi, blood, body fluid, phlegm obstruction or blood stasis. However, pathogenic factors such as wind, cold and dampness remain in meridian joints, which directly affects the movement of qi, blood and body fluid, and can also lead to the formation of phlegm and blood stasis, which can make joints swollen, stiff and deformed.

# 4.2 Etiology and Pathogenesis Analysis of Rheumatoid Arthritis in Western Medicine

Western medicine believes that the etiology of rheumatoid arthritis is mainly caused by environmental factors, genetic factors and immune disorders. First, environmental factors mean that the human body is in a humid environment for a long time, which leads to the decline of the body's immune function. Secondly, genetic factors usually refer to the influence of family factors on one's health, and the disease has a very significant familial comorbidity. According to the literature, the prevalence rate of rheumatoid arthritis in identical twins is over 30%, and that in fraternal twins is only 5%. Third, the body's immune disorder will also lead to the decline of patients' disease resistance and cause disease.

Rheumatoid arthritis often causes diseases due to synovitis, joint cavity effusion, microvessel hyperplasia and infiltration of a large number of inflammatory cells in interstitial layer. First, electron microscope shows that there are a large number of inflammatory cells in joint cavity fluid, most of which are neutrophils, and of course, there are also some T cells and dendritic cells. Secondly, synovitis, the inflammation will lead to the thickening of cell layers, which can be thickened from the original one to two layers to eight to ten layers of cells.

Rheumatoid arthritis is mostly caused by the increasing number of T cells, the decreasing number of B cells in joints, the decrease of antibodies, the increase of anti-collagen antibodies and the decrease of cytokines. Specifically, it is necessary to conduct sampling inspection according to the situation of different patients, explore the causes, put forward feasible treatment plans, and strengthen the intervention of the disease.

# 5. Treatment of Rheumatoid Arthritis with Combination of Traditional Chinese and Western Medicine

### 5.1 Early Treatment of Rheumatoid Arthritis

In this period, synovitis was the main joint of the patient, but there was no cartilage and bone destruction, and X-ray showed no bone destruction, which was determined as early stage. The clinical manifestations are mainly swelling and pain in the joints of limbs, especially in the small joints of limbs, and the morning stiffness is more than 1 hour. The symptoms of joint pain, pulse condition and whether the body has a fever are mainly observed to determine whether it belongs to wind-cold-dampness or rheumatic fever.

For wind-cold-dampness type, Bitongkang pills can be selected. The medicine is a water pill, which is mainly composed of cornu Cervi Degelatinatum, Radix Rehmanniae, Radix Rehmanniae Preparata, Semen Coicis, Notopterygii Rhizoma, Radix Angelicae Pubescentis, Herba Asari, etc., each bag is about 6g, and two tablets are taken each time, about three times a day; For rheumatic fever, Professor Fang Dingya's "Simiao Xiaobi Decoction" was used as the basis to treat it. At the same time, the dose remained unchanged after entering the group, and the treatment lasted for about 12 weeks. During this period, the treatment was supplemented by non-steroidal anti-inflammatory analgesic rheumatic fever, which could relieve the disease and reduce the pain symptoms. In addition, the treatment with Aconitum decoction can treat both the symptoms and root causes, and at the same time, it can also consolidate the disease. The treatment idea is to combine Chinese and western medicine, with Chinese medicine as the main and western medicine as the supplement.

### 5.2 Mid-Term Treatment of Rheumatoid Arthritis

Laboratory tests show that the titer of rheumatoid factor is mostly around 180, and the positive rate can reach 80%. Blood sedimentation accelerates and the concentration of C- reactive protein begins to increase. At this time, the positive rate can reach more than 70% or even higher. Serum immunoglobulin increased, especially IgG began to increase significantly, and complement C3 began to increase. Many patients have different degrees of anemia symptoms. X-ray examination of the affected parts of the patient's joints, such as bilateral hands, wrists, feet and other joint parts, if there are images of bone and joint destruction, it is determined as the middle stage. Rheumatoid arthritis in the middle stage has shown that the disease is in a worsening stage. At this time, adequate anti-rheumatic treatment should be carried out under the guidance of doctors to control inflammation, otherwise the disease can not be effectively controlled, and the joint damage will be irreversible. Synovitis and synovial hyperplasia are still the main pathological changes in this stage. Western medicine generally believes that rheumatoid arthritis is an inflammatory disease, so when treating it, anti-inflammatory and immunotherapy methods are often emphasized, and antirheumatic treatment is emphasized. Hydroxychloroquine, methotrexate, leflunomide and other immunosuppressants and non-steroidal anti-inflammatory drugs are often used, such as methotrexate tablets (10mg once a week after meals) and Voltaripine (25mg twice a day after meals). Syndrome differentiation of traditional Chinese medicine is still based on evidence, and it is still treated by wind-cold-dampness and rheumatic fever, and it is necessary to take into account the patient's personal physique and season.<sup>[2]</sup>Zhang Congzheng put forward the theory that "damp heat is the source of arthralgia syndrome, wind-cold-dampness is both, and three qi are harmonious and arthralgia" in Confucianism, emphasizing that damp heat is an important factor leading to arthralgia syndrome. Therefore, the quality of traditional Chinese medicine should pay attention to eliminating rheumatism in the body and reducing the symptoms of arthralgia caused by rheumatism, so as to play the role of conditioning mechanism, relieving illness and enhancing immunity. We can choose Dahuoluo Pill (Tongrentang), which has good effects of expelling wind and relieving pain, dredging blood and meridians, and has good control and treatment effects. Literature shows that with this treatment method, the treatment effect of the treatment group in the experiment reaches 90%.

# 5.3 Advanced Treatment of Rheumatoid Arthritis

In the diagnosis, the diagnosis can be combined with specific diagnostic criteria, including: first, the patient's morning stiffness is less than 1 hour every day and lasts for more than six weeks; Second, a number of different joints, such as: swelling of more than three joints; Third, the swelling of the proximal interphalangeal joint reached more than six weeks; Fourth, symmetrical joints appear larger swelling; The fifth subcutaneous rheumatoid nodule; Fifth, rheumatoid factor is positive, and the RF titer is above 180; Seventh, after X-ray diagnosis, it is confirmed that there is bone destruction in the finger joint, which can be determined as advanced [3].

At this stage, the condition is cold and hot, which is complicated. After the first two stages of disease evolution, the patient's body appears deficiency of Yin and Yang, qi and blood in different degrees. Therefore, it is necessary to strengthen the patient's TCM conditioning, mainly to regulate the liver, spleen and kidney, in order to correct the imbalance of Yin and Yang. We should also pay attention to the treatment of western medicine pathology in order to control inflammation, alleviate the development of the disease, avoid further damage to joints and target tubes, reduce the disability rate and improve the quality of life. Western medicine can choose immunosuppressants such as hydroxychloroquine, methotrexate, leflunomide and sulfasalazine, and can also be treated with tripterygium wilfordii polyglycoside and Zhengqingfengtongning tablets. Traditional Chinese medicine should take Duhuo Jisheng Decoction combined with Shiquan Dabu Decoction or Renshen Yangrong Pill to benefit liver and kidney and replenish qi and blood, so as to achieve the purpose of treating both the symptoms and root causes, and harmonizing the disease with the body.

In addition, the rehabilitation exercise of patients' joint function should be continuously enhanced. Rehabilitation therapy is conducive to maintaining or restoring limb function. After rehabilitation medical treatment, the purpose of relieving pain, relieving swelling, improving

dysfunction, preventing and correcting joint deformity can be achieved. For rehabilitation therapy, different methods can be adopted according to the pathological process and different stages of the patient, such as physical therapy, physical therapy, massage and self-massage, daily life movement training, application of auxiliary devices, support and wheelchair.

### 6. Conclusion

In real life, rheumatoid arthritis (RA) is very common, which often occurs in women of childbearing age. After getting sick, it will have a great impact on patients' daily life and actions. Because of the great harm of the disease, the impact is even more difficult to completely eliminate. Therefore, many patients will actively participate in treatment after getting sick. In this way, we can reduce the bad stimulation and reaction of the disease to our own health, especially to prevent joint bone destruction and joint deformity caused by the deterioration of the disease. Patients can use many different methods to treat diseases, such as Chinese medicine, western medicine and combination of Chinese and western medicine. Among them, the combination of Chinese and western medicine has achieved remarkable results, and it has achieved a good therapeutic effect in medical research, which is regarded as one of the best treatment methods and means for rheumatoid arthritis.

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