

Oral Chinese Medicine Combined with High Frequency Electrotome on T Cell Subsets in Condyloma Acuminatum Lesions under Optical Microscope

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Abstract: In recent years, the incidence rate of condyloma acuminatum in China has also increased year by year, ranking second in STD, followed by gonorrhoea. Condyloma acuminatum and genital cancer have a special relationship, so more and more people pay attention to it. At present, the treatment of condyloma acuminatum is based on clearing the wart, emphasizing the regulation of patient's immune function and active development of effective preventive vaccine. The purpose of this study is to prove that oral Chinese medicine combined with high frequency electrotome has clinical effect on condyloma acuminatum, and to explore the influence of this research method on T cell subsets in condyloma acuminatum lesions. In this study, 90 cases of anogenital Condyloma Acuminatum Patients Treated from June 2018 to October 2019 were selected as the research object, and three groups of control experiments were set up, which were the control group, the oral Chinese medicine treatment group and the high-frequency electrotome group. The results showed that after a month of treatment, the adverse symptoms of anorexia and fatigue were significantly improved, and the difference was statistically significant ($P < 0.05$). The most important factor affecting the recurrence of condyloma acuminatum was abnormal T cell subsets, accounting for 34%, followed by drinking, accounting for 23%, and the least influencing factor was staying up late, accounting for only 8%. After one month treatment, the ratio of CD4 + / CD8 + increased from 1.02 to 1.26, the ratio of oral Chinese medicine increased from 0.93 to 1.23, while the ratio of control group decreased from 0.82 to 0.68.

1. Introduction

1.1. Background and Significance

Condyloma acuminatum (CA) is a common sexually transmitted disease caused by human

papillomavirus (HPV), which mainly occurs in genitalia, perineum and anus. CA is one of the most common sexually transmitted diseases in Europe and America. At present, local physical therapy or drug therapy is mainly used, but local drugs have no lethal effect on HPV. Physical therapy only destroys the fibrous tissue and has no anti HPV effect. Therefore, the recurrence rate of CA is generally 40% - 60%. Recent studies have shown that sub-I clinical infection is the main cause of recurrence of CA, and is related to the abnormal immune function of patients. Patients with CA immune insufficiency, especially those with abnormal cellular immune function, are more likely to suffer from infection than HPV, and the recurrence rate will also be higher. The immune status of patients is an important factor affecting the incidence, development and outcome of AIDS. Therefore, the treatment of subclinical infection and the improvement of immune function will be the key to prevent the recurrence of CA.

1.2. Related Work

Condyloma acuminatum (CA) is a sexually transmitted disease with high recurrence rate caused by rapid replication of human papillomavirus (HPV) and subtle immune escape mechanism. Local CO₂ laser can remove wart accurately. 5-aminolevulinic acid (pdt-ala) photodynamic therapy is also an effective treatment for HPV infection site. Studies have shown that when combined with the use of carbon dioxide laser, photodynamic therapy will become a more effective method: Zhang tried to treat a series of condyloma acuminatum diseases such as cervix, urethra, urethra, vulva and so on. Local CO₂ laser combined with photodynamic therapy for Ca, after 3 courses of treatment, achieved complete curative effect. 6 cases were followed up for 6 months without recurrence, hpv-pcr detection from positive to negative [1].

HPV (HPV) is the focus of HPV typing. The correlation between HPV type and clinical features of Ca is rarely documented. Objective to investigate the relationship between human papillomavirus (HPV) typing and clinical features of ca. Polymerase chain reaction restriction fragment length polymorphism (PCR-RFLP) was used to classify HPV in 80 CA patients with complete clinical data. Among them, HPV6 and HPV11 single infection were the most common, accounting for 38.7% and 36.3% respectively. Multiple infections caused by HPV6, HPV11, HPV16, HPV18 and / or HPV31 accounted for the remaining 25%. Cong reported for the first time a case of intraanal HPV11 and HPV31 co infection in a colon cancer patient in China. Statistical analysis shows that multiple HPV infection makes a person prone to more warts, larger warts, longer course of disease and higher recurrence frequency [2].

Objective to investigate the clinical efficacy of high frequency electrocautery combined with 5% imiquimod cream in the treatment of condyloma acuminatum (CA) and its influence on T cell immune function and serum IL-10 level. Chen recruited 112 CA patients between January 2014 and January 2016. The patients were randomly divided into control group (n = 56) and observation group (n = 56). The control group was treated with high-frequency electrocautery combined with intramuscular injection of BCG polysaccharide nucleic acid, while the observation group was treated with high-frequency electrocautery combined with external application of 5% imiquimod cream. The course of treatment was 12 weeks in both groups, followed up for 6 months. The clinical efficacy of the two groups was compared [3].

1.3. Innovation

This study initially analyzed the immune function of patients with recurrent condyloma acuminatum. The content of serum immunoglobulin was detected to reflect the immune response of fungi. The results showed that the contents of IgG, IgA and IgM in serum of patients with condyloma acuminatum were lower than those of normal control group, and the serum IgM of

recurrent group was significantly lower than that of non-recurrent group. Humoral immune function has been suggested to be closely related to the pathogenesis and recurrence of this disease.

2. Based on the Effect of Oral Chinese Medicine Combined with High Frequency Electrotome on T Cell Subsets in Condyloma Acuminatum Lesions

2.1. Hpv Infection, Proliferation and the Pathogenesis of Condyloma Acuminatum

Human papillomavirus (HPV) is a double, circular, non-envelope DNA virus, which can only exist in human cells. More than 100 HPV subtypes have been identified by modern molecular biology technology, among which 6, 11, 16 and 18 are related to genital structure [4]. It has been reported that CA is caused by a variety of HPV co infection, 85% of Ca is associated with type 6 and type 11, while the high-risk type (type 16 and 18) has a greater correlation with cervical and vaginal tumors, such as squamous cell carcinoma in situ and Bowenoid papulosis. The pathogenicity of reproductive tract contamination is still unclear. It is generally believed that skin, mucosa and metaplasia epithelium are the main sensitive sites of HPV, especially when there are many virus carriers [5].

In sexual life, patients with condyloma acuminatum or human papillomavirus (HPV) infection inoculate the discarded epidermis or keratin fragments with virus particles to sensitive epithelial tears, genitalia and local small wounds of healthy people. Among keratin cells hidden in the basal layer, as skin replication enters the core, HPV-DNA replication synchronizes with human DNA of host cells. The division and proliferation of host cells are accompanied by infection and transmission of HPV virus, resulting in platelet proliferation, skin thickening, and finally tissue canceration [6]. There are two views on the process of human health after human papillomavirus infection: one is that basal cell proliferation is very active; the other is that basal cell proliferation is normal, but its maturation is delayed, skin cell maturation and keratinization are delayed, and the accumulation of cells is characterized by "proliferative" lesions.

2.2. Immunological Mechanism of Condyloma Acuminatum

In different stages of HPV infection, the immune function of the body will be abnormal, mainly manifested as abnormal cellular immune function. It is suggested that the best indicator of normal cellular immune function is to monitor T cells in peripheral blood and subsets. For many years, most researchers believe that when HPV invades human skin, the cellular immune response produced by the body is mainly caused by T lymphocytes, which are mostly played by cytokines, T cell subsets and antigen cells. The results showed that only by ensuring the balance between T lymphocytes and their subsets, can the defense function be brought into full play, and the monitoring and immune stability of the body can be achieved [7].

Under normal circumstances, the immune response of human body is usually based on the cytokines secreted by T cells to stimulate and regulate the level of immune response, so as to maintain the stability of the immune state of the body. Therefore, the changes of T lymphocyte function and subsets in peripheral blood often lead to different diseases. Cytokine and its balance play an important role in the body's response to virus invasion. HPV is mainly transmitted through sexual contact, because of the structure and metabolism of the virus itself, HPV infection is limited to human skin and mucous membrane, and does not enter the circulatory system at all, and virus antigen rarely contacts human body [8]. Therefore, immune cells cannot promote the human immune system to produce effective immune response. It is now believed that the imbalance of cellular immune function is closely related to its occurrence, prediction and recurrence.

The cellular immune function of patients with recurrent Ca was basically inhibited. HPV may

cause immune system escape by interfering with the normal immune response. Recent studies have shown that cellular immunity is limited to patients with recurrent Ca, and the occurrence, recurrence, cure and cancer are closely related to the immune function of the body [9]. As one of the most important cell groups in human cellular immunity, T cell subsets must ensure that the interaction between each subgroup is controlled within the normal range before normal immune control can be carried out. If the function and quantity of different lymphocyte subsets change, it will cause immune system dysfunction and a series of corresponding clinical events and pathological changes. In T cell subsets, CD3 can specifically recognize antigens and control the activation of T and B cells [10]. Helper T (th) cells (labeled with CD4) can produce cytokines such as interleukin-2 and tumor necrosis factor, activate macrophages, cause and stimulate antibody production. T suppressor cells (TS) (CD8 labeled) have cytotoxic and killing effects, which may have adverse regulatory effects on the stimulation of T cells and B lymphocytes. Another measure of cellular immune function is the ratio of CD4 + to CD8 +.

2.3. Current Situation of Condyloma Acuminatum in Traditional Chinese Medicine

Oral Chinese medicine is mainly used for clearing away heat and dampness, detoxification and turbidity, tonifying qi and strengthening body, nourishing children and tonifying kidney. At present, there are few literatures about the treatment of condyloma acuminatum only by oral Chinese medicine. Traditional Chinese medicine comprehensive treatment of condyloma acuminatum needs Decoction oral, the formula needs to use purslane, raw coix seed, wax gourd kernel, raw Astragalus membranaceus, fried *Atractylodes macrocephala*, *Radix Isatidis*, *Folium Isatidis*, beehive, *Smilax glabra*, Zicao, twice a day after decoction, the total cure rate was 65.9%. In the treatment of perianal giant condyloma acuminatum, *Lysimachia christinae*, *Carthamus tinctorius*, peach kernel, *Ligusticum chuanxiong* Hort., *Ophiopogon japonicus*, *Arnebia euchroma*, *Folium Isatidis*, oyster were used for the treatment of perianal giant condyloma acuminatum, and the results were all cured. Clinically, condyloma acuminatum was divided into three types: Damp heat flow, liver meridian fire toxin, qi stagnation and blood stasis.

Through modern medical research, the anti-inflammatory and bactericidal effects of most anti-virus and anti-cancer proliferating cells are mainly divided into heat clearing and detoxification drugs, heat clearing and dehumidification drugs, clearing heat and cooling blood, promoting blood circulation and removing blood stasis, with strong cytotoxic effect [11]. The corrosive effect on insects basically belongs to the compounds of anti-corrosion insecticides, and the effects of regulating immune system and anti-virus basically belong to tonic drugs.

The incidence rate and recurrence rate of CA are increasing, which has caused great harm to human life and health. According to the basic principle and pathogenesis of recurrent Ca, western medicine has not yet found an ideal drug and method for the treatment of recurrent ca. At present, there is little application of traditional Chinese medicine to study the prevention and treatment of recurrent condyloma acuminatum from the perspective of cellular immunology. On the basis of the treatment of condyloma acuminatum with Xiaoyou formula, it is necessary to further observe the clinical efficacy of Xiaoyou recipe in the treatment of recurrent condyloma acuminatum. In recent years, especially in the prevention and treatment of Ca recurrence, the treatment of recurrence of Xiaoyou recipe has been studied from the perspective of cells. The immune mechanism of condyloma acuminatum provides a more effective method for the treatment of recurrent Ca and provides new ideas and methods for the prevention and treatment of viral diseases.

2.4. Nursing Care of Condyloma Acuminatum Treated by High Frequency Electric Knife Cauterization

Because condyloma acuminatum is a special sexually transmitted disease, patients must bear a huge psychological burden at the same time. Therefore, how to carry out psychological nursing for patients with condyloma acuminatum is one of the hot spots in clinical research. On this basis, how to do a good job of preoperative preparation, intraoperative and postoperative nursing is an important means to further reduce the recurrence rate and complication rate of patients after operation, and the problems to be solved urgently [12]. At present, clinical health workers at home and abroad mainly focus on psychological, preoperative, high-frequency electrocoagulation treatment of acute fluid defect intraoperative and postoperative medical research.

At present, the relationship between doctors and nurses is relatively tense. To establish a good relationship between nurses and patients is the most important factor to ensure the clinical effect of psychological nursing. Contrary to other traditional diseases, patients with condyloma acuminatum must bear a huge psychological burden while suffering from the disease. Patients with condyloma acuminatum are usually accompanied with tension, anxiety, emotional excitement and other adverse emotions, and even fall into depression. Whether male or female, in the nursing process, should be based on different age groups of psychological state nursing and provide certain psychological counseling and guidance for patients. In the process of verbal communication, we should respect the confidentiality of patients and protect their self-esteem. We need to have a non-discriminatory and non-discriminatory attitude to make the patients feel safe and dependent, so as to improve the patients' condition and improve the degree of treatment cooperation.

For the female patients who are sick because of their husband's infection, most of them have psychological contradictions and can't accept them. They are dissatisfied with their husbands and even have suicidal thoughts. For such patients, while providing psychological support for patients, we must do a good job in ideological work and actively guide the treatment of their spouses. Compared with surgical operation, high-frequency electric knife cauterization has reduced to trauma, but we should follow the concept and attitude of humanistic care, and choose different anesthesia methods according to the severity of the disease, so that patients can receive minimal pain treatment. Due to the sense of shame brought by the disease, most patients hope to get the care and care of medical staff during the operation. Therefore, in the process of treatment, nursing staff should communicate with patients in terms of language, eyes, body and other aspects, and often ask the patient's feelings, which can quickly distract the attention of patients, to a certain extent, can reduce the intensity of patients, improve the coordination and tolerance of treatment. For special patients, such as pregnant women, we should continue to strengthen disease monitoring to ensure the safety of patients and fetuses. After treatment, we should further check the reproductive status of patients to avoid injury.

3. T Cell Subsets Influence Experiment

3.1. Research Object

Methods: 90 cases of anogenital Condyloma Acuminatum Patients Treated from June 2018 to October 2019 were selected as the research objects. The patients were randomly divided into oral treatment group, high frequency electric knife group and control group. There were 30 patients in the oral treatment group, 18 males and 12 females, with an average age of 31.2 years (range, 22-35 years); 30 patients in the high-frequency electrotome group (15 males and 15 females, with an average age of 38.6 years old) were in the high-frequency electrotome group; 30 patients (22 males and 8 females, aged 23-40 years, with an average age of 35.7 years) were in the control group.

Three groups of patients were clinically diagnosed as anal genital condyloma acuminatum, patients with age, gender, disease and other aspects of no significant difference, comparable.

3.2. Experimental Steps

Three groups of experimental objects were set up, including the control group, the traditional Chinese medicine oral treatment group and the high frequency electrotome group. The patients in the control group did not receive any treatment. The oral Chinese medicine group took Chinese medicine from the mouth according to the doctor's instructions before lunch and dinner every day. Guide patients to eat light, soft, viscous, rich in vitamins, low-fat and other nutrients, adequate calories, eat less meals. Avoid cold drinks, cellulose rich vegetables and spicy food; avoid tobacco, alcohol, milk and dairy products. In the high frequency electrotome group, the male patients were placed in the horizontal position, and the female patients in the bladder lithotomy position. The ultra-pulse CO₂ laser treatment machine was used for treatment. The current was set at 20mA, the wavelength was 8.5 μm, and the output power was 300VA. It was continuously adjustable, the spot diameter was 0.1mm, the distance between the knife head and the lesion was 0.3cm, and the scanning treatment was carried out in turn.

Methods: the skin defect tissue of CA patients and the control prepucce tissue in cross section were fixed with 10% formaldehyde solution, made into wax blocks, cut into 4 Tim long slices, and put them on the slide treated with poly-L-lysine. The CD4 and CD8 cells were stained in strict accordance with the instructions of S-P immunohistochemical Kit. Normal lymphoid tissue was used as positive control and PBS as negative control instead of antibody. The result is the Yellow cell membrane on the skin. At high magnification (X800), 6 visual fields were observed randomly, and the number of T lymphocyte subsets in skin lesions could be detected by immunohistochemistry.

3.3. Statistical Methods

Statistical analysis software package was used to analyze the exported data when the included studies had enough similarity, otherwise descriptive analysis was used. The measured data were expressed by relative risk and 97% confidence interval (CI). Continuous data were represented by weighted mean difference (MD) and 95% confidence interval (CI). Due to the different dimensions of each index in the evaluation index system, it is not appropriate to directly compare the differences. In order to eliminate the influence of different dimensions of each rating index, the variation coefficient of each index is used to measure the change degree of each index value. The coefficient of variation formula of each index is as follows:

$$V_i = \frac{\sigma_i}{\bar{x}_i} \quad (1)$$

In the above formula, V_i refers to the coefficient of variation of index i , which can also be regarded as the coefficient of standard deviation, σ_i refers to the standard deviation of index i , and \bar{x}_i is the average of index i . The weight of each index is as follows:

$$W_i = \frac{V_i}{\sum_{i=1}^n V_i} \quad (2)$$

4. Analysis of T Cell Subsets

4.1. Comparison of Symptoms between the Two Groups before and After Treatment

After about a month of treatment, the number of patients with symptoms in the control group and the oral Chinese medicine group changed after treatment, and the symptoms of the two groups were alleviated. Compared with the degree and number of patients in the two groups, the number of patients with symptoms disappeared and the number of patients with symptoms in the treatment group increased more significantly, indicating that Chinese medicine can improve the clinical symptoms of patients with condyloma acuminatum to a certain extent. However, in the treatment of condyloma acuminatum, oral Chinese medicine combined with high frequency electrotherapy can improve the symptoms of patients more obviously, as shown in Table 1.

Table 1. Symptoms before and after treatment in two groups

Symptom	Treatment group			Control group			P
	Disappear	Ease	Invalid	Disappear	Ease	Invalid	
Nausea and vomiting	10	8	12	11	9	10	>0.05
Tired and weak	18	6	6	10	8	12	<0.05
Lose one's appetite	11	7	12	5	16	9	<0.05
Heavy limbs	10	11	9	7	12	11	>0.05

The experiment was designed to study four symptoms of patients: nausea and vomiting, fatigue, loss of appetite and heavy limbs. It can be seen from the table that after a period of treatment, there is no significant difference between the experimental group and the control group in front of the two symptoms of nausea and vomiting and limb heaviness. However, the adverse symptoms of anorexia and fatigue were significantly improved, and the difference was statistically significant ($P < 0.05$).

4.2. Peripheral Blood T Lymphocyte Subsets

Lymphocyte is the most important cell group in human cellular immune system. In normal people, T lymphocytes of each subgroup interact to maintain a specific balance and ensure normal immune function. The abnormal number and function of lymphocytes in different subpopulations may lead to immune system dysfunction and a series of pathological changes. There is a lot of evidence that the occurrence, reversion or persistence of CA is affected by immune function. Patients with immune deficiency, especially those with abnormal cellular immune function, are vulnerable to HPV infection. The incidence rate and recurrence rate of immunocompromised people, such as kidney transplantation, diabetes, malignancy, glucocorticoid or other immunosuppressive agents and human immunodeficiency virus (HIV), are all increased, which can damage development rapidly, and easily form giant CA.

As shown in Figure 1, after staining of normal foreskin tissue sections, a small to moderate number of positive lymphocytes were found in the superficial layer of dermis in 19 cases, and no positive cells were found in the other 11 cases. Compared with the normal control, moderate to large numbers of lymphocytes with brownish yellow membrane were found in the superficial and middle dermis of primary CA and recurrent CA. the ratio of CD4 + / CD8 + in recurrent CA Group was significantly lower than that in primary CA Group.

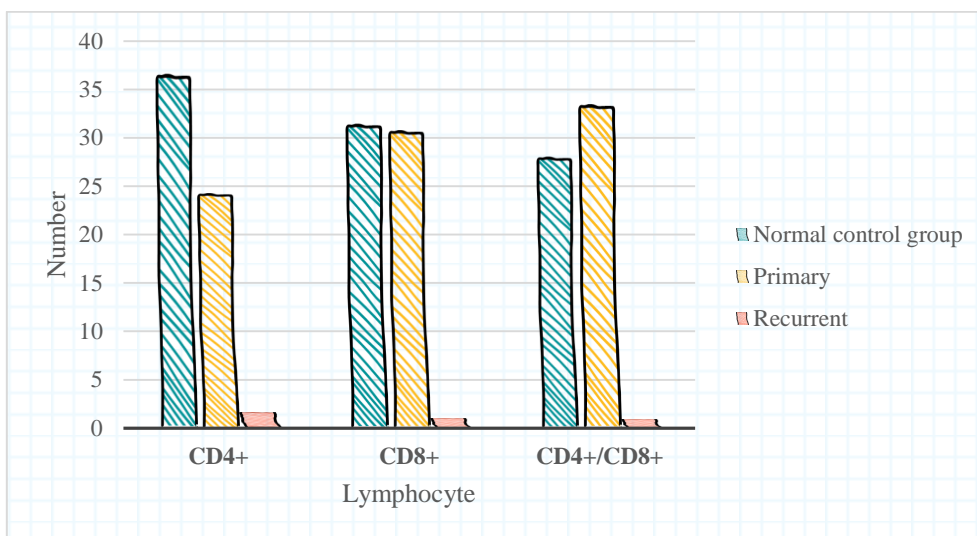


Figure 1. T lymphocyte subsets in peripheral blood

4.3. T Lymphocyte Subsets in Skin Lesions

The ratio of CD4 + lymphocyte to CD8 + lymphocyte is an important index to measure cellular immune function. In this study, T lymphocyte subsets were detected in 30 CA patients using floating controls. The results showed that the ratio of CD4 + T lymphocytes decreased and the ratio of CD8 + lymphocytes increased in patients with primary Ca and recurrent ca. The ratio of CD4 + / CD8 + in the two groups was significantly lower than that in the normal control group, suggesting that the occurrence of Ca is indeed related to the whole body cellular immune function. The changes of T lymphocyte subsets in peripheral blood of CA patients may be due to the influence of HPV infection on immune function, which leads to the decrease of CD4 + lymphocytes, the decrease of cytokines such as interleukin and interferon, the decrease of natural killer cells (NK), activity and cellular immune function, as shown in Figure 2.

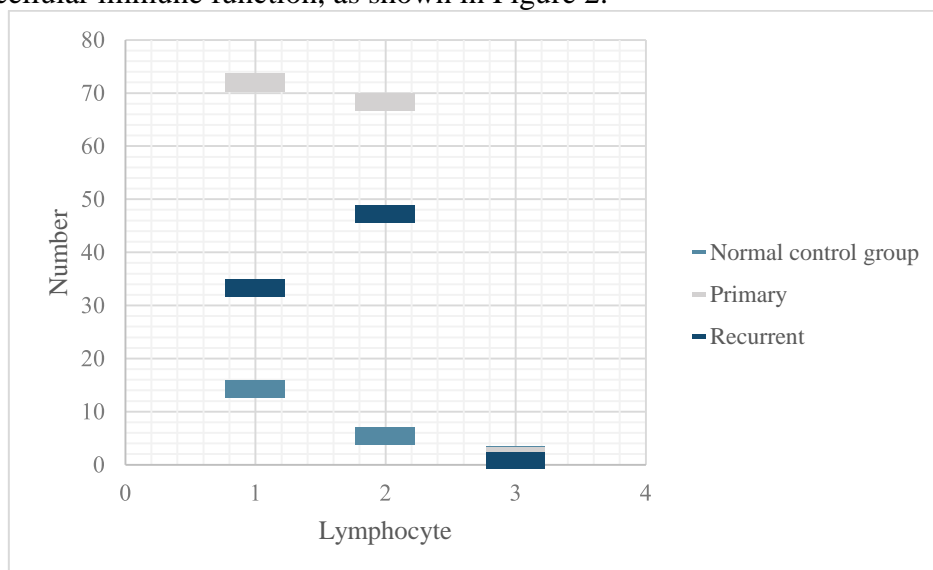


Figure 2. T lymphocyte subsets in skin lesions

The local skin lesions of 30 patients were detected. It was found that CD4 + and CD8 + T cells

were increased in epidermis and dermis, especially CD8 + T cells, suggesting that the local cellular immunity of patients with condyloma acuminatum has been eliminated. The changes of T lymphocyte subsets in the lesions of CA patients showed that the occurrence and reversion of Ca were related to local cellular immunity. Therefore, local treatment of CA patients may have a positive effect, and its effect is even better than systemic treatment. Therefore, enhancing the local cellular immune function of patients can reduce the recurrence.

4.4. Comparison of Treatment Effect

The difficulty in the treatment of condyloma acuminatum is to solve the problem of recurrence. The main cause of recurrence did not solve subclinical infection and latent infection. Of course, this is also closely related to the low cellular immune function of the human body. Current studies have shown that the activation and reversion of HPV and the outcome of treatment largely depend on the patient's immune function, especially the patient's cellular immune function. Human papillomavirus (HPV) may escape from immune surveillance, which is the key reason for the high recurrence rate of condyloma acuminatum. The experimental results are shown in Figure 3.

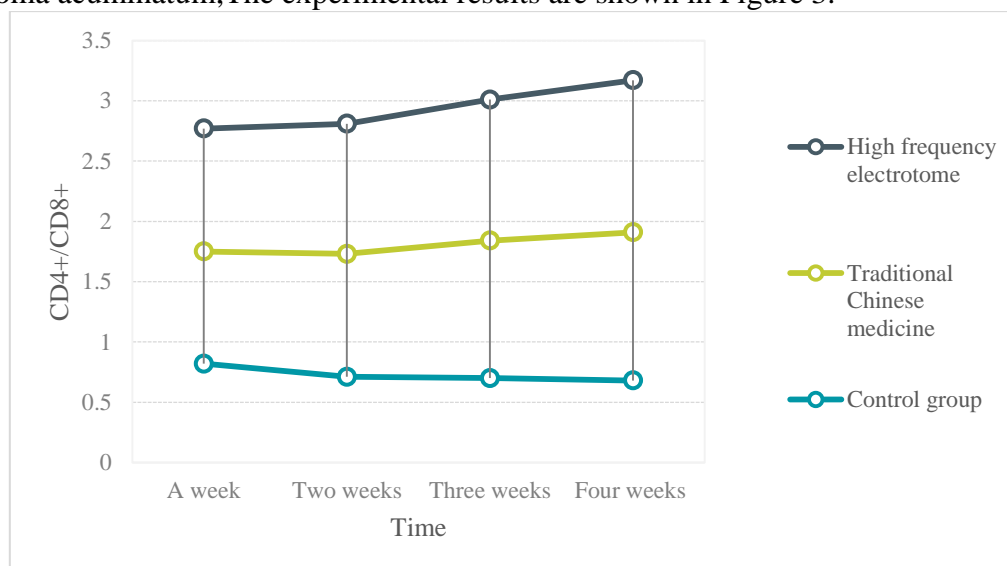


Figure 3. Comparison of treatment effect

As can be seen from the figure, because the control group did not receive treatment, T cell subsets showed a trend of attenuation, and the disease was gradually serious. However, the patients who received high-frequency electrotome and oral treatment of traditional Chinese medicine got certain control, T cell subsets increased, and the ratio of CD4 + / CD8 + increased. The ratio of T cell subsets increased from 1.02 to 1.26, the ratio of oral Chinese medicine increased from 0.93 to 1.23, while that of control group decreased from 0.82 to 0.68. T cell subsets showed that the therapeutic effect of oral Chinese medicine group was not as good as that of frequency electric knife, but there was no significant difference between the two groups.

4.5. Factors Influencing Recurrence of Condyloma Acuminatum

The univariate analysis showed that the two groups were compared in staying up late, education level, smoking, drinking and other aspects to explore the factors influencing the recurrence of condyloma acuminatum. Some studies have different views from this paper, and think that smoking is one of the independent risk factors of condyloma acuminatum recurrence. In other words, the

greater the smoking history, the greater the daily smoking volume and the higher the recurrence rate. A related study suggests that smoking can change DNA of damaged epithelial cells and increase HPV sensitivity. It is also mentioned in the literature that the recurrence rate of condyloma acuminatum is significantly positively correlated with the amount of alcohol consumed, but the real reason may be that drinking alcohol can lead to high-risk sexual behaviors, such as not using condoms and increasing new partners, which will increase the possibility of exposure to condyloma acuminatum. Studies have shown that staying up late may also lead to recurrence of condyloma acuminatum, which may be related to the decline of immune function of patients staying up late, thus inhibiting the function of T lymphocytes, and ultimately prolonging the time of HPV infection. The experimental results are shown in Figure 4.

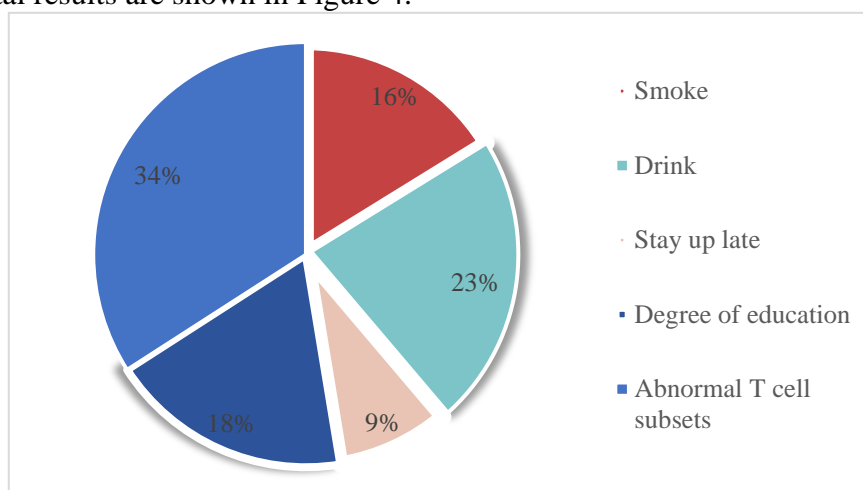


Figure 4. Recurrence factors of condyloma acuminatum

The second was the abnormal T cell group, which accounted for the smallest proportion of patients with condyloma acuminatum. It is worth noting that some scholars believe that the recurrence rate of people with low education level is higher, which may be due to the lack of health knowledge and the low acceptance rate of health education. However, this study found that education level did not affect the recurrence of condyloma acuminatum, which may be related to the failure of timely rest, alcohol and smoking cessation, social and psychological stress.

5. Conclusion

High frequency electrotome uses high temperature produced by argon ion to cut off and stop bleeding the target tissue. The flow of argon ion will transfer the energy released by high frequency current to the surface of target tissue, so as to achieve the purpose of coagulation and necrosis of lesions. In addition, the argon ion is ionized by the high-frequency electric knife according to the high-frequency current, and the argon ion arc with beam shape is generated. This can not only effectively reduce the temperature of the wound surface, but also avoid the oxidation or carbonization of the damaged tissue. This is a non-contact electrical coagulation technology, so it ensures the safety of high-frequency electrotome removal treatment. Patients with sharp wet defects treated by high-frequency electric cauterization therapy will be given comprehensive nursing care at the same time of treatment, taking treatment measures to deal with various patients, paying attention to psychological nursing of patients, strengthening publicity and education, and reducing mental pressure of patients, which is the purpose of continuous exploration and research of clinical nurses.

Radix Isatidis has the function of clearing away heat, detoxification and antiviral. It can resist the reproduction of HPV in the genital tract. It can promote the removal of condyloma acuminatum

vegetations by cooperating with other drugs. *Cyperus rotundus* and *Equisetum* have smooth and stable effects. Because CA occurs in perineum, warm and humid place. Therefore, add *Sophora flavescens*, *Smilax glabra* and *Rhizoma Dioscoreae* to clear away heat and remove dampness. The whole prescription can eliminate verruca and improve local environment. This study confirmed that the prevention of condyloma acuminatum should be carried out from the following aspects: get rid of bad habits, such as avoiding excessive staying up late, drinking and other bad habits. The men with excessive foreskin need to pay attention to keep clean, strengthen health education, promote safe sex, avoid sexual behavior of multiple sexual partners, reduce non marital sexual intercourse, and use appropriate condoms during sexual intercourse. The patients were informed of the possibility of high recurrence of condyloma acuminatum, prevention of indirect infection, establishment of correct sexual concept, self-care, improve self-protection awareness, avoid re infection. During the treatment, it is of great significance to do a good job of diet guidance for patients with postoperative rapid recovery. Encourage patients to eat less and more meals, and eat more high protein, high vitamin and other nutrients rich and balanced food, avoid excessive intake of high fat, high calorie substances, which is conducive to greatly improve the body immunity of patients.

In this study, T lymphocyte subsets in skin lesions and peripheral blood of CA patients were detected to further understand the systemic and local changes, observe the cellular immune function of CA patients, and explore its influence on the occurrence, development, regression and reversion of ca. The detection of T lymphocyte subsets in patients with condyloma acuminatum can change the treatment plan for different types of diseases in the process of treatment, carry out immunosuppressive treatment, improve the curative effect and control the recurrence. Therefore, the detection of T lymphocyte subsets has high clinical value in patients with condyloma acuminatum, which is beneficial to monitoring the recurrence of the disease and the effect of immunosuppressive therapy, which is worthy of clinical application.

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Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Conflict of Interest

The author states that this article has no conflict of interest.

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