

## Study Based On The Clinical Effect Of Itraconazole Treatment Of Candidal Vaginitis

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**Keywords:** Clotrimazole suppository; Itraconazole; Candidal vaginitis; Effective treatment with medication; Time of symptom disappearance

**Abstract: Objectives:** The study analyzed the clinical effect of itraconazole in the treatment of candidal vaginitis. **Methods:** From February 2019 to February 2020, 110 cases of candidal vaginitis admitted to our hospital were taken as the research object, and the patients were grouped according to the odd-even number method. The control group was treated with clotrimazole suppository alone, and the observation group was combined after treatment with itraconazole, the corresponding indexes were obtained and compared at the end of the two groups. **Results:** The effective rate of medication treatment in the observation group was 98.2% greater than that in the control group, 81.8%, which was statistically significant ( $P < 0.05$ ). The pain, itching, vaginal discharge, and vaginal erosion symptoms in the observation group were all shorter than those in the control group ( $P < 0.05$ ). Adverse reactions occurred during treatment in both groups, but the adverse reactions were mild and the patients were tolerable without symptomatic treatment. **Conclusion:** Based on the treatment of candida vaginitis with clotrimazole suppository, combined with itraconazole treatment, it can effectively improve the clinical treatment efficiency of patients, accelerate the disappearance of clinical symptoms of patients, and the safety of medication is higher, and it worth in clinical application.

Candida vaginitis is a clinically common gynecological disease, and it is also a common one among many kinds of vaginitis. Candida polyphonic infection induces diseases, causing patients to have vaginal itching, abnormal increase in leucorrhea, pain in the perineum [1]. Clinical research [2] pointed out that the occurrence of candidal vaginitis is closely related to patients' application of glucocorticoids, sexual behavior, and the widespread use of antibiotic drugs. After the occurrence of the disease, if the ideal drug is not selected in time for effective treatment, even if the short-term effect is significant, it is easy to relapse after stopping the drug [3]. Therefore, how to effectively treat candidal vaginitis is also one of the main research topics in the field of gynecology. In recent years, there have been an increasing number of studies on itraconazole in the treatment of candidal vaginitis, and different research literatures have different views. Based on this, this study mainly compares the effects of different methods of treatment of candidal vaginitis, the reports are as follows.

### 1. Materials and methods

#### 1.1 Clinical Data

From February 2019 to February 2020, 110 cases of candidal vaginitis admitted to our hospital were taken as the research object, and the patients were grouped according to the odd-even method, 55 cases in each group. The 55 patients in the observation group ranged in age from 22 to 45 years old, with a mean value of  $(33.65 \pm 4.12)$  years old; the disease duration was 7d-16 months, with a mean value of  $(8.02 \pm 4.38)$  months. The age range of 55 patients in the control group was 21-45 years old, with an average value of  $(33.46 \pm 4.18)$  years; the disease duration was 7d-17 months, with an average value of  $(8.25 \pm 4.45)$  months. Comparing the baseline data of the two groups of patients, there is no significant difference ( $P > 0.05$ ), and the data can be compared.

Inclusion criteria: (1) This study was reported to the medical ethics committee of our hospital for review and approval; (2) All patients included in this study met the diagnostic criteria for candidal vaginitis [4]; (3) All patients had varying degrees of pudendal Pain, pruritus pruritus, vaginal secretions, vaginal erosion symptoms; (4) The patients have clear consciousness and normal cognitive function, and can follow the doctor's instructions to complete the medication course; (5) The patients are informed of the clinical research and voluntarily participate in the research.

Exclusion criteria: (1) Patients with other gynecological diseases; (2) Patients with drug allergies in this study; (3) Patients with major diseases such as liver and kidney dysfunction, malignant tumors; (4) Incomplete clinical data or withdrawal from the study patient.

## 1.2 Method

The control group was treated with clotrimazole suppository alone (manufacturing company: Shanghai Modern Pharmaceutical Co., Ltd. Approval number: National Pharmaceutical Standard H31020396 drug specifications: 0.15g\*10 pieces), medication 3 times a day, empty the bladder and clean the vagina, And then put the drug into the vagina, 1 capsule at a time, for 3 months.

The observation group was treated with itraconazole (manufacturing company: Xi'an Janssen Pharmaceutical Co., Ltd. Approval number: National Pharmaceutical Standard H20020367, drug specifications: 100mg\*4 capsules). The clotrimazole suppository was used in the same way as the control group. , Take it after a meal, twice a day, and one capsule at a time, for 3 months.

## 1.3 Observation indicators

The medication treatment of the two groups of patients is effective, and the criteria for curative effect [5] are as follows, markedly effective: after the patient completes the course of treatment, symptoms such as vaginal itching and vaginal pain completely disappear, vaginal secretions are normal, fungal examination shows negative, and the drug is stopped There was no recurrence within a month. Effective: After the patient completed the course of treatment, symptoms such as vaginal itching and vaginal pain were significantly relieved, the odor of vaginal secretions was significantly reduced, and the fungal test showed positive. Invalid: After the patient completed the course of treatment, there was no obvious change in symptoms such as vaginal itching and genital pain, the smell of vaginal secretions did not improve, and the fungal examination showed positive.

(1) The time when the symptoms of the two groups disappeared. The symptoms were: pain, itching, vaginal discharge, and vaginal erosion.

## 1.4 Statistical methods

Thne SPSS 22.0 statistical software was used to analyze the data. The t-test was used for the effectiveness of drug treatment. The X<sup>2</sup> test was used to detect the clinical symptom disappearance time. P<0.05 was considered statistically significant.

## 2. Results

### 2.1 Compare the Effectiveness of Patients' Medication

The effective rate of medication treatment in the observation group was 98.2% greater than that in the control group, 81.8%, which was statistically significant (P<0.05). See Table 1 for details.

**Table 1.** Comparison of the effectiveness of medication treatment of patients (n/%)

Group	Number of cases	Marked effect	effective	invalid	Efficient
Observation group	55	30	24	1	54(98.2%)
Control group	55	22	23	10	45(81.8%)
X <sup>2</sup> Value	-	-	-	-	13.089
P Value	-	-	-	-	0.01

## 2.2 Compare the Time When the Patient's Symptoms Disappear

The pain, itching, vaginal discharge, and vaginal erosion symptoms in the observation group were all shorter than those in the control group ( $P < 0.05$ ). See Table 2 for details.

**Table 2.** Comparison of symptoms disappearing time (d)

Groups	No of cases	Discomfort	Itching	Vaginal discharge	Vaginal erosion
Observation group	55	5.5±1.2	5.7±1.2	6.1±0.7	9.2±0.8
Control group	55	7.6±1.6	7.9±1.7	8.0±1.0	12.4±1.8
T Value	-	11.094	9.287	5.446	7.265
P Value	-	0.01	0.01	0.01	0.01

## 3. Discussion

Candida vaginitis occurs mostly in women of childbearing age and pregnant women. The cause of the patient's morbidity and the decline of the patient's local body defense function cause bacteria to invade the genitals, causing vaginal inflammation and threatening women's health. Candida albicans is an opportunistic pathogen and a long-lived flora that can effectively maintain the stability of the vaginal environment and the cleanliness of the vagina. However, due to the increase in social pressure and changes in physiological functions, women's local immunity has declined, ovarian defense function has gradually declined, estrogen has been obviously lost, the glycogen content of surface cells has gradually decreased, and the pH of the solution in the vagina has gradually increased, which has led The outer layer of the vaginal mucosa gradually shrinks and thins, causing Candida infection and causing gynecological diseases [6].

There are many clinical treatments for candidal vaginitis, such as ozone combined drug therapy, drug combination, vaginal flushing and so on. However, it can be seen from the actual application situation that the frequency of drug treatment for candidal vaginitis is the highest. Clotrimazole suppositories are broad-spectrum antifungal drugs commonly used in clinics and have powerful antibacterial effects. It is used for the treatment of candidal vaginitis. It is placed deep in the patient's vagina, which can effectively inhibit the effective synthesis of candida cell membrane in the vagina, can affect the metabolism of candida, and then achieve the ideal sterilization effect. Modern pharmaceutical research has shown that, compared with oral administration, clotrimazole suppository is more effective for topical application. Oral medication, although it can effectively treat a variety of fungal infectious diseases, but because the drug itself affects the antibacterial and bacteriostatic effects by affecting the permeability of fungal cell membranes, oral medication can cause certain adverse effects on the patient's gastrointestinal tract and liver It is clinically believed that clotrimazole suppository is more suitable as a topical drug, which can be directly absorbed by the site of the lesion and can effectively treat candidal vaginitis. However, clinical studies [7] found that the single application of clotrimazole suppository compared with fluconazole single use and itraconazole single use, there was no significant difference in treatment effect between the three groups, and the overall efficacy was about 90%. . Some research literature [8] pointed out that compared with clotrimazole suppository single medication, clotrimazole suppository combined with itraconazole can effectively treat candidal vaginitis, and the medication efficiency is more significant (100% vs 86.7%).

Itraconazole is a triazole broad-spectrum antifungal drug and a synthetic drug. It has a relatively ideal effect on a variety of fungi, such as Candida, dermatophytes, and Aspergillus. Itraconazole itself is highly fat-soluble, and the drug concentration in the skin is higher than that in blood. However, through oral administration, the actual drug concentration in the patient's vagina can be maintained for a relatively long period of time, which can ensure that the drug will function in the vagina for a long time and achieve a more ideal therapeutic effect. In addition, colleagues who invade the vaginal mucosa of the patient can also invade the human intestine and oral mucosa, and then form potential lesions, which is also the main reason for the relapse of the disease after the

patient stops the drug. Therefore, although vaginal medication alone has a certain effect, it is difficult to reduce the recurrence rate after drug withdrawal [9]. Modern pharmacology believes that itraconazole has high affinity. After oral administration, it can effectively inhibit the synthesis of ergosterol in fungal cells, and can effectively kill fungi, and the drug concentration of itraconazole capsules is higher. Oral medication can prompt the drug to act in the superficial vagina and deep vagina as soon as possible [10].

It can be seen from the results of this study that the results of this study partially overlap with the above research points. The results of this study show that the effective rate of medication treatment in the observation group (combined with itraconazole) is 98.2% greater than that in the control group (clotrimazole alone) Suppository) 81.8%; the pain, itching, vaginal discharge, and vaginal erosion symptoms of the observation group disappeared shorter than the control group; adverse reactions occurred during treatment in both groups, but the adverse reactions were mild and the patient could tolerate it without Treat symptomatically and disappear spontaneously after stopping the medicine.

It can be seen from the above analysis that the candida vaginitis is treated with itraconazole, which can achieve the ideal therapeutic effect, and can also promote the clinical symptoms of patients to disappear as soon as possible.

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