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Clinical Efficacy and Prognosis of Budesonide Nasal Spray in the Treatment of Allergic Rhinitis

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Abstract: To explore the clinical efficacy of budesonide nasal spray in the treatment of allergic rhinitis. Methods: 100 patients with allergic rhinitis who received treatment in our hospital from January 2022 to January 2023 were selected as the study subjects. Patients were randomly divided into two groups, a control group and an experimental group, with 50 patients in each group. Both groups of patients require treatment with loratadine. On this basis, patients in the experimental group were more likely to use budesonide nasal spray than patients in the control group. Observe the efficacy and adverse reactions of the two groups of patients. Results: The treatment effect and recurrence rate of rhinitis in the experimental group were better than those in the control group, and the treatment effect was good. The recurrence rate of patients was also decreasing. There was no significant difference in adverse reactions between the two groups (P>0.05). Conclusion The experimental group of budesonide nasal spray has good efficacy and prognosis in the treatment of allergic rhinitis, with safety assurance and ideal application effect, which is worthy of clinical promotion and application.

Keywords: Allergic Rhinitis; Budesonide Nasal Spray; Therapeutic Efficacy; Prognosis; Loratadine

1. Data and Methods

1.1 General information of the experimental group

During the period from experimental group 2022, experimental group year, experimental group 1, experimental group month, to January 2023, 100 patients with allergic rhinitis in the experimental group who came to our hospital for treatment were randomly divided into experimental group and control group, with 50 patients in each group. After comparing the basic data of patients in the two experimental groups, there was no significant difference, which can be compared (P experimental group>experimental group 0.05).

1.2 Inclusion and Exclusion Criteria

Inclusion criteria: The patient was identified as an allergic rhinitis patient after examination, and the patient was over 18 years old. The patient's disease cycle is more than 1 year, and before coming to our hospital for treatment, the patient has not received glucocorticoids, antihistamines, or other related treatment within the shortest three months. Personnel participating in the experiment should undergo blood routine tests and liver and kidney function tests to determine that the patient's organs do not have pathological changes. Before participating in the experiment, all patients and their families were informed and signed an informed consent form. Exclusion criteria: The patient was not tested for allergic rhinitis. Testing is required for the drugs used, and non drug resistant patients cannot participate in the experiment. Patients with nasal polyps, sinusitis, and bronchial asthma cannot participate in the experiment. Patients with mental and psychological abnormalities cannot participate, and patients during pregnancy and lactation are excluded from participating in the experiment. Patients with malignant tumors and a history of allergy to some drugs, who have been using other drugs for a long time, and patients with chronic diseases cannot participate in the experimental study.

1.3 Method

The included patients were first given symptomatic treatment such as spasmolysis, cough relief, and asthma relief; Antibiotic treatment is required for patients with infection. Both groups of patients were given oral treatment with loratadine (Hainan Xinshitong Pharmaceutical Co., Ltd., Guoyao Zhunzi Experimental Group H20041886). On the basis of this, patients in the experimental group were given budesonide

nasal spray (Swedish experimental group McNeil experimental group Sweden experimental group AB, Guoyao Zhunzi experimental group J20180024), Daily experimental group 2 experimental groups and each side of nasal spray experimental group 64 ug/experimental group times. Both groups of patients were continuously treated for 4 weeks in the experimental group. During the implementation of treatment, patients in both experimental groups were strictly prohibited from eating more greasy foods, and more attention should be paid to keeping warm and avoiding various allergens.

1.4 Observations of the experimental group

(1) Treatment effectiveness: It is divided into significant, effective, and ineffective. Significant indicates that the patient's clinical symptoms completely disappear after treatment, and there is no recurrence within three months. Effective indicates that the patient's clinical symptoms have significantly improved after treatment, and ineffective indicates that the patient's clinical symptoms have not significantly changed before and after treatment. The total effective rate of treatment is calculated based on significant and effective; (2) Adverse reactions: These include itching of the skin, dry nasal passages, and bloodstains in mucus; (3) Recurrence rate.

1.5 Experimental Group Statistical Methods

This research data was all analyzed using the experimental group SPSS22.0 experimental group software, and the count data was expressed as "[experimental group example (%)]"" χ 2 "Test data differences; The measurement data is expressed as "($x \pm s$)", and the data difference is tested with "t". If the experimental group P is less than the experimental group 0.05, it is significant.

2. Results

2.1 Comparison of clinical efficacy between the experimental group and the two groups

After treatment, the total effective rate of clinical treatment in the experimental group was significantly higher than that in the control group, with significant differences in data comparison between the groups (P<0.05 in the experimental group).

2.2 Comparison of adverse reactions in the experimental group

During the treatment period, the incidence of adverse reactions in the experimental group was 7 cases (14%), of which 2 patients in the experimental group developed itching of the skin, 1 patient in the experimental group developed dry nasal cavity, and 4 patients in the experimental group developed bloodstains in the nasal discharge; The incidence of adverse reactions in the control group was 5 patients (10.00%) in the experimental group, of which 1 patient in the experimental group developed skin itching and 4 patients in the experimental group developed nasal dryness. There was no significant difference in the incidence of adverse reactions between the two groups (χ 2=0.125, P=0.723, P experimental group>experimental group 0.05).

2.3 Comparison of recurrence

After months of treatment in experimental group 3, 4 patients in experimental group experienced recurrence, with a recurrence rate of 8% in experimental group 2; Patients in the control group experienced 10 relapses in the experimental group, with a recurrence rate of 10 cases (5%) in the experimental group. The recurrence rate of patients in the experimental group was significantly lower than that of patients in the control group, with significant differences in data comparison between the groups (χ 2=5.165, P=0.023, P experimental group<experimental group 0.05).

3. Discussion

Allergic rhinitis is mainly caused by the patient's own cell hypertrophy, while the IgE antibody in the experimental group binds to allergens on basophils, resulting in allergic lesions. The clinical manifestations of patients with allergic rhinitis include sneezing, nasal conges-

tion, and itching. Severe patients may experience shortness of breath and mutual shortness of breath. Therefore, in conducting the research experiment, the selected patients participating in the experiment cannot have diseases such as nasal polyps, sinusitis, and asthma. The most serious problem with allergic rhinitis is that the disease cannot be eradicated and is prone to relapse. After long-term medication, patients are prone to develop drug resistance. What is more serious is that patients are affected by the constant changes in the external environment, and eventually will have a more serious recurrence. The etiology of allergic rhinitis is relatively complex, and the pathogenesis cannot be determined at all. There are many causes of the disease, including air pollution, dietary structure, or sulfur monoxide issues.

At the present stage, conventional western medicine is often used in clinical treatment of allergic rhinitis, including the intervention of anti allergic drugs and hormone drugs. Although certain clinical effects can be achieved, there are many adverse reactions, and long-term use has drug resistance. The patient's disease recurrence rate is high, which is not conducive to improving the prognosis of the patient. As a long-term antihistamine, loratadine can competitively inhibit histamine by binding to receptors in the histamine experimental group H1 experimental group, thereby effectively relieving symptoms such as nasal itching, nasal congestion, and sneezing. However, this drug has a slow onset of action and its single use is not ideal. Therefore, on the basis of regular drug treatment, the use of glucocorticoid preparations for treatment has positive significance, As a glucocorticoid preparation, budesonide nasal spray has a good anti allergic effect. It can inhibit inflammatory mediators and reduce their secretion and synthesis, effectively control rapid local allergic reactions. It has a rapid and lasting effect, and has ideal curative effect. Budesonide nasal spray has good anti allergic and local anti-inflammatory effects. Nasal spray with aerosol can increase the concentration of local drugs, quickly improve airway inflammation, inhibit inflammatory damage mediated by immunoglobulin test group E, enhance the stability of smooth muscle cells and endothelial cells, reduce the sensitivity of stimulation receptors, and reduce the release of inflammatory mediators, thereby quickly relieving nasal congestion, runny nose Clinical symptoms such as nasal itching and sneezing can also regulate cytokines and eosinophils, thereby promoting the synthesis of anti-inflammatory proteins in cells. Budesonide nasal spray can play a therapeutic role in many ways, with strong anti-inflammatory effects, rapid onset, and lasting effects, which can promote patients' early recovery.

This time, patients in the control group were treated with loratadine orally. On this basis, patients in the experimental group were treated with budesonide nasal spray. The results showed that the clinical efficacy and recurrence rate of patients in the experimental group were significantly better than those in the control group ($P<0.05$ in the experimental group), and there was no significant difference in adverse reactions between the two groups ($P>0.05$); This shows that in patients with allergic rhinitis, the combination of loratadine and budesonide nasal spray has a more ideal effect, and can reduce the recurrence rate of patients without causing more adverse reactions. It can provide long-term and stable control of the condition, with higher clinical application safety.

References

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