Clinical Analysis of Treatment on Generalized Pustular Psoriasis through Compound Glycyrrhizin in Combination with Acitretin

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Abstract: Objective: The objective is to observe the clinical effect of treatment on generalized pustular psoriasis (GPP) through compound glycyrrhizin in combination with acitretin. Method: 72 patients with GPP admitted to our hospital from August 2011 to August 2012 are randomly divided into two groups. The control group is treated with acitretin. The observation group is treated with compound glycyrrhizin in combination with acitretin. The clinical effects and adverse reactions of the two groups are compared. Results: The total effective rate of the observation group is 91.67%, significantly higher than that of the control group (P<0.05). The time of heat retreat, skin lesion disappearance and hospitalization time in the observation group are significantly less than those in the control group (P<0.05). There is no significant difference in the incidence of adverse reactions between the two groups (P>0.05). Conclusion: Treatment on GPP through compound glycyrrhizin in combination with acitretin has a significant effect, which can significantly improve the clinical symptoms of patients. And there are fewer adverse reactions. It is worthy of clinical promotion and application.

Keyword: Compound glycyrrhizin; Acitretin; Generalized Pustular Psoriasis (GPP)


1 Introduction

Generalized pustular psoriasis (GPP) is a kind of rare exudative psoriasis in clinical practice, often accompanied by high fever, body pain or fatigue and other clinical symptoms. Its incidence is about 1‰ - 3‰, and it has a trend of increasing year by year in recent years [1]. GPP patients are often seriously ill and prone to recurrent attacks, which seriously affect their normal life and work, making clinical treatment difficult [2-3]. Currently, glucocorticoid is the preferred clinical treatment for GPP, for its significant short-term clinical effects. But it is easy to cause other concurrent symptoms. And patients are prone to relapse after drug withdrawal, which seriously affects the rehabilitation and treatment of patients [4]. In this study, compound glycyrrhizin in combination with acitretin has achieved good clinical results in patients with generalized pustular psoriasis admitted to our hospital from August 2011 to August 2012, and the results are reported as follows.

2 Materials and Methods

2.1 General Materials

All patients are admitted to our hospital from August 2011 to August 2012 with generalized pustular psoriasis. There are a total of 72 patients, including 39
males and 33 females, who are aged between 19 and 71. All patients are randomly divided into 2 groups, 36 patients in each group. In the control group, there are 19 males and 17 females, with an average age of the patients is (46.82±4.17) years old, including 21 cases of initial onset and 15 cases of recurrence (including 4 cases with a history of common psoriasis and 11 cases with a history of pustular psoriasis). The average course of disease is (41.13±3.13) d. In the observation group, there are 20 males and 16 females, with an average age of (47.36±4.02) years old, including 20 cases of initial onset and 16 cases of recurrence (including 5 cases with a history of common psoriasis and 10 cases with a history of pustular psoriasis). The average course of disease is (40.45±3.42) d. General data such as gender, age, course of disease and disease in the two groups have showed no significant difference in comparison at the level of P > 0.05, so the data are comparable.

2.2 Judgement of Clinical Effect

The criterion for judgement of clinical effect [5] are: 
**Recovery**: The clinical symptoms of the patients are eliminated, and the skin lesion disappearance ≥ 90%.
**Obvious Effect**: Clinical symptoms improves significantly, and skin lesion disappearance ≥ 60%.
**Valid Effect**: Clinical symptoms improves, and skin lesion disappearance ≥ 30%.
**Invalid Effect**: There is no improvement in clinical symptoms, and skin lesion disappearance < 30%. Total effective rate = (recovery + obvious effect + valid effect) / total cases × 100%

2.3 Statistical Method

The results are all processed by SPSS17.0 statistical software. The indicators of each group are expressed as mean ± standard deviation (x ± s) to carry out t test. \( \chi^2 \) test is used for counting data. Test value P<0.05 means the the difference is statistically significant.

3 Results

3.1 Comparison of Clinical Effect between the Two Groups

According to the clinical results, the total effective rate of the observation group is 91.67%, which is significantly higher than that of the control group (69.44%). The effective rates of the two groups are significantly different (P<0.05), as shown in table 1.

<table>
<thead>
<tr>
<th>Group</th>
<th>Case</th>
<th>Recovery</th>
<th>Obvious Effect</th>
<th>Valid Effect</th>
<th>Invalid Effect</th>
<th>Total effective rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group</td>
<td>36</td>
<td>9</td>
<td>11</td>
<td>5</td>
<td>11</td>
<td>25 (69.44)</td>
</tr>
<tr>
<td>Observation Group</td>
<td>36</td>
<td>18</td>
<td>10</td>
<td>5</td>
<td>3</td>
<td>33 (91.67)*</td>
</tr>
</tbody>
</table>

Note: Compared with control group, *P < 0.05.

3.2 Comparison of Clinical Conditions between the Two Groups

In the observation group, the time of heat retreat, skin lesion disappearance and hospitalization are (3.18 ± 1.13) d, (17.54 ± 3.21) d and (20.98 ± 3.41) d respectively, which are significantly less than those in the control group. The difference between the two groups is statistically significant (P<0.05), as shown in table 2.
**4 Conclusion**

The second generation of aromatic retinoic acid acitretin (the effective component is etretin) is the preferred drug for clinical treatment of GPP, which can regulate the differentiation of epidermal keratinocytes and inhibit the proliferation of keratinocytes. The acitretin has the effect of regulating immune function, promoting cell differentiation and anti-inflammatory, etc., which has a good clinical treatment effect. Compound glycyrrhizin (the main ingredient is glycyrrhizic acid) has the kind of cortical hormone kind function, which has been widely used in the adjuvant treatment of skin diseases such as psoriasis. It has steroid effects, which can be used for anti-inflammatory, anti-allergic process and aldosterone. The compound glycyrrhizin has no glucocorticosteroid effects. In combination with acitretin, it can significantly improve the skin lesion status of patients and has a good clinical therapeutic effect [7]. In this study, the patients with generalized pustular psoriasis admitted to our hospital from August 2011 to August 2012 are treated with compound glycyrrhizin in combination with acitretin achieving good clinical effects. The clinical effective rate is up to 91.67%, which is significantly higher than that of the control group. In addition, the time of heat retreat, skin lesion disappearance and hospitalization are significantly less than that of the control group. There are significant differences between the two groups (P<0.05). And there is no significant difference on the adverse effects rate after treatment between the two groups (P > 0.05). Therefore, compound glycyrrhizin in combination with acitretin in the treatment of GPP has a significant effect and can significantly improve the clinical symptoms of patients with few adverse reactions, which is worthy of clinical promotion and application.

**References**


