Observation on the effect of licorice flavonoid Chinese herbal medicine spotting cream combined with Awei A capsule in the treatment of psoriasis

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ABSTRACT

Objective: To study the curative effect of licorice flavonoid Chinese herbal frond cream combined with Awei A capsule in the treatment of psoriasis. Methods: During the period from April 2016 to March 2018, a total of 116 patients with psoriasis in our hospital were randomly divided into the experimental group (the treatment of licorice flavonoids and Chinese acupoint cream combined with Awei A capsule) and the control group (single use) Awei A capsule treatment). Comparison of blood lipid metabolism indexes (high-density lipoprotein, apolipoprotein, low-density lipoprotein) and serum biochemical indicators (neutrophil elastase, endogenous inhibitor of NE, placental cadherin) statistical difference in content. The statistical differences between PASI score and DLQI score before and after treatment were compared between the two groups. At the end of treatment, the statistical difference between the clinical efficacy and the incidence of adverse reactions was compared between the two groups. Results: The levels of serum NE, Trappin-2 and P-cad in patients before and after treatment showed a significant downward trend. The content of NE, Trappin-2 and P-cad in the experimental group was significantly lower than that in the control group. The content of HDL-C in lipid metabolism index increased significantly before and after treatment, and the content of APOA and LDL-C decreased significantly. The content of HDL-C in the experimental group was significantly higher than that in the control group. The content of APOA and LDL-C was significantly lower than that of the control group. The PASI score and DLQI score of patients before and after treatment decreased significantly. After treatment, the PASI score and DLQI score of the experimental group were significantly lower than those of the control group. The clinical efficacy of the two groups was significantly different. The efficacy of the experimental group was significantly better than that of the control group. The skin of the experimental group was dry, itchy, and the skin desquamation was significantly less than that of the control group.

Conclusion: Licorice Flavonoids and Awi A capsules have the advantages of improving blood lipid metabolism in the treatment of psoriasis, while reducing the recurrence rate and reducing the occurrence of common adverse reactions such as skin itching, dryness and abnormal liver function. It has a good clinical application significance.

1. Introduction

Psoriasis is a benign, non-infectious skin disease caused by multiple factors. Its clinical features are recurrent scaly erythema or papules with itching or pain[1,2]. The lesions occur in the extremities of the extremities, especially in the elbow and knee joints, followed by the scalp, trunk, etc., with varying degrees of itching[3,4]. It is easy to recur, winter and heavy summer, there is no specific treatment for this disease, patients can only achieve the effect of relieving the disease and reducing recurrence through standard treatment, which has a great impact on the physical and mental health of patients[5,6]. Awei A capsule can regulate the differentiation and proliferation of epidermal cells, while licorice flavonoids have anti-tumor, anti-inflammatory, anti-oxidation,
sedative and analgesic, lipid-lowering effects, etc\(^{(7,8)}\). Considering the advantages of the two drugs in the treatment of psoriasis, there may be differences in the mechanism of drug onset. We tried to use drugs in combination and achieved good results. The results are reported below.

2. Objects and methods

2.1. Research object

During the period from April 2016 to March 2018, 116 patients who were diagnosed with psoriasis after admission in our hospital were selected for research. Inclusion criteria: Selected cases meet the diagnostic requirements for psoriasis; No treatment for psoriasis in the past two months. Exclusion criteria: Important abnormalities of essential organs; Serious damage to the body's material metabolism; Patients who are abnormally sensitive to the study of selected drugs. There was no significant difference in gender, stage, age, and disease index between the two groups\(^{(P>0.05)}\). Show in Table 1.

2.2. Grouping and treatment

A total of 116 patients were enrolled according to the order of admission, odd-numbered patients were included in the control group, and even-numbered patients were included in the experimental group. 58 cases in each group. The treatment methods are as follows:

(1) Control group (administered with Avi A capsule): On the basis of routine treatment, patients in the control group were given Oral A capsules orally, 2 to 3 times a day, 3 capsules at a time, and can be appropriately adjusted according to the actual situation of each patient, with 8 weeks as a treatment cycle.

(2) Test group (administering licorice flavonoid Chinese herbal medicine spotting cream combined with Awei A capsule combined treatment): On the basis of conventional treatment, the treatment method of combination of licorice flavonoid Chinese herbal frond cream and awei A capsule was adopted. On the basis of the drugs used in the control group, the licorice flavonoid Chinese herbal freckle cream was assisted 3 times a day, 2 to 3 times a day. Take 8 weeks as a governance cycle.

2.3 Investigate subject

The basic conditions of the patients at the beginning of admission (sex, stage, age, disease index, etc.), the following indicators were tested or evaluated before treatment and after treatment (2 weeks of treatment).

(1) Serum index: Includes NE (neutrophil elastase), Trappin-2 (endogenous inhibitor of NE), and P-cad content (placental cadherin). NE: an important protease secreted by neutrophils. Trappin-2: Effectively inhibits NE activity by degrading NE. P-cad: a calcium-dependent cadherin that mediates cell-to-cell adhesion of the same affinity.

(2) Lipid metabolism index: Contains comparisons of indicators such as HDL-C (high-density lipoprotein), APOA (apolipoprotein), and LDL-C (low-density lipoprotein).

(3) PASI and DLQI scores: The PASI score is mainly used to evaluate the degree of psoriatic lesions. The score is positively correlated with the degree of skin damage. The higher the score, the wider the lesion spread. DLQI score is used to evaluate the quality of life of patients. It is judged by the life, work and other aspects of the patient's recent 7 d. The score is positively correlated with the degree of skin damage. The higher the score, the psoriasis is The greater the impact of patients' daily life.

(4) Clinical efficacy: At the end of treatment, the efficacy evaluation was performed according to the patient's PASI score, which was divided into cure (all lesions disappeared, PASI score decreased more than 95%), markedly effective (most lesions disappeared, clinical symptoms were alleviated, PASI score decreased between 70% and 94%), improved (the lesions partially subsided, the symptoms improved, the PASI score decreased between 50% and 69%), and was ineffective (the lesions were not regressed, the clinical symptoms were not alleviated, PASI The score decline rate is less than 50%) four levels.

(5) Adverse reactions: Including dry skin, itchy skin, skin desquamation, abnormal liver function, dyslipidemia and so on.

Table 1.

Basic information of the two groups of patients \(\{n(\%)\}\).

<table>
<thead>
<tr>
<th>Basic situation</th>
<th>Control group</th>
<th>Test group</th>
<th>(\chi^2)</th>
<th>(P)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender Man</td>
<td>40(68.97)</td>
<td>39(67.24)</td>
<td>1.924</td>
<td>0.581</td>
</tr>
<tr>
<td>Woman</td>
<td>18(31.03)</td>
<td>19(32.76)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staging Progress period</td>
<td>23(39.66)</td>
<td>25(43.10)</td>
<td>1.634</td>
<td>0.463</td>
</tr>
<tr>
<td>Stationary period</td>
<td>34(60.34)</td>
<td>33(56.90)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 39.84±5.01</td>
<td>39.57±5.24</td>
<td>0.283</td>
<td>0.777</td>
<td></td>
</tr>
<tr>
<td>Course 3.05±0.76</td>
<td>3.11±0.79</td>
<td>0.416</td>
<td>0.677</td>
<td></td>
</tr>
</tbody>
</table>

Table 2.

Comparison of serum NE, Trappin-2 and P-cad levels before and after treatment in two groups of patients.

<table>
<thead>
<tr>
<th>Index</th>
<th>Control group</th>
<th>Test group</th>
<th>Comparison: (\chi^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>After</td>
<td>Before</td>
<td>After</td>
</tr>
<tr>
<td>NE ((p\text{ g/L}))</td>
<td>237.84±29.64</td>
<td>154.08±22.03</td>
<td>238.41±29.20</td>
</tr>
<tr>
<td>Trappin-2 ((\text{ng/mL}))</td>
<td>108.34±15.49</td>
<td>75.04±10.33</td>
<td>109.65±15.22</td>
</tr>
<tr>
<td>P-cad ((\text{ug/g}))</td>
<td>38.51±4.50</td>
<td>20.85±3.79</td>
<td>38.19±4.50</td>
</tr>
</tbody>
</table>

Note: Comparison before and after treatment \(P<0.05\).
2.4 Statistical analysis

Analyze specific data through SPSS 21.0 software. The measurement data were expressed by (Mean ± SD), and the independent sample t test was used for comparison between groups. The \( t \) test was used to compare the design data before and after treatment, the \( \chi^2 \) test was used for the count data, and the rank sum test was adopted for the test of the grade data. The test level was 0.05.

3. Result

3.1. Comparison of serum NE, Trappin-2 and P-cad levels in patients before and after treatment

The levels of NE, Trappin-2 and P-cad in the serum of the two groups were significantly changed before and after treatment \((P<0.05)\). The NE, Trappin-2 and P-cad levels decreased significantly with time migration. Before treatment, the levels of NE, Trappin-2 and P-cad in the two groups were not significantly different \((P>0.05)\). After treatment, the levels of NE, Trappin-2 and P-cad in the experimental group were significantly lower than those in the control group. Show in Table 2.

3.2 Comparison of lipid metabolism indexes between the two groups before and after treatment

The levels of HDL-C, APOA and LDL-C in the two groups were significantly changed before and after treatment \((P<0.05)\). The HDL-C content increased significantly with the migration of time, and the content of APOA and LDL-C decreased significantly. There was no significant difference in HDL-C, APOA and LDL-C between the two groups before treatment \((P>0.05)\). After treatment, the HDL-C content of the experimental group was significantly higher than that of the control group, and the levels of APOA and LDL-C were significantly lower than those of the control group \((P<0.05)\). Show in Table 3.

3.4 Comparison of clinical effects between the two groups

The clinical efficacy of the two groups was significantly different \((Z=29.346, P<0.05)\), and the efficacy of the experimental group was significantly better than that of the control group. Show in Table 4.

3.5 Comparison of adverse reactions between the two groups

The dry skin, itchy skin and skin desquamation adverse reactions in the experimental group were significantly less than those in the control group \((P<0.05)\). Show in Table 5.

4. Discussion

Psoriasis is a systemic skin disease caused by the proliferation of epidermal cells. The main manifestation is that the rash is reddish or the surface is silvery white, and the base is red papules or plaques[9]. The number varies, the size varies, and the shape is diverse. In severe cases, the pieces can be joined together, the boundary is clear, and the surface is covered with a plurality of dry silvery white scales. It includes four types: vulgaris, pustular, arthritic, and erythrodermic[10,11]. At present, there is no cure for psoriasis in clinical practice. Patients often need repeated long-term treatment. For a long time, psoriasis is the focus and hotspot of research in the field of dermatology[12]. In this study, licorice flavonoids and Chinese acupoint cream combined with avi A capsule were used to treat psoriasis, and the clinical effect was observed.

Studies have shown that the levels of NE, Trappin-2, and P-cad in the experimental group were significantly lower than those in the control group \((P<0.05)\). Show in Table 3.
Comparison of adverse reactions between the two groups [n(%)].

<table>
<thead>
<tr>
<th>Group</th>
<th>Dry Skin</th>
<th>Itchy skin</th>
<th>Skin desquamation</th>
<th>Abnormal liver function</th>
<th>Dyslipidemia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group</td>
<td>8(13.79)</td>
<td>14(24.14)</td>
<td>9(15.52)</td>
<td>7(12.07)</td>
<td>4(6.90)</td>
</tr>
<tr>
<td>Test Group</td>
<td>3(5.17)</td>
<td>6(10.34)</td>
<td>2(3.45)</td>
<td>5(8.62)</td>
<td>2(3.45)</td>
</tr>
<tr>
<td>( \chi^2 )</td>
<td>1.347</td>
<td>1.592</td>
<td>1.702</td>
<td>0.678</td>
<td>0.582</td>
</tr>
<tr>
<td>( P )</td>
<td>&lt;0.05</td>
<td>&lt;0.05</td>
<td>&lt;0.05</td>
<td>0.390</td>
<td>0.641</td>
</tr>
</tbody>
</table>

by NE. Therefore, the balance between NE and trappin-2 plays an important role in the development of inflammatory response, while P-cad mainly mediates the adhesion between cells. With the improvement of the content of these three indicators, the local inflammatory response of patients is obtained. Effective control, which helps restore function of epithelial cells[16,17]. Some scholars have proposed that Avi A capsule, which mainly regulates the function of lymphocytes and neutrophils, inhibits inflammation and improves the desquamation of the stratum corneum for therapeutic purposes[18,19]. However, its slow onset, longer duration of treatment, and greater side effects, licorice flavonoids can inhibit tyrosinase activity, scavenge oxygen free radicals, and have good anti-inflammatory and anti-allergic effects[20]. Therefore, the treatment of licorice flavonoids and scutellaria cream combined with awei A capsules has better anti-inflammatory effects and more clinical effects than the treatment with avi A capsules.

At the same time, the content of HDL-C in the experimental group was significantly higher than that in the control group. The levels of APOA and LDL-C were significantly lower than those in the control group. The PASI score, DLQI score and adverse reaction of APOA and LDL-C were significantly lower than those in the control group. The levels of HDL-C in the experimental group were significantly higher than that in the control group. The levels of HDL-C in the experimental group were significantly higher than that in the control group. The levels of HDL-C in the experimental group were significantly higher than that in the control group. The levels of HDL-C in the experimental group were significantly higher than that in the control group. The levels of HDL-C in the experimental group were significantly higher than that in the control group.

References