Analysis on the Application and Characteristics of Chinese Patent Medicines Containing Ginger

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Abstract. Ginger taste acrid flavor, slightly warm in nature, tropism of spleen, stomach and lung. Ginger has the effect of inducing sweat and dispelling exogenous evils, eliminating phlegm and relieving cough and warming middle energizer to arrest vomiting. Since ancient times, China has been saying that ginger can cure any diseases. In Zhou Qin's history, the cultivation, consumption and medical use of ginger were recorded in detail. With the continuous digging of ginger in edible and medicinal fields, the application of Chinese patent medicine containing ginger is also concerned all over the world. The research on ginger and its products has been the focus of people's attention, but the research and application of Chinese patent medicine containing ginger is less. This paper summarizes Chinese patent medicine containing ginger, analyzes its application and characteristics, provides theoretical basis for the use of Chinese patent medicine containing ginger.

Introduction

Ginger is Zingiberaceae fresh rhizome, also known as fresh ginger. It has the effect of inducing sweat and dispelling exogenous evils, eliminating phlegm and relieving cough and warming middle energizer to arrest vomiting, is a commonly herb plant used in medicinal and edible[1]. In addition to the nutritional components of, ginger also contains gingerol, shogaol, zingiberone, purine compounds, volatile oil components and other functional chemical components[2, 3, 4]. The rhizome (dried ginger), cork (Jiang Pi) and leaf (Jiang Ye) of ginger can be used as medicine, it topical can alleviate rheumatic diseases, oral has the effects of antibacterial and anti-inflammatory. In Clinical, it can be used for the treatment of cold, diarrhea and vomiting, swelling, nasal congestion and other diseases. With the incidence of various diseases increased rapidly, more and more people tend to Chinese medicine regimen. Study of ginger and its processed products is always concerned by people, but the summary of ginger Chinese patent medicine is less. In order to provide reference for the development and utilization of ginger and its Chinese patent medicines, the form, single herb number, functions indicated and application situation of ginger Chinese patent medicine were summarized in this article.


In the 2015 edition Chinese Pharmacopoeia, 70 kinds of Chinese patent medicine containing ginger were recorded, there are 64 kinds of oral preparations, 6 kinds of topical
preparations among them. They are divided into eight groups according to the dosage form. The first three groups are pills, granules and tablets, which occupy 71.4%. As shown in Table 1, there are 26 kinds of pills, 13 kinds of granules, 11 kinds of tablets, 5 kinds of capsules, 5 kinds of paste, 4 kinds of mixture, 2 kinds of liniment, and 4 kinds of other preparations. The ginger Chinese patent medicines is made up of 3 medicinal herbs at the lowest, and is made up of 24 medicinal herbs at the highest. This paper divides it into 5 sections, which are: 1-5 flavors, 7 kinds; 6-10 flavors, 36 kinds; 11-15 flavors, 21 kinds; 16-20 flavors, 2 kinds; >20 flavor, 4 kinds.

Table 1. Dosage from distribution of Chinese patent medicines containing ginger.

<table>
<thead>
<tr>
<th>Dosage form</th>
<th>pill</th>
<th>granule</th>
<th>tablet</th>
<th>capsule</th>
<th>paste</th>
<th>mixture</th>
<th>liniment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>26</td>
<td>13</td>
<td>11</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Percentage</td>
<td>37.1%</td>
<td>18.6%</td>
<td>15.7%</td>
<td>7.1%</td>
<td>7.1%</td>
<td>5.7%</td>
<td>3.0%</td>
</tr>
</tbody>
</table>

The Functions Indicated, Representative Drug and Number of Ginger Chinese Patent Medicine Recorded by *Chinese Pharmacopoeia*

On the basis of the 2015 edition Chinese Pharmacopoeia, a simple classification about 70 kinds of Chinese patent medicine containing ginger was made. According to the function can be divided into 8 categories. Dispersing lung qi to clear exterior, soothing the liver and regulating the stomach; Eliminating dampness and phlegm, regulating qi-flowing and harmonizing stomach; Warming middle-Jiao and tonifying deficiency, relieving spasm and pain; Warming Qi and supplementing blood, replenishing qi and invigorating the spleen; Dissipating cold and antipyretic analgesia; regulating qi to alleviate pain, quicken the blood and disperse swelling; Warming the liver and kidney, dispel wind and relieve pain; keeping ying and weiqi in balance, clearing liver and gallbladder. As can be seen from Table 2, the ginger Chinese patent medicine with the functions of dispersing lung qi to clear exterior, soothing the liver and regulating the stomach has the largest application category, accounting for 30.0%. The category of eliminating dampness and phlegm, regulating qi-flowing and harmonizing stomach is more, accounting for 22.9%. The first three categories accounted for 68.6% of all ginger Chinese medicines containing ginger, and the latter five occupied 31.4%.

The Application Form of Ginger in Its Chinese Patent Medicine Recorded by *Chinese Pharmacopoeia*

There are 70 kinds of Chinese patent medicine containing ginger in the 2015 edition Chinese Pharmacopoeia, ginger as the main drug has 46 kinds, accounting for 65.7%; ginger as a supplement has 24 kinds, accounting for 34.3%. There are 29 kinds, 15 kinds, 15 kinds and 7 kinds, respectively, with ginger water decoction, ginger juice, ginger alcohol extract and ginger volatile oil as raw materials. In addition, there are 4 kinds of other forms used in medicine of ginger. The percentage were 41%, 22%, 22%, 15% and 5% respectively. Among 4 kinds of other forms used in medicine of ginger, 2 kinds of ginger soup, 1 kinds of fried ginger, 1 kinds of ginger powder.
The Clinical Application of Ginger Chinese Patent Medicine

TCM believes that ginger taste acrid flavor, slightly warm in nature, tropism of spleen, stomach and lung, has the effect of inducing sweat and dispelling exogenous evils, eliminating phlegm and relieving cough and warming middle energizer to arrest vomiting. It is often used to treat cold, cough, vomiting and so on.

The Fuction of Inducing Sweat and Dispelling Exogenous Evils

Ginger taste acrid flavor, slightly warm in nature, it has the function of relieving heat dissipation. Mingyi bielu records it can be used for dispel wind chills and feve, typhoid, headache, nasal congestion, stop vomiting and go to phlegm. New compilation of materia medica records that ginger can scatter wind evil, cold small itching, why should use cassia twig? We can see that ginger relieving heat dissipation effect is very significant. The combination of ginger and Guizhi was used in Guizhi granules, has the effects of Jieji scattered evil, keep ying and weiqi in balance. At the same time, it has the characteristics of relieving heat dissipation and do not hurt the body fluid. The combination of ginger windproof and bupleurum was used in Zhengchaihuyin granules, it can not only dissipate cold, but also disperse fever, and can be used to treat mild cold and fever[6]. Xiaochaihu granule combined with Lianhuaqingwen capsule has the efficacy of clearing away pathogenic toxin, internal and external relieving, antibiosis and antiphlogosis, it can remarkably improve the clinical symptoms of the patients with upper respiratory tract infection[7]. Warm moxibustion cream contains chili and ginger, ginger divergence and cold phlegm, it can enhance the effect of warming spleen and stomach for dispelling cold of pepper, and can be used for the adjuvant therapy for patients with renal colic[8].

The Fuction of Warming Middle Energizer to Arrest Vomiting

Ginger has its reputation of “Vomit Shengyao”. Because of gastrointestinal discomfort and oral odor can caused these symptoms of nausea and vomiting, it can be solved with 1 slices of ginger in the morning.”Qianjin Fang” recorded “Ginger is the treatment of vomiting effective medicine”. The cold of the spleen and stomach can lead to lower appetite, indigestion, nausea and vomiting. Ginger has the function of warming middle energizer to arrest vomiting, regulating spleen and stomach. The compatibility of ginger with jujube in Xiao Jian Zhong Pian, It has the function of regulating spleen and stomach, invigorating qi and generating blood. Xiao Jian Zhong Pian combined with western medicine has good curative effect. It can not only obviously improve the symptoms of gastritis and gastroduodenal ulcer, but also prevent diarrhea, abdominal pain, vomiting and other adverse reactions occur[9].The compatibility of ginger with liquorice in Buzhong Yiqi Pills, It has the function of Warming spleen yang[10].

The Fuction of Expectorant and Relieving Cough

“Materia medica variorum” records “The ginger has the effect of eliminating phlegm in the viscera”. Ginger can alleviate fullness in chest and hypochondrium caused by phlegm and retained fluid. Chinese patent drug containing ginger that Xiangshayang wei pill has the effect of strengthening the spleen and replenishing qi, removing phlegm and blood stasis. After the patients with chronic atrophic gastritis treated Xiangshayangwei pill, gastric mucosal TGF-beta 1, Smad3 expression and serum IL-8, IL-11 and TNF-α levels were decreased significantly [11,12].Ginger and cinnamon, keel, Radix Paeoniae Alba combination in
guilongkechuanning capsules. It has the function of relieving cough and reducing sputum. The main components of Fufangxianzhuliye were fresh bamboo juice, Houttuynia cordata, raw pinellia, ginger, peppermint oil etc. It is often used in the treatment of phlegm-heat cough and phlegm yellow sticky. Add ginger in muxiangshunqi pills have the effect of the nourishing the stomach and eliminating dampness and phlegm[13,14].

Other

Ginger has a strong ability to relieving exterior syndrome, but the perspiration effect is weak. In Chinese patent medicines of sweating, usually as auxiliary drugs, can be mixed with ephedra and cinnamon, to strengthen the sweat force. Shishenwan using ginger as auxiliary drugs, ginger, fructus psoraleae Chinese-date all together has the functions of antidarrhea with astringent, can improve the clinical symptoms, enhancing immune function and improve clinical curative effect of patients with postoperative abdominal distention significantly[15]. Tianmaqufengbu tablets takes gastrodia elata as the medicine, can enhance the effect of eliminating phlegm and dispelling wind. It has a good therapeutic effect on osteoarthritis, and does not affect the function of liver and kidney of patients. In most cases, ginger is an ingredient added to enhance the efficacy of a dose of medicine. Chinese patent medicine and medicine introduction compatibility is an important component of clinical use of traditional Chinese patent medicines.

Discussion

Ginger is an essential ingredient in people's daily life it is also a common Chinese medicinal herb. Since ancient times, traditional Chinese medical believes that "A woman can not without lotus root for three consecutive days, a man can not without ginger root for three consecutive days", so we can see the importance of ginger. Chinese patent medicine has the advantages of numerous in variety, dosage form completely and storage, portability, use convenience. Now there is only dozens of Chinese patent medicine containing ginger in sales, although the effect is significant, but the type, dosage form is still relatively small, so it has broad prospects of development.

Modern medical research found that many diseases on the basis of Western medicine treatment, dialectical plus ginger Chinese patent medicines, toxic side effects significantly reduced, while the efficacy increased. But the literature shows that ginger is less used alone, more often used as seasoning or therapeutic application. The application of Chinese medicine containing ginger is less, and most of them combined with western medicine. The use of ginger as a therapeutic diet has not been promoted, and the ginger used as a supplement is rarely listed in the recipe of the Chinese patent medicine instructions. Most Chinese patent medicines lack the understanding of the function of ginger in the prescription, and the material basis of the effect of ginger has not been mentioned. In addition, pharmacies and drug stores are not selling ginger. For the clinical prescription containing ginger, the doctor also remind patients to match ginger.

Treatment based on syndrome differentiation is the characteristics of traditional Chinese medicine in the treatment of various diseases, mainly reflects the "Different diseases with same treatment, and the same diseases with different drugs" concept. The statistical analysis found that, the granules for the treatment of Chinese patent medicine are the most, but the granules themselves have their limitations. Therefore, it is necessary to develop new dosage forms. In conclusion, the reasonable application of compatibility of ginger Chinese patent medicine and the use of ginger as a supplement will have a great effect on the treatment of patients.
medicine is conducive to the effectiveness of drug treatment and will promote the modernization of Chinese Medicine.

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Reference
