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## CLINICAL GUIDELINE

**Guidelines on common cold for Traditional Chinese Medicine based on pattern differentiation**

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Pharmacopeia integrated with findings from systematic literature review and the experts' consensus on the issue in question.

**RESULTS:** Common cold was divided into four patterns in the guidelines. The medications were recommended respectively: Ganmaoqingre granule for wind-cold exterior syndrome, Yinqiaojiedu granule for wind-heat exterior syndrome, Huoxiangzhengqi Wan for summer-heat dampness exterior syndrome and Shensu Wan for wind-cold exterior syndrome accompanied with *Qi* deficiency.**CONCLUSION:** The guidelines were primarily derived from the practice experience of TCM and the experts' consensus. The process was not strictly evidence-based because of lacking enough clinical studies. Further refinement of the guidelines should be needed as more studies are available.

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**Key words:** Common cold; Practice guideline; Medicine, Chinese traditional; Pattern differentiation**INTRODUCTION**Common cold, often known as cold,<sup>1</sup> is an acute upper respiratory tract viral infection caused by rhinovirus, coronavirus, parainfluenza virus, respiratory syncytial virus (RSV) etc. It is the most common viral infection with a sporadic incidence and self-limiting nature. The often seen symptoms are nasal congestion, runny nose, sore throat, and cough. The natural course of the cold varies from 4 to 10 days, if no complications involve. Various complications may be present in a common cold including suppurative pharyngitis, sinusitis, otitis**Abstract****OBJECTIVE:** To establish the guidelines on common cold treated with Traditional Chinese Medicine (TCM) in terms of pattern identification.**METHODS:** The guidelines were formulated by using the basic patterns of common cold in China

media, bronchitis, or acute progression or deterioration of underlying respiratory diseases. Probability of complications increases in the elderly, patients with chronic heart, lung, kidney or cerebral disorders or compromised immunity.

Up to now, no evidence-based guidelines have been published on common cold for clinical practice. Generations of Traditional Chinese Medicine (TCM) practitioners have developed quite a few formulas for the cold. They have been prepared in various forms such as tablet, pill, powder, capsule, and oral liquid etc specified by China Pharmacopeia.<sup>2</sup> The China Pharmacopeia 2010 documents 56 formulas for the cold.<sup>3</sup> Studies have demonstrated many ingredients or compounds of TCM remedy for common cold. They have the following effects: diaphoresis and antipyretic,<sup>4,5</sup> analgesic and tranquilizer,<sup>6</sup> cough suppressant,<sup>5</sup> anti-inflammation,<sup>7,8</sup> anti-microorganism,<sup>7</sup> antiviral<sup>5,7,9</sup> and immunoregulation.<sup>7</sup>

"TCM pattern or syndrome is an outcome of analysis of TCM information by TCM practitioner. Pattern classification is a traditional diagnostic method to categorize the patients based on their different conditions".<sup>10</sup> The treatment of common cold in TCM is based on pattern differentiation. According to TCM theory, common cold is considered as exterior syndrome, which can be further divided into the wind-cold, wind-heat and summer-heat dampness syndrome. Exterior syndrome in common cold is due to external contraction of pathogenic factors of wind-cold, wind-heat or summer-heat damp. Sometimes common cold occurred in the patients who suffer from other patterns. If a patient with *Qi* deficiency was exposed to wind-cold, this is the *Qi* deficiency syndrome complicated by exterior syndrome.

As clinical guidelines in modern times are made based on evidence, TCM guidelines on common cold shall also be derived from evidence, which was obtained from a systematic literature review. A guideline steering committee and its review group established by China Academy of Chinese Medical Science participated in reviewing and finalizing the guidelines. The evidence-based guidelines on common cold for clinical practice was published in 2011.<sup>11</sup>

## MATERIALS AND METHODS

### *Literature retrieval*

Literature in English were retrieved with the key word "common cold" in the following database from 1987 through 2009: on-line Medical Literature Analysis and Retrieval System, the Cochrane Library, Evidence-Based Medicine Reviews, Allied and Alternative Medicine -Allied and Complimentary Medicine database, The National Guideline Clearinghouse, etc.

Literature in Chinese were searched with the keyword 'Gan mao' (common cold in Chinese) and names of

relevant experts in the following database from 1987 through 2009: China National Knowledge Infrastructure, Chinese Medicine Literature Database, Chinese Thesis Database, VIP Medicine Information System, Chinese Medical Current Contents, Founder Digital library and etc.

Literature in Japanese was retrieved manually from journals and electronically from databases. The journals were *Kampo Medicine* (1987-2007), *Japan Oriental Medicine* (1987-2007), *Advancement of Kampo Medicine* (1996-2005), *Meridian and Acupuncture* (1987-2007), *Acupuncture Treatment* (1991-2007), *Japanese Medicine* (1987-2007), *Clinical Kampo Medicine* (1997-2007), *Journal of Japan Association of Acupuncture and Moxibustion* (1987-2007), *Clinical Medicine* (1987-2007), *Meiji Acupuncture and Moxibustion* (1987-2007), *Traditional Medicine* (1998-2007), *The Journal of Kampo Medicine & Pharmacy* (1997-2002), *Journal of Traditional Medicines* (1987-2007), and *Treatment* (1987-2007), etc; the databases were, *Scholarly and Academic Information Navigator*, *National Institute of Informatics*, *Meteo Inegrate*, *Sunmedica*, *JMEDPlus* and *International Medical Information Center*, searched with the keywords of "common cold", "cold", "wind pathogen", "kampo medicine", "acupuncture and moxibustion" as of 31st, July, 2007.

Literature in Korean was retrieved with key words of "common cold", "toxin cold", "Korean medicine", "acupuncture and moxibustion etc in the Library of Seoul University and the Library of Kyung Hee University and in the Journal of Korean Epidemics Association, Journal of Korean Society of Pharmacognosy, Journal of Korean Society of Virology, Journal of Association of Korean Medicine and Life Sciences, Journal of Korean Society of Emergency Medicine, Journal of Korean Society of Microorganism, Korean Journal of Life Sciences, Journal of Korean Society of Food Nutrition, Journal of Korean Society of Pharmacology, Journal of Korean Medicine Institute, Korean Health Care, Journal of Korean Society of Medicinal Herbs from 1987 up to 31, July, 2007.

### *Inclusion criteria*

(a) Research design: randomized controlled clinical trial with or without blinding; (b) diagnosis criteria: diagnosis of common cold with biomedicine and/or Traditional Chinese Medicine criteria; with pattern differentiation. (c) intervention: oral administration of single herb or compound; (d) subjects  $\geq 18$  years.

### *Exclusion criteria*

(a) Redundant publication (s); (b) subjects contracting influenza or pregnant subjects; (c) absence of TCM pattern differentiation.

### *Literature screening*

All papers were screened by two experts independently.

Included papers were then assorted and appraised. When the two had a disagreement, a third party made the decision.

### **Levels of evidence**

Evidence was divided into 5 levels.<sup>12</sup> Level Ia consisted of evidence obtained from consistent results from two different kinds of studies of the following: randomized controlled trial, cohort study, case-control study and case series. Level Ib consisted of evidences obtained from one well-designed randomize, controlled trial with sufficient power. Level IIa consisted of evidence obtained from cohort study. Level IIb consists of evidence obtained from case-control study. Level IIIa consisted of evidence obtained from case series with historical control. Level IIIb consisted of evidence obtained from case series with self before-after control. Level IV consisted of evidence obtained from case reports and therapies recorded in historical documents, which have undergone long time of clinical testing and application. Level V consisted of evidences obtained from expert committee reports or opinions and/or clinical experience of respected authorities without any systematic testing or evidence obtained from case reports and therapies recorded in historical documents, which have not undergone long time of clinical testing or application.

### **Expert consensus**

For recommendation without sound evidence, if the expert panel agreed to use it in the guidelines, the drafting group would invite other experts to fully discuss to reach a consensus. That particular piece of recommendation would be used for expert consensus.

### **Recommended grading system**

Grading system recommended by guideline Grading Work Group<sup>13</sup> by the US National Guideline Clearinghouse: grade A: at least one randomized control trial (RCT) as a part of literature evidence to provide consistent and high-quality recommendation (based on evidence of level Ia and Ib); grade B: well-conducted and relevant clinical studies yet without RCTs (based on evidence of level IIa, IIb and III); grade C: reports or consensus and/or clinical experiences from an expert committee with relevant high-quality clinical studies (based on evidence of level IV).

## **RESULTS**

### **Literature quantity**

Total of 2880 papers were identified and assigned into the following intervention categories: Chinese medicinal, acupuncture, other therapies and prevention. No English or Korean literature was identified. Forty-two Chinese studies<sup>14-55</sup> were included with 2 abstracts of Japanese papers.<sup>56,57</sup> Forty-four randomized clinical trials were included into the final study.

A Cochrane systematic review<sup>58</sup> published in 2007 located 14 RCTs and graded them all as level C in terms of evidence quality.

### **Study design**

(a) Randomization: stratified randomization, multi-center block randomization and envelop methods were reported. Thirty-four studies did not report details of their randomization methods. (b) Blinding: 4 studies claimed to have used single blinding methods yet failed to provide details. Twelve studies stated they had conducted double-blinding. Several of them didn't report blinding methods. All other studies didn't report whether they used blinding or not.

### **Criteria of diagnosis and differentiation**

Diagnosis criteria of the included studies varied. The diagnosis criteria of the West Medicine were mainly from Practical Internal Medicine, etc.<sup>59,60</sup> The differentiation criteria of the TCM were mainly from TCM internal Medicine, etc.<sup>61-65</sup>

### **Intervention**

In the RCTs with TCM treatment, the medications were either a decoction or a patent Chinese medicine with significant discrepancy in their formulas, which made it difficult to be categorized. Most of the control groups, however, also used either decoction or patent Chinese medicine. Six compared different preparation forms of TCM. Eleven used western medicines as the control. Only one in Japanese paper used placebo as control.

### **Study subjects**

(a) Category of syndromes: 22 papers were on wind-heat exterior syndrome, 17 on wind-cold exterior syndrome, 3 on summer-heat dampness exterior syndrome and 2 on wind-cold exterior syndrome accompanied with *Qi* deficiency. (b) Source of cases: 16 papers reported their cases were from out-patient clinic while 7 papers from both out-and in-patient clinics. Twenty-one papers didn't report the source of cases. (c) Number of cases: 8330 subjects were identified in total; of them, 3616 were wind-heat exterior syndrome, 4000 wind-cold exterior syndrome, 576 summer-heat dampness exterior syndrome and 138 wind-cold exterior syndrome accompanied with *Qi* deficiency.

### **Expert consensus**

A guideline drafting group was constituted and reached the following consensus:

(a) TCM treatment of common cold should be based on pattern differentiation; (b) pattern classification of common cold in the guidelines is categorized the same way as in the China Pharmacopeia; (c) the medications to be prescribed should be those specified in the pharmacopeia and supported by clinical studies.

### **Recommendation**

Wind-cold exterior syndrome: clinical manifestation:



severe aversion to cold, mild fever, absence of sweating, headache, body ache, lassitude, lack of strength, nasal congestion with clear nasal discharge, sneezing, coughing with thin and white sputum, thin and white tongue coating, floating and tight or floating and moderate pulse. Treatment principle: to release the exterior with pungent-warm. Medications: either one of the following patent medicine (grade A, Level II a/II b); Ganmaoqingre granule<sup>17</sup> (relieving-cold and clearing-heat granule); Chailian oral solution<sup>17</sup> (oral liquid of *Radix Bupleuri* and *Fructus Forsythiae*); Gegen Tang<sup>26</sup> (*Radix Puerariae Lobatae* decoction); Jing Fang compound<sup>21,26</sup> (*Herba Schizonepetae* and *Radix Saposhnikoviae* compound).

Wind-heat exterior syndrome: clinical manifestation: fever, distending headache, nasal congestion with turbid nasal discharge, sore and swollen throat, aggravated by swallowing, coughing with yellow sputum and/or sputum difficult to expectorate, dry mouth and thirst, marginally red tongue, white or yellow tongue coating, floating and rapid pulse. Treatment principle: to release the exterior with pungent-cool. Medications: either one of the following patent medicine (Grade A, Level II a/II b). Yinqiaojiedu granule,<sup>32</sup> (antitoxin granule of *Fructus Forsythiae* and *Flos Lonicerae Japonicae*); Chai-guanjiere granule<sup>32</sup> (relieving-heat granule of *Radix Bupleuri* and *Rhizoma Dryopteridis Crassirhizomatis*); Shuanghuanglian oral solution<sup>34</sup> (oral liquid of *Flos Lonicerae Japonicae*, *Radix Scutellariae* and *Fructus Forsythiae*); Jinlianqingre capsule<sup>38</sup> (heat-clearing capsule of Chinese Globeflower); Qingjie oral solution<sup>40</sup> (heat clearing oral liquid).

Summer-heat dampness exterior syndrome: clinical manifestation: mostly seen in summer and autumn, fever, absence of sweating or mild sweating, general aching and lack of strength, distending dizziness and heaviness in the head, stuffy and runny nose, oppression in the chest and stuffiness in the stomach, nausea and vomiting, abdominal fullness and diarrhea, yellow and slimy tongue coating, soggy and rapid pulse. Treatment principle: to clear summer-heat, dispel dampness and release exterior. Medications (grade B, level II a/IV): Huoxiangzhengqi Wan<sup>52</sup> (*Herba Pogostemonis* pill).

Wind-cold exterior syndrome with *Qi* deficiency: clinical manifestation: chills and fever, or mild fever, spontaneous sweating, headache, nasal congestion, cough with whit sputum, low voice, shortness of breath, lassitude, lack of strength, thirst without desire to drink, lingered course with recurrent attacks of common cold, white tongue fur, floating and weak pulse. Treatment principle: to release exterior and tonify *Qi*. Medications (grade B, level II a/IV): Shensu Wan<sup>14</sup> (pill of Ginseng and Perilla leaf).

## DISCUSSION

TCM has been making advances in the pattern differentiation for the treatment of common cold in the past

two thousand years. The authors have tried to integrate evidence-based medicine into the drafting of guidelines on common cold for TCM treatment. As there is still no enough literature to provide sound evidence that meets the standards of modern evidence-based medicine, it seems quite difficult to formulate the guidelines that are totally consistent with tenet of evidence-based medicine.

Apart from the four syndromes mentioned above, following syndromes such as wind-damp exterior syndrome, wind-heat exterior syndrome accompanied with *Yin* deficiency, deserved further study. Currently, Guidelines for Clinical Studies on New TCM Drugs<sup>62</sup> uses a scale of four levels: totally recovered, significantly effective, effective and ineffective to measure outcome after three-day treatment. There are three outcome measurements: disease, syndrome and temperature, all of which are based on symptom scoring. We propose that symptom relief and its timing should be the major outcome measured to demonstrate instant symptom relief and duration reduction. Follow-up should be conducted to evaluate the incidence of cough after suffering from cold, suppurative pharyngitis, sinusitis and otitis media in order to investigate whether TCM could reduce the incidence of complications and provide a bigger picture for TCM's efficacy.

As the treatment course is fairly short in common cold and there has been few reports on adverse events. Safety evaluation should be, nonetheless, incorporated into clinical trials on common cold.

The medications recommended in this guideline have been in wide use for a long period of time yet without evidence of modern sense. With the improvement of TCM research and methodology, more good quality studies are to be conducted to update and refine the guidelines.

## REFERENCES

- 1 **Zhu YJ**, Chen WB. Respiratory medicine. Beijing: People's Medical Publishing House, 2003: 699-703.
- 2 National Pharmacopoeia Committee. China pharmacopoeia. vol.1. Beijing: Chinese Medicine Science and Technology Press, 2010: 399-1248.
- 3 National pharmacopoeia committee. China pharmacopoeia- clinical drug instructions (volume of Chinese Patent Medicine). Beijing: Chinese Medicine Science and Technology Press, 2011: 1-29.
- 4 **Xue Y**, Bai JY. Study on the heat relieving component of Chai Hu. *Pharmacol Clin Chin Mater Med* 2003; 19(1): 11-12.
- 5 **Duan JY**, Yu LS, Chen RM, Wang XL. Study on the pharmacological action of Chailian oral solution. *Zhong Guo Shi Yan Fang Ji Xue Za Zhi* 1998; 3(4): 22-25.
- 6 **Zhou YH**. Zheng Chai Hu Yin Chong Ji is a good choice of common cold. *Shanghai Zhong Yi Yao Za Zhi* 1994; 28(1): 21-22.
- 7 **Sun XZ**, Xie JS, Xie LY. Pharmacological action and clinical

- cal practice of Shuanghuanglian. Heilongjiang Yi Xue 2006; 19(1): 54-55.
- 8 **Sun YP**, Xu Q. The effect and mechanism of aqueous extract of Qianghuo to delayed hypersensitivity and inflammation. Zhong Guo Yao Ke Da Xue Xue Bao 2003; 34(1): 51-54.
  - 9 **Wen YH**. Study on anti-virus effect of aqueous extract of Jinlianhua. Zhong Hua Wei Sheng Wu Xue He Mian Yi Xue Za Zhi 1999; 19(1): 21.
  - 10 TCM Zheng Classification and clinical trials. ECAM online, 2012-07-15, cited 2012-09-05: 1 screens. Available from URL: <http://www.hindawi.Com/journals/ecam/si/940878/cfp/>.
  - 11 China academy of chinese medical sciences. Evidence-based guidelines of clinical practice in Chinese medicine (internal medicine). Beijing: China press of Traditional Chinese Medicine, 2011: 311-328.
  - 12 **Liu JP**. The composition of evidence body of traditional medicine and recommendations for its evidence grading. Zhong Guo Zhong Xi Yi Jie He Za Zhi 2007; 27(12): 1061-1062.
  - 13 GRADE working group. Grading quality of evidence and strength of recommendations. BMJ 2004; 328(7455): 1490-1497.
  - 14 **Peng YH**, Pi DH. Study on 100 cases in curing elder common cold with Shensuchong Ji. Xin Zhong Yi 1987; 19(8): 54.
  - 15 **Cui SL**, Fang Y, He R, Liu BQ. Study on effect of curing wind-cold exterior syndrome of common cold with Kanggan oral solution. Yi Jiao Yan Jiu 1995; 23(4): 21-22.
  - 16 **Sun LM**, Zhang GZ, Wang SS, et al. Fenghanganmao oral solution can treat common cold. Jilin Zhong Yi Yao 1996; 16(4): 15.
  - 17 **Du BJ**, Cui TH, Kou QA. A clinical study on Chailian oral liquid for wind-cold exterior syndrome of common cold and Wind-damp exterior syndrome. Zhong Yao Xin Yao Yu Lin Chuang Yao Li 1997; 8(3): 139-141.
  - 18 **Liang NS**, Fu WM, Wang YS. Analysis on therapeutic effects of Zhengchaihu powder in treating 208 patients with common cold. Zhong Guo Zhong Yi Ji Zheng 1999; 8(3): 127-129.
  - 19 **Tang XH**. Treatment of 90 cases of wind-cold exterior syndrome of common cold by Ganmaoshufeng pills. Hunan Zhong Yi Yao Dao Bao 2000; 6(6): 16-17.
  - 20 **Gao GY**, Liu ZH, Yu WH, Hu DH. Treatment of 38 Cases of wind-cold exterior syndrome of common cold by Huoxuehuayujiebiao Fang. Hunan Zhong Yi Yao Za Zhi 2000; 16(4): 31.
  - 21 **Wang ZQ**, Ren ZY, Liu CG. Treatment of 360 cases of wind-cold exterior syndrome of common cold by Jingfang Chongji. Shandong Yi Yao Gong Ye 2001; 20(4): 48-49.
  - 22 **Zhao TL**. Study on clinical effect of curing wind-cold exterior syndrome of common cold with Ganmaoruan capsule. Zhong Guo Zhong Yi Yao Xin Xi Za Zhi 2001; 8(7): 52-53.
  - 23 **Tan MQ**. Study on clinical effect of curing wind-cold exterior syndrome accompanied with Qi deficiency of common cold with Jingfangbaidu San. Guangdong Yi Xue Yuan Xue Bao 2003; 21(1): 63-64.
  - 24 **Zhang PZ**. Treatment of 120 cases of wind-cold exterior syndrome accompanied with Qi deficiency of common cold by Biaoxuganmao Fang. Henan Zhong Yi 2004; 24(9): 28.
  - 25 **Wang YS**, Zhou JD, Fu WM, Jiang M. Study on clinical effect of curing wind-cold exterior syndrome of common cold with Shufengganmao oral solution. Shanxi Zhong Yi Xue Yuan Xue Bao 2004; 5(4): 21-22.
  - 26 **Song HN**, Mao ZF, Han DF, Xiang N, Li NL. Randomized double-blind controlled trial on Gegentang mixture in treatment of cold. Clinical Focus 2005; 20(6): 313-315.
  - 27 **Zhai HQ**, Xiang N, Yang Y, Ke J. Study on clinical effect of curing wind-cold exterior and heat interior syndrome of common cold with Daqinglong granule. Zhong Yao Xin Yao Yu Lin Chuang Yao Li 2005; 16(6): 452-453.
  - 28 **Zhang RM**, Wang L, Chang J, et al. A randomised controlled paralleled clinical study of Huoxiangzhengqi Dropping pill in treatment of wind-cold exterior syndrome of common cold (Fenghan and Shizhi syndrome). Hua Xi Yi Xue 2005; 20(1): 48-49.
  - 29 **Su W**, Chen XY, Li DY, et al. Study on clinical effect of curing wind-heat exterior syndrome of common cold with Chaihudi Wan. Beijing Zhong Yi Yao Da Xue Xue Bao 1998; 21(4): 56-57.
  - 30 **Huang SC**, Zhong QS, Deng HM, Tang ZY, Zhu HQ. 60 cases study on treating wind-heat exterior syndrome of common cold with Chaiqinhe Ji. Xin Zhong Yi 2002; 34(4): 28-29.
  - 31 **Wang HJ**, Liu F, Liu LP, Song ZG. 120 clinical cases study on treating wind-heat exterior syndrome of common cold by Kangbingdu oral solution. Zhong Hua Lin Chuang Yi Yao 2002; 3(8): 76-78.
  - 32 **Zhou J**, Xi GQ, Zou JD, Wei HQ. 100 clinical cases study on treating wind-heat exterior syndrome of common cold with Chaiguanjiere granule. Jiangsu Zhong Yi Yao 2003; 24(2): 24-25.
  - 33 **Fang Y**, Chen XZ. Treatment of 60 cases of wind-heat exterior syndrome of common cold by Hongguniangukanggan Yin. Sichuan Zhong Yi 2003; 21(4): 29.
  - 34 **Jiang YX**, Li M, Wang JL, Gao J, Zhuang TQ. Treatment of 300 cases of wind-heat exterior syndrome of common cold by Shuanghuanglian oral solution. Zhong Hua Xian Dai Zhong Xi Yi Za Zhi 2003; 1(12): 1109-1111.
  - 35 **Mao B**, Zhang RM, Wang L, Chang J, Li TQ. A randomised controlled paralleled clinical study of Fufanglianpu granule in treatment of wind-heat exterior syndrome of common cold. Zhong Guo Xun Zheng Yi Xue Za Zhi 2004; 4(10): 677-684.
  - 36 **Lou JY**, Hu X, Xu JP. Study of clinical effect of Qingrejiudu Zhong Yao in treatment of wind-heat exterior syndrome of common cold. Zhejiang Zhong Xi Yi Jie He Za Zhi 2004; 14(9): 552-553.
  - 37 **Wang ZW**, Yuan Q, Wu ZQ, et al. A randomised, open, positive effect, paralleled controlled clinical study of Jinlianhua Pian in treatment of wind-heat exterior syndrome of common cold. Shi Yong Yi Xue Za Zhi 2005; 21(18): 2085-2086.
  - 38 **Chang J**, Li TJ, Wan MH. A double-blind randomized controlled trial of Jinlianqingre capsule in the treatment of acute upper respiratory tract infection (wind-heat exterior syndrome of common cold). Zhong Guo Xun Zheng Yi

- Xue Za Zhi 2005; 5(8): 593-598.
- 39 **Lai YJ**. Treatment of 300 cases of wind-heat exterior syndrome of common cold by Qiangpu Tang. Tianjin Zhong Yi Yao 2005; 22(3): 253.
  - 40 **Li J**, Zhang JY. Stage-II, multi-center clinical Study of curing wind-heat exterior syndrome of common cold with Qingjie oral solution. Shanxi Zhong Yi Xue Yuan Xue Bao 2005; 6(4): 20-21.
  - 41 **Wang XC**, Lin Q, Nong YB, Huang XA, Song MF. Curative effect of Sanqing decoction on wind-heat exterior syndrome of common cold. Beijing Zhong Yi Yao Da Xue Xue Bao 2005; 12(6): 4-7.
  - 42 **Zhang XZ**, Xu DN, Liu KQ. Clinical observation of Kangganqingre capsule on wind-heat exterior syndrome of common cold. Hebei Zhong Yi 2006; 28(4): 251-252.
  - 43 **Yan XJ**, Wu M, Ni JL, Ge AK, Yan SF. Clinical effect and safety of Yinqiao tablet on wind-heat exterior syndrome of common cold. Zhong Cheng Yao 2006; 28(2): 205-208.
  - 44 **Liu HH**, Yuan XW, Feng HJ, Huang SH, Luo YC. Development and clinical effect of Ganmaocha granule. Xian Dai Zhong Xi Yi Jie He Za Zhi 2008; 17(27): 4250-4251.
  - 45 **Li X**, Zheng SP. 79 clinical cases study on treating wind-heat exterior syndrome of common cold by Jinlingkanggan capsule. Chang Chun Zhong Yi Yao Da Xue Xue Bao 2008; 24(4): 188.
  - 46 **Zhang WS**. Study on treating common cold with Jinqianganmao capsule. Shi Yong Zhong Yi Yao Za Zhi 2008; 24(5): 307.
  - 47 **Mao BY**. 90 clinical cases study on treating wind-heat exterior syndrome of common cold by Kangganjiedu oral solution. Yunnan Zhong Yi Zhong Yao Za Zhi 2008; 29(4): 18-19.
  - 48 **Li MZ**, Ji WH, Lei P. 72 clinical cases study on treating wind-heat exterior syndrome of common cold by Rendongganmao granule. Xian Dai Zhong Yi Yao 2008; 28(4): 8-9.
  - 49 **Wang XH**, Liu Y. Clinical study on treatment of 100 cases of wind-heat exterior syndrome of common cold by Kanggan Paotengpian. Zhong Guo Zhong Yi Yao Xin Zi Za Zhi 2008; 15(10): 59-60.
  - 50 **Hu GL**, Wu CS, Sheng LL. A randomised controlled paralleled clinical study of Shuanghuanglian Pian in treatment of wind-heat exterior syndrome of common cold. Zhong Hua Zhong Yi Yao Xue Kan 2008; 26(4): 891-892.
  - 51 **Zhang LR**. 96 cases study on treating summer-heat dampness exterior syndrome of common cold with Qingxiangdaipao Ji. Anhui Zhong Yi Xue Yuan Xue Bao 1994; 13(2): 24.
  - 52 **Xi GL**. 150 cases study on treating summer-heat dampness exterior syndrome of common cold by Fufangshuanghua pian. Shaanxi Zhong Yi Xue Yuan Xue Bao 2006; 29(5): 11-12.
  - 53 **Zhe L**. Comparative clinical study of Huoxiangguizhi Tang and Huoxiangzhengqi Shui in treatment of summer-heat dampness exterior syndrome of common cold. Yunnan Zhong Yi Xue Yuan Xue Bao 2007; 30(5): 45-47.
  - 54 **Yang DL**, Ma HJ, Wang W. Clinical study on treating wind-cold exterior syndrome accompanied with Qi deficiency of common cold with Chai Hu Gui Zhi Tang. Sichuan Zhong Yi 2008; 26(18): 79.
  - 55 **Xu JJ**, Liu RF. 58 cases study on treating wind-cold exterior syndrome accompanied with Qi deficiency of common cold with Yupingfeng San. Xian Dai Yi Yao Wei Sheng 2009; 25(2): 269-270.
  - 56 **Hommy Y**, Takaoka K, Yozawa H, et al. Effectiveness of Mao-bushi-saishin-to in treating common cold syndrome: controlled comparative study using the sealed envelope method. Kampo Med 1996; 47(2): 245-252.
  - 57 **Kaji M**, Kashiwagi S, Yamaki K. A double-blinded placebo control clinical study on treating common cold with Xiao Chai Hu Tang. Jpn J Clin Exp Med 2001; 78(12): 140-156.
  - 58 **Wu T**, Zhang J, Qiu Y, Xie L, Liu GJ. Chinese medicinal herbs for the common cold (Review). The Cochrane Library. online, 2007, Issue 3, cited 2009-07-01. Available from URL: <http://www.thecochranelibrary.com>. (<http://www.ncbi.nlm.nih.gov/pubmed/17253524>).
  - 59 **Cai BQ**, Li LY. PUMC Respiriology. Beijing: Peking Union Medical College Press, 2005: 579-580.
  - 60 **Chen JZ**. Practice of Internal Medicine. Beijing: People's Medical Publishing House, 2004: 1639-1640.
  - 61 **Zhang BY**. Internal Chinese Medicine. Shanghai: Shanghai Scientific and Technical Publishers, 1985: 38-42.
  - 62 **Zheng XY**. Guidelines of Clinical study on new Chinese medicine. Beijing: Chinese Medicine Science and Technology Press, 2002: 58-60.
  - 63 **Chen GT**, Yang SS. Practical diagnostics and therapeutics of integrated Traditional Chinese and Western Medicine. Beijing: Chinese Medicine Science and Technology Press, 1991: 245-247.
  - 64 State administration of Traditional Chinese Medicine of the People's Republic of China. Criteria of diagnosis and therapeutic effect of traditional chinese medicine syndromes. Nanjing: Nanjing University Press, 1994: 1.
  - 65 **Ouyang ZX**, Ke XQ. TCM Respiriology. Beijing: Chinese Medicine Science and Technology Press, 1994: 432-445.
  - 66 **Ye RG**. Internal medicine. Beijing: People's Medical Publishing House, 2004: 11-12.
  - 67 **Sun CX**. Criteria of diagnosis and therapeutic effect for Diseases. Beijing: People's Military Medical Press, 1988: 68.
  - 68 **Chen H**. Newest chinese and international standards for diagnosis and treatment. Beijing: Xueyuan Press, 1992: 119-123.
  - 69 State Administration of Traditional Chinese Medicine of the People's Republic of China. criteria of diagnosis and therapeutic effect of internal, surgical, gynecology and pediatrics of Traditional Chinese Medicine. Nanjing: Jiangsu Scientific And Technical Publishers, 1988: 1.