TCM Differential Treatment of Cough Variant Asthma

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Cough variant asthma (CVA), also called latent asthma or cough asthma, is a special type of asthma. With gradually deepened understanding of CVA in recent years, good curative effect has been achieved in TCM treatment of CVA.

The mechanism for the occurrence and development of CVA is quite complicated. The knowledge of TCM syndromes, therapeutic methods, recipes and drugs for CVA is still under continuous exploration. Many scholars or practitioners have in recent years raised many insightful views on its etiology, pathogenesis and the law governing the diagnosis and treatment of CVA. CHAO En-xiang¹ believes that the etiology and pathogenesis of CVA belong to delayed or improper treatment of exopathic diseases so that the pathogenic factors are stagnated in the lung, causing dysfunction of the lung-qi. This is identical to the view in western medicine that some CVA patients have allergic constitution and high reactivity of the air passage. HONG Bo² thinks that CVA often occur when the patient at early stage inappropriately use the anti-inflammatory drugs and antitussives, causing obstruction of the lung-qi, with reversed flow of qi and stagnation of phlegm. Therefore, promoting the dispersing function of the lung to relieve asthma, expelling the wind to relieve the spasm, clearing away the lung-heat and resolving phlegm should be taken as the principle for treatment of CVA. WANG Li-hua, et al.³ hold that in some patients with congenital defect and deficiency of the kidney-qi, CVA can be induced by exopathic wind-cold, sensitinogen, seven emotions and fatigue, causing retention of phlegm, disorder of qi, oppressed feeling in the chest and cough. MA Xu-sheng, et al.⁴ think that asthma is actually attributed to deficiency of the spleen, kidney and lung with the superficiality at the lung and the origin at the spleen and kidney. The disease should be treated by invigorating qi, nourishing the kidney, spleen, stomach and lung as well as replenishing yin to strengthen the body resistance and restore the normal function of the body. ZHENG Cai-xia⁵ believes that the disease is related to exopathic wind and dryness, and it is mainly caused by stagnation of the liver-qi or deficiency of yin and blood in the liver. Therefore, the disease should be treated from the liver and lung.

On the basis of the above-mentioned etiology and pathogenesis and in combination with clinical practice, the authors put forward their ideas for treatment of CVA in the following respects.

Acute Cough due to Invasion of the Lung by Pathogenic Wind

Case 1: A female patient, aged 65, suffered from cough for 5 months after catching cold, which was mild during daytime but severe at night, itching in the throat, and pain in the chest. She had taken antibiotics and antitussives without avail. Abnormalities were found in eosinophilic cells, airway stimulation test and sensitinogen, conforming to CVA. She was then treated by expelling wind, promoting the dispersing function of the lung, relieving the spasm to stop cough. The recipe of the decoction mainly consisted of Zi Su Zi (紫苏子 Fructus Perillae), Zi Su Ye (紫苏叶 Folium Perillae), Wu Wei Zi (五味子 Fructus Schisandrae), Di Long (地龙 Pheretima Asper-
gillum), Chan Tui (蝉蜕 Periostracum Cicadae), Jiang Can (僵蚕 Bombyx Batryticatus) and Zhi Pi Pa Ye (炙枇杷叶 Folium Eriobotryae). At the beginning, Ying Su Ke (罂粟壳 Pericarpium Papaveris) was added. Having taken 3 doses, the symptoms were relieved. After taking another 7 doses, the patient was cured. A relapse occurred 2 months later, which was relieved by taking the original recipe.

The CVA patients are mainly characterized by dry throat with itching, and tussiculation. LI Su-yun, et al. have treated 89 CVA patients with the granules for expelling wind and stopping cough and obtained quite satisfactory results. In the recipe, Chan Tui (蝉蜕 Periostracum Cicadae), Jing Jie (荆芥 Herba Schizonepetae) and Fang Feng (防风 Radix Saposhnikoviae) are the 'wind drugs' for ventilating the lung. Modern pharmacological researches have confirmed that 'wind drugs' can raise the immune function of the cells, decrease the stress reaction of the body to allergic factors, antagonize histamine, resist allergic inflammation and relax small trachea of the lung. Chan Tui (蝉蜕 Periostracum Cicadae) is a drug that can be used to dispel wind-heat and prevent liver-wind. When used together with Jiang Can (僵蚕 Bombyx Batryticatus), it can strengthen the effect of expelling wind, clear collaterals and relieve spasm. Qian Hu (前胡 Radix Peucedani), Zi Wan (紫菀 Radix Asteris), Bai Bu (百部 Radix Stemonae) and Zi Su Zi (紫苏子 Fructus Perillae) are used for a better effect of lowering the adverse flow of qi and stopping cough.

Acute Cough due to Accumulation of Wing-cold in the Lung

Case 2. A male patient, aged 42, paid his first visit in February 2004, with the chief explain of repeated cough for 3 months. The cough was due to a cold with fever. After treatment, his fever subsided but he still suffered from dry cough especially in the morning and in the evening, and itching in the throat with small amount of sputum. Usually, abnormal smell would aggravate his cough. Little curative effect was achieved in the treatment with antibiotics and syrup for resolving phlegm and stopping cough. No abnormalities were found in fluoroscopy and blood routine examination. During his visit, he had a normal body temperature without abnormal findings in auscultation on the lung. His tongue was pale and enlarged with white greasy fur, and his pulse was taut. Xi Xin (细辛 Herba Asari Mandshurici), Zhi Ma Huang (炙麻黄 Herba Ephedrae Sinicca) and Zhi Pi Pa Ye (炙枇杷叶 Folium Eriobotryae) were used to warm the lung and disperse cold, and Jing Jie (荆芥 Herba Schizonepetae), Fang Feng (防风 Radix Saposhnikoviae) and Qian Hu (前胡 Radix Peucedani) were used to dispel wind and stop cough. The patient took 5 doses before the cough was alleviated and the tongue fur turned thin-white. He continues to take the recipe for 1 week before his cough was completely cured.

This type of disease is mainly caused by accumulation of cold in the lung, obstruction of the lung-qi, adverse flow of qi with unceasing cough. ZHAI Nai-hai, et al. have used Erlong Shegan Mahuang Tang (二龙射干麻黄汤) to treat 42 cases of child CVA with remarkable curative effect. In the recipe, She Gan (射干 Rhizoma Belamcandae) was used to resolve phlegm, Ma Huang (麻黄 Herba Ephedrae Sinicca) to ventilate the lung, Sheng Jiang (生姜 Rhizoma Zingiberis Recens) and Xi Xin (细辛 Herba Asari) to warm the lung, disperse cold and promote water discharge, Mai Dong (麦冬 Radix Ophiopogonis) and Ban Xia (半夏 Rhizoma Pinelliae) to send down abnormally ascending qi and resolve phlegm, and Wu Wei Zi (五味子 Fructus Schisandrae) to astringe lung-qi so as not to damage vital qi. Modern pharmacological researches have proved that Ma Huang (麻黄 Herba Ephedrae Sinicca), Zhi Ma Huang (炙麻黄 Herba Ephedrae Sinicca), Xi Xin (细辛 Herba Asari Mandshurici), Qian Hu (前胡 Radix Peucedani) and Zi Wan (紫菀 Radix Asteris) can remarkably relax the smooth muscle of the bronchus, calm down the mild, stop cough and inhibit the pathogenic germs, and Wu Wei Zi (五味子 Fructus Schisandrae) can strengthen the adrenocortical function like parahormone.
Chronic Cough due to Deficiency of the Lung and Kidney

Case 3. A male patient, aged 42, paid his first visit in February 2004. One month before, he caught cold with the symptoms of fever, headache, and cough with thick phlegm. Western medical treatment cured his cold, but cough attacked especially at night. In addition, he had dry throat with itching, oppressed feeling in the chest, lassitude, anorexia, and pain in the waist and back. His disease responded poorly to the treatment with Cephalosporin, Amikacin and some TCM drugs. In the examination, his body temperature was 37 ℃, auscultation showed respiratory rudeness without dry or wet rales and wheeze in the lung on both sides, blood routine test was normal, roentgenogram of the chest showed slightly thickened lung-marking on both sides, and bronchus-relaxing test was positive. His tongue was pale with thin-whitish fur, and his pulse was deep and thready. Then, he was treated with Qian Hu (前胡 Radix Peucedani), Zi Su Ye (紫苏叶 Folium Perillae) and Bai Bu (百部 Radix Stemonae) for ventilating the lung and stopping cough, and with Tu Si Zi (菟丝子 Semen Cuscutae), Niu Xi (牛膝 Radix Achyranthis Bidentatae) and Shan Zhu Yu (山茱萸 Fructus Corni) for tonifying the kidney-qi. After taking 5 doses, his cough and oppressed feeling in the chest were alleviated with improved appetite and good sleep. His cough was completely cured after he took another 7 doses when the original recipe was slightly modified.

Special attention should be paid to the relationship between the lung and the kidney in treating this kind of CVA patients. The stress should be put on nourishing the lung and kidney at the same time of ventilating the lung and stopping cough. CHAI Ren-gang has treated 76 CVA patients with a decoction for nourishing the kidney and ventilating the lung. The total effective rate was 97.4%. In the prescription, She Gan (射干 Rhizoma Belamcandae), Xing Ren (杏仁 Semen Armeniacae Amarum), Chai Hu (柴胡 Radix Bupleuri), Zi Su Zi (紫苏子 Fructus Perillae) and Ting Li Zi (葶苈子 Semen Lepidii) are the common drugs for ventilating the lung, sending down the adverse upward flow of the lung-qi, stopping cough and relieving asthma; Shi Chang Pu (石菖蒲 Rhizoma Acori Graminei), Jiang Can (僵蚕 Bombyx Batryticatus) and Di Long (地龙 Pheretima Aspergillum) can antagonize allergy and relax the smooth muscles of the air passage; Huai Niu Xi (怀牛膝 Radix Achyranthis Bidentatae), Tu Si Zi (菟丝子 Semen Cuscutae), and Hu Lu Ba (葫芦巴 Semen Trigonellae) are the kidney-nourishing drugs which can be used to restore the qi-receiving function of kidney to play a role in warming the kidney and receiving qi. In addition, Gou Qi Zi (枸杞子 Fructus Lycii) and Yu Zhu (玉竹 Rhizoma Polygonati Odorati) are added to replenish the kidney-yin for patients with yin deficiency. The above-mentioned drugs used together can treat both superficiality and origin so as to play an active role in nourishing the kidney, ventilating the lung for stopping cough.

Cough due to Stagnation of the Liver, Adverse Flow of the Lung-qi, Deficiency of Yin with Blood-heat

Case 4. A female patient, aged 51, paid her visit in April 2003. The patient had suffered from paroxysmal cough for one month with distension and oppressed feeling in the chest, vexation, bitter taste in the mouth, xenophthalmia, red tongue with thin-white fur, and taut-thready pulse. Auscultation showed clear respiratory sound; roentgenogram of chest indicated thickened lung-marking on both sides, and there was no abnormal change in hemogram. She had taken cephanone and ofloxacin without obvious alleviation of cough. FEV1 was 66%, PEF 76%, variation rate of PEF 34% and bronchus-relaxing test positive. She was diagnosed as having CVA due to stagnation of the liver and lung, and treated with a recipe consisting of Chai Hu (柴胡 Radix Bupleuri), Huang Qin (黄芩 Radix Scutellariae Baicalensis), Hou Po (厚朴 Cortex Magnoliae Officinalis), Zhi Shi (枳实 Fructus Aurantii Immaturi), Xing Ren (杏仁 Semen Armeniacae Amarum), Chai Hu (柴胡 Radix Bupleuri), Zi Su Zi (紫苏子 Fructus Perillae) and Ting Li Zi (葶苈子 Semen Lepidii) are the common drugs for ventilating the lung, sending down the adverse upward flow of the lung-qi, stopping cough and relieving asthma; Shi Chang Pu (石菖蒲 Rhizoma Acori Graminei), Jiang Can (僵蚕 Bombyx Batryticatus) and Di Long (地龙 Pheretima Aspergillum) can antagonize allergy and relax the smooth muscles of the air passage; Huai Niu Xi (怀牛膝 Radix Achyranthis Bidentatae), Tu Si Zi (菟丝子 Semen Cuscutae), and Hu Lu Ba (葫芦巴 Semen Trigonellae) are the kidney-nourishing drugs which can be used to restore the qi-receiving function of kidney to play a role in warming the kidney and receiving qi. In addition, Gou Qi Zi (枸杞子 Fructus Lycii) and Yu Zhu (玉竹 Rhizoma Polygonati Odorati) are added to replenish the kidney-yin for patients with yin deficiency. The above-mentioned drugs used together can treat both superficiality and origin so as to play an active role in nourishing the kidney, ventilating the lung for stopping cough.
alleviated. The patient continued to take another 10 doses of the modified decoction with her cough, distension and fullness of the chest all gone. Then, the patient had normal appetite, normal urination and defecation, and normal PEF and FEV1. No relapse was found in a follow-up period of half a year.

CVA is often misdiagnosed and mistreated, making the patient suffer from lingering cough with depressed mental state. And antibiotics taken in large dosage for a long time would impair the spleen and stomach, and cause phlegm stagnation, poor circulation of qi and stagnation of the liver and the lung. Therefore, the disease should be treated from the liver and lung. ZHANG Fen-lan, et al. used the modified Chai Bu Tang (柴补汤) to treat CVA patients with a total effective rate of 86.7%. In the recipe, Chai Hu (柴胡 Radix Bupleuri), ascending and dispersing in nature, can clear away the heat and ascend yang, regulate the Shaoyang Mediation to relieve the depressed liver; Fang Feng (防风 Radix Saposhnikoviae) can dispel both the exopathic wind and the endogenous wind, so as to relieve the spasm; Wu Mei (乌梅 Fructus Mume) and Wu Wei Zi (五味子 Fructus Schisandrae) are used together to astringe the lung-qì to stop cough.

In addition, Huang Qin (黄芩 Radix Scutellariae Baicalensis) and Zhi Zi (栀子 Fructus Gardeniae) can be added for clearing away heat to resolve phlegm, and Dan Shen (丹参 Radix Salviae Miltorrhizae) and Chi Shao (赤芍 Radix Paeoniae Rubra) added for promoting blood circulation to remove blood stasis.

References

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