COMPREHENSIVE METHODS FOR PREVENTING AND TREATING INFLUENZA

by Yifang Zhang

Introduction

Influenza is a commonly encountered, serious epidemic disease. Combining modern and traditional Chinese medicine (TCM) may assist in helping to reduce morbidity and diminish the severity of the illness, while TCM may further play a role in its prevention.

Early in the year 2000 an influenza virus of the Sydney A type spread from England over the whole of Europe and the USA. Millions of people fell ill and several thousand people died. Approximately 14 countries suffered this epidemic, 12 in Europe and 2 in Asia.

Historically we can observe that people suffer epidemics of influenza somewhere in the world every year. The last serious influenza epidemic in the UK was from 1989 to 1990. The infection rate was very high (600 out of every 10,000) and 26,000 people in all died from that single epidemic. Although the precise total is not known, the morbidity rate was higher in the winter of 1999-2000 (7% to 20% in Europe and the USA), especially among the elderly, although the mortality rate was lower.

In the USA, influenza combined with pneumonia is the "fifth killer" of humans after heart disease, cancer, stroke and pulmonary emphysema.

Fatal influenza is frequently epidemic in Europe and the USA but rarer in Asia. This is because people have different reactions to influenza according to geographical location. Influenza tends to affect the lung and the heart lightly in Asia, but more seriously in Europe, where the central nervous system is also more likely to be affected. Examples of nervous system sequelae include post viral syndromes manifesting with such symptoms as high or low fever, heavy headedness or dull headache, lack of concentration, depression etc. This geographical variation may result from different body constitutions and environments among different races.

Influenza is not only the cause of sudden high morbidity but is also influential in the cause of many chronic diseases, for example pneumonia, bronchitis and chronic fatigue syndrome. Therefore, as well as improving health education, multiple effective measures should be used to control the spread of the virus in order to save lives and money. The most effective preventative method in modern medicine is by vaccination. In many "developed" countries, enormous manpower and material resources are utilised to develop new influenza vaccines, despite the fact that they only work for one year since the influenza virus is capable of changing genetically within 12 months.

Modern medical theory divides influenza into 3 types the typical, light and viral pneumonia types. There may also be various complications, for example influenza complicated with Reye's syndrome, which damages the liver and nervous system. If the immune system is already compromised, for whatever reason, the risks of morbidity are high. Infant and elderly patients easily develop the pneumonia type of influenza, and weak patients tend to die if they develop pneumonia or other complications.

TCM places great importance on understanding the patient's underlying constitution as well as the type of influenza virus and TCM pattern with which he or she is affected. For example the "typical type" manifests as a serious wind-heat or wind-cold pattern, mixed with dampness or food stagnation, the "light type" manifests as a milder wind-heat or wind-cold pattern, and the viral pneumonia type equates to heat obstruction of the Lung. All relevant symptoms must be noted in order to identify the pathological pattern. On diagnosis of this pattern, TCM doctors will prescribe herbs as well as various other methods of treatment including gentle exercise, acupuncture, massage and changes of diet. Western drugs can be helpfully combined with TCM methods.

TCM aetiology and pathology

TCM considers that people who have a weak constitution, disordered life style, disharmony of the body, deficiency of immunity and disharmony of "yingwei qi" (superficial defense mechanisms against the external environment) can easily succumb to viral infections such as influenza.

In TCM the pathological symptoms can be divided into patterns of wind-heat or wind-cold on the surface (exterior).

At a deeper level, dampness, summer-heat, or dryness can complicate both patterns. Common symptoms of influenza include fever, aversion to wind, sweating which does not relieve fever, stuffy nose, sore throat, and persistent cough. These symptoms may be accompanied by a sense of fullness, depressed breathing, and gastric discomfort accompanied by nausea and diarrhoea. The wind-heat pattern of influenza is far more common than other types, and is easily complicated by the addition of dampness.

Both wind-heat and wind-cold patterns are fundamentally excess patterns. Most patients however, have a constitutional deficiency, particularly infants or the elderly, and their patterns will be of the mixed type, i.e. excess based on deficiency. If both qi and yin are weakened, the pathogenic influences can more directly affect the pericardium or heart. Patients' reactions to invading factors vary depending on individual constitution and the severity of the pathogen. For example, when patients with a combined yin deficiency and excessive yang, for example chronic smokers who are prone to bronchitis, catch the wind-cold pattern of influenza, their patterns will gradually change to the interior heat pattern. The typical symptoms of the heat pattern are high fever, sore throat, cough and shortness of breath. In very severe cases, patients suffer involuntary movement or lose consciousness. Alternatively, damaged lungs or Lung qi deficiency may result initially in the patient being unable to fight the exterior disease factor and subsequently their influenza symptoms can easily become complicated with other factors or diseases. Therefore, the disease becomes prolonged.

Differentiation

1. Wind-heat invades the exterior

Fever and chills (with fever more pronounced than chills), sweating, headache, cough with thick yellow mucus accompanied by a swollen, red and painful throat, dry mouth and slight thirst. The tongue is red and its coating thin white or slightly yellow. The pulse is floating (*fu*) and rapid (*shu*).

- If patients have chest and epigastric distension, and a thin, greasy tongue coating, these symptoms show the windheat is mixed with dampness.
- If patients have a pale face, pallor of the lips and nails, dizziness, palpitations and a thin (*xi*) pulse, these symptoms show the condition is mixed with blood deficiency.
- If the influenza is complicated by dryness, there will be dry cough and dryness of the throat, mouth and nose. If there is irritability, thirst, five palms heat, a red and dry tongue with scanty coating, and a thin (*xi*) and rapid (*shu*) pulse, these indicate underlying yin deficiency.

2. Wind-cold invades the exterior

Fever and chills (the chills may be severe even if the temperature is raised), absence of sweating, headache, congested runny nose, frequent sneezing, itching throat and slight cough. There is slight clear mucus or no mucus at all. The tongue coating is thin and white. The pulse is floating

(fu) and tight (jin).

- If patients have a heavy sensation in the head and body, turbid, sticky discharges such as loose stools and leucorrhoea, and a white and thick tongue coating, this shows that wind-cold is combined with dampness.
- If patients have shortness of breath, dislike of speaking, lassitude and spontaneous sweating, this shows that wind-cold is mixed with qi deficiency.

3. Summer-heat and dampness invade the exterior

Influenza may occur not only in winter but also in summer and early autumn. Symptoms of fever with sweating, headache and soreness and pain of the limbs, accompanied by a feeling of fullness in the chest and gastric region, nausea, yellow urine and diarrhoea, all reflect the heat and dampness. The tongue is red with a yellow and thick coating. The pulse is soggy (*ru*) and rapid (*shu*).

Treatment

1. Wind-heat

Herbal medicine

To dispel the wind-heat when it invades the superficial portion of the body, use acrid (pungent) but cool herbs. If prescribing powered herbs, use 3 to 5 grams each time, 4 times a day. If prescribing decoctions, use the routine dosage or up to double dosage.

Sample prescription: Yin Qiao San (Honeysuckle and Forsythia Powder)

Niu Bang Zi (Fructus Arctii Lappae) 9g Bo He (Herba Menthae) 4.5g added later Lian Qiao (Fructus Forsythiae Suspensae) 9g to 20g Jin Yin Hua (Flos Lonicerae Japonicae) 9g to 20g Sang Ye (Folium Mori Albae) 9g

Xing Ren (Semen Pruni Armeniacae) 9g

- For severely red and swollen tonsils add Tu Niu Xi (Radix Achyranthis) 30g, She Gan (Rhizoma Belamcandae Chinensis) 6g, Shan Dou Gen (Radix Sophorae Subprostratae) 9g and Xuan Shen (Radix Scrophulariae) 9g.
- For epistaxis add Shan Zhi Zi (Fructus Gardeniae Jasminoidis) 9g and Bai Mao Gen (Rhizoma Imperatae Cylindricae) 15g.
- If heat predominates, there is more likelihood of headache and body aches. In this case reduce Sang Ye and add Da Qing Ye (Folium Daqingye) 15g or Ban Lan Gen (Radix Isatidis seu Baphicacanthi) 15g and Qiang Huo (Rhizoma et Radix Notopterygii) 9g.
- If the high fever continues, add Chai Hu (Radix Bupleuri) 9g and Huang Qin (Radix Scutellariae Baicalensis) 9g. Patent herbs
- Yin Qiao Jie Du Pian, 2-4 tablets (6-8g) t.i.d (three times a day).
- Gan Mao Pian, 2-4 tablets (6-8g) t.i.d.
- Gan Mao Tui Re Chun Ji, one sachet t.i.d.
- Apply *Watermelon Frost Spray* round the area of the pharynx.
- If wind-heat, or wind-cold transform into heat and lodge in the Lung, giving rise to high fever, cough, asthmatic and

coarse breathing, a red tongue with yellow coating and a slippery (*hua*) pulse, use *Ma Xing She Gan Tang* (Ephedra, Apricot Kernel, Coicis and Licorice Decoction). This pattern is more severe than the above patterns and is changeable.

• For heat combined with dryness, use *Sang Xing Tang* (Mulberry Leaf and Apricot Kernel Decoction): Sang Ye (Folium Mori Albae) 9g, Xing Ren (Semen Pruni Armeniacae) 10g, Nan Sha Shen (Radix Adenophorae seu Glehniae) 12g, Zhe Bei Mu (Bulbus Fritillariae Thunbergii) 9g, Dan Dou Chi (Semen Sojae Praeparatum) 9g, Zhi Zi Pi (Pericarpium Gardeniae Jasminoidis) 9g or Zhi Zi (Fructus Gardeniae Jasminoidis) 6g and Li Pi (Exocarpium Pyrus) 9g.

Acupuncture treatment

To treat this type of influenza, points of the taiyin, yangming and shaoyang channels of the hand are mainly used as main points. Superficial needling with reducing manipulation is applied. Pricking to bleed may also be used. Withdraw the needles after arrival of qi. The frequency of treatment is once daily for five days.

Prescription

Chize LU-5, Lieque LU-7, Hegu L.I.-4, Quchi L.I.-11, Dazhui DU-14, Neiting S.T.-44

Supplementary points

- To treat high fever use two groups of points. Group 1: needle Hegu L.I.-4, Quchi L.I.-11 and Dazhui DU-14 with strong manipulation, retaining the needles for 5 minutes. According to recent research, the patient's fever should come down within 24 hours after one or two acupuncture treatments if the symptoms are still at the early stage. Group 2: needle Hegu L.I.-4, Dazhui DU-14 and Zusanli ST-36 with strong manipulation, withdrawing the needles after arrival of qi.
- If wind-heat is combined with dampness, add Yanglingquan GB-34 and Yinlingquan SP-9.
- In case of congested and sore throat, needle or prick to bleed Shaoshang LU-11.
- In case of deficiency of blood, add Sanyinjiao SP-6.
- For heat complicated by dryness: add Taixi KID-3, Feishu BL-13.

2. Wind-cold

Herbal medicine

To dispel the wind-cold when it invades the superficial layers of the body, use acrid but warm herbs.

Sample prescription: *Jing Fang Bai Du San* (Schizonepeta and Ledebouriella Powder to Overcome Pathogenic Influences)

Jing Jie (Herba seu Flos Schizonepetae Tenuifoliae) 9g Fang Feng (Radix Ledebouriellae Sesloidis) 6g Su Ye (Folium Perillae Frutescentis) 6g

Qian Hu (Radix Peucedani) 6g

Jie Geng (Radix Platycodi) 4.5g

Dan Dou Chi (Semen Sojae Praeparatum) 9g

- For sore and aching limbs and severe headache, add Qiang Huo (Rhizoma et Radix Notopterygii) 4.5g and Du Huo 4.5g.
- Clinically we often see mixed patterns of cold and heat, especially cold on the exterior and heat in the interior

(known as fire enveloped by cold - han bao huo). This pattern begins with chills more pronounced than fever, then heat sensations increase, with sweating, a productive cough with yellow and white mucus, headache, weakness and aching in the extremities or eyes, dry mouth and nose, restlessness and insomnia, a slight red tongue body with thin white coating and a floating (fu) or floating and rapid (shi) pulse. Herbs should be used to expel the cold from the superficial layers first. When the cold symptoms disappear, patients may then only feel hot and show a red tongue with yellow coating, accompanied by thirst with a dry cough, or cough with yellow mucus, or a sore and swollen throat. The pulse becomes more rapid and is no longer floating. This shows that the mixed cold and heat has transformed into heat which should be expelled by the dispersing method.

It must be emphasised that when patients still have a mixture of cold and heat symptoms, cold and cooling herbs should not be used, otherwise the cold will be retained and the condition may become chronic. If the cold is only residual, and heat is already felt, *Chai Ge Jie Ji Tang* (Bupleurum and Kudzu Decoction to Release the Muscle Layer) can be prescribed: Chai Hu (Radix Bupleuri) 6g, Ge Gen (Radix Puerariae) 9g, Huang Qin (Radix Scutellariae Baicalensis) 9g, Qiang Huo (Rhizoma et Radix Notopterygii) 9g, Bai Zhi (Radix Angelicae Dahuricae) 6g, Bai Shao (Radix Paeoniae Albae) 9g, Jie Geng (Radix Platycodi Grandiflori) 6g and Gan Cao (Radix Glycyrrhizae Uralensis) 6g.

- For half-exterior half-interior pattern: prescribe *Chai Hu Da Yuan Yin* (Bupleurum Decoction to Reach the Membrane Source) for influenza which is superficial but penetrating deeper into the interior. The pathogenic factors thus remain between the exterior and interior. The symptoms of this pattern are alternating chills and fever, discomfort and fullness in the chest and hypochondria, anorexia, bitter taste in the mouth and wiry (*xian*) pulse. Throughneedling at Neiguan P-6 and Waiguan SJ-5 can also be used in this pattern.
- If heat invades the Heart and Liver due to high fever, there will be delirium or coma, muscular cramps or stiffness of the neck and back, a deeper red tongue and wiry (*xian*) pulse. Combined Western and TCM medicine must be used rapidly.

Patent herbs

- Wu Shi Cha (Noon Time Tea), 1-2 bags mix with boiled water. b.i.d. (twice a day)
- Cang Er San Jiu, 5ml to 10ml b.i.d.
- Chuan Xiong Cha Tiao Wan (Ligusticum Tea Adjust Pills), 6-8 pills, b.i.d.

Acupuncture treatment

To treat this type of influenza, points of the hand yangming, hand taiyin and foot taiyang channels are often used as main points. Moderately deep needling with reducing manipulation method is applied. Moxibustion is applicable. The frequency of treatment is once daily for four days. Prescription

Fengmen BL-12, Fengchi GB-20, Hegu L.I.-4, Waiguan SJ-5,

Taiyang (M-HN-9).

Supplementary points

- If wind-cold is combined with dampness, add Yinling quan SP-9 and Chize LU-5.
- If wind-cold is combined with qi deficiency, add Zusanli ST-36 and Gaohuangshu BL-43.

Cupping may be applied, mainly when wind-cold manifests with aching, at:

Dazhui DU-14, Shenzhu DU-12, Dazhu BL-11, Fengmen BL-12 and Feishu BL-13.

3. Summer-heat and dampness invade the exterior Herbal medicine

To dispel summer-heat and dampness from the superficial layers of the body, use fragrant, neutral but cooling herbs. Sample prescription: *Xin Jia Xiang Ru Yin* (Newly Augmented Elsholtzia Decoction)

Xiang Ru (Gummi Olibanum) 9g

Dou Juan (Semen Glycines Germinatum) 9g

Lian Qiao (Fructus Forsythiae Suspensae) 9g to 20g

Jin Yin Hua (Flos Lonicerae Japonicae) 9g

Hou Po (Cortex Magnoliae Officinalis) 3g

Liu Yi San (Six-To-One Powder) 12g bagged

Huo Xiang (Herba Agastaches seu Pogostemi) 9g

Pei Lan (Herba Eupatorii Fortunei) 9g

He Ye (Folium Nelumbinis Nuciferae) 3g

- If heat is predominant the patient will be irritable. Add Huang Lian (Rhizoma Coptidis) 1.5g.
- If there is food stagnation, manifesting with indigestion, poor appetite, acid regurgitation and eructation with foul odour, add Lai Fu Zi (Semen Raphani Sativi) 6g and Shan Zha (Fructus Crataegi) 9g.

Acupuncture treatment

To treat summer-heat type of influenza, points of the hand yangming and taiyin channels and the foot shaoyang channel are often used as main points. Shallow insertion and reducing manipulation is applied. The frequency of treatment is once daily for five days.

Prescription:

Fengchi GB-20, Hegu L.I.-4, Fuliu KID-7, Zhongwan REN-12, Zusanli ST-36.

Supplementary points:

- For high fever add Dazhui DU-14.
- For headache add Taiyang (M-HN-9).
- For stuffy nose add Yingxiang L.I.-20.
- For cough add Chize LU-5 or Lieque LU-7.
- For sore throat add Yuji LU-10.

Ear acupuncture for all patterns

Fei (Lung), Nei Bi (Internal Nose), and Xia Ping Jian (Lower Apex of Tragus). For sore throat add Yian Hou (Pharynx and Larynx) and Bian Tao Ti (Tonsil). Method: medium or strong manipulation for 2-3 minutes, then leave the needles in place for 20 to 30 minutes.

Prevention

People can take a few simple steps to assist in prevention, for example

- Avoid crowded spaces and maintain good ventilation in all rooms.
- Use vinegar as a simple method of sterilisation to fumigate a room, or use 10% water-soluble vinegar as nasal drops.
- Acupuncture as prevention: needle or moxa Zusanli ST-36, Yongquan KID-1, Qihai REN-6, Guanyuan REN-4. Treat daily for 3 successive days. This can strengthen the Spleen and Kidney energy to improve the body's immune reaction.
- Herbs: The aim is to clear heat and toxicity by promoting diuresis, improve superficial immunity and eliminate dampness. This will restrict the effect of the virus and reduce heat: Ban Lan Gen (Radix Isatidis seu Baphicacanthi) 15g, Da Qing Ye (Folium Daqingye) 15g, Guan Zhong (Rhizoma Cyrtomii Fortunei) 10g, Jin Yin Hua (Flos Lonicerae Japonicae) 10g, Pu Gong Ying (Herba Taraxaci Mongolici cum Radice) 10g, Qiang Huo (Rhizoma et Radix Notopterygii) 10g, Huo Xiang (Herba Agastaches seu Pogostemi) 10g, Pei Lan (Herba Eupatorii Fortunei) 10g, Ge Gen (Radix Puerariae) 10g, Hua Shi (Talcum) 5g, Sheng Gan Cao (Radix Glycyrrhizae Uralensis) 3g. Choose 3 to 6 of these herbs and prepare as a decoction. Dosage: Twice a day, 5 to 7 days as a course.
- Foods which increase resistance to influenza:

Cold condition: before and during epidemics regularly consume leek, spring onion, garlic, onion, caper, date, walnut, sweet potato.

Hot condition: before and during epidemics regularly consume artichoke, radish (luo-buo), dandelion leaf, chicory, mint, towel gourd (si gua), mungbean sprout, pear, grapefruit, lemon, orange, water chestnut, momordica fruit (luo han guo/ fructus momordicae grosvenori), seed of great burdock (niu bang zi), pomegranate.

All conditions: before and during epidemics regularly consume olive, pi pa, apricot, almonds, fig, chinese yam, black fungus.

Constitutional herbs

- People with Lung qi and yin deficiency, phlegm heat or phlegm damp, have a weak constitution and may easily catch influenza. It is suggested that these people regularly take: Shan Yao (Radix Dioscoreae Oppositae), Xing Ren (Semen Pruni Armeniacae), Si Gua (Retinervus Luffae Fructus), Luo Han Guo (Fructus Momordicae Grosvenori), Pi Pa Ye (Folium Eriobotryae Japonicae).
- People with Lung and Liver yin deficiency, manifested as thin body build, thirst, night sweating and constipation should take *Sha Shen Mai Men Dong Tang* (Glehnia and Iphiopogonis Decoction) or *Yi Guan Jian* (Linking Decoction) for 6 months.
- People with Spleen and Kidney yang deficiency, manifesting as feeling chilly rather than hot, pallor, diarrhoea, slow (*chi*) pulse: should take *You Gui Wan* (Restore the Right [Kidney] Pill) for 6 months.

Exercise

Exercises, including Taiji, Qigong, walking and slow running help to strengthen defense qi and develop immunity from disease.

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