

Bird Flu and Chinese Medicine

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According to the U.S. Centers for Disease Control and Prevention (CDC), avian influenza is an infection caused by bird flu viruses. These influenza viruses occur naturally among birds and, although wild birds worldwide carry the viruses in their intestines, they do not usually get sick from them. However, avian influenza is very contagious among birds and can make some domesticated birds, including chickens, ducks and turkeys, very sick and can kill them. Infected birds shed the influenza virus in their saliva, nasal secretions, and feces. Susceptible birds become infected when they come in contact with contaminated secretions or excretions or with surfaces that are contaminated with secretions or excretions from infected birds. Domesticated birds may become infected with avian influenza virus through direct contact with infected waterfowl or other infected poultry; through contact with surfaces such as dirt or cages; or materials, such as water or feed, that have been contaminated with the virus.

Infection with avian influenza viruses in domestic poultry causes two main forms of disease that are distinguished by low and high extremes of virulence. The low pathogenic form may go undetected and usually causes only mild symptoms, such as ruffled feathers and a drop in egg production. However, the highly pathogenic form spreads more rapidly through flocks of poultry. This form may cause disease that affects multiple internal organs and has a mortality rate that can reach 90 percent to 100 percent, often within 48 hours.

The risk from bird flu is generally low to most people because the viruses do not usually infect humans. However, confirmed cases of human infection from several subtypes of avian influenza infection have been reported since 1997. Most cases of avian influenza infection in humans have resulted from contact with infected poultry (i.e., domesticated chicken, ducks and turkeys) or surfaces contaminated with secretion/excretions from infected birds. The spread of avian influenza viruses from one ill person to another has been rarely reported, and transmission has not been observed to continue beyond one person.

Symptoms of avian influenza in humans have ranged from typical human influenza-like symptoms, such as fever, cough, sore throat, and muscle aches, to eye infections, pneumonia, severe respiratory diseases, such as acute respiratory distress, and other severe and life-threatening complications. The symptoms of bird flu may depend on which virus caused the infection. Studies done in laboratories suggest that some of the prescription medicines approved in the United States for human influenza viruses should also work in treating avian influenza infection in humans. However, influenza viruses can become resistant to these drugs. Therefore, these medications may not always work. Additional studies are needed to demonstrate the effectiveness of these medicines.¹

According to the World Health Organization (WHO), there have been a total of 31 cases worldwide of avian influenza and 20 deaths from Jan. 1 to March 8, 2006.² Also as of March 8, 2006, the Ministry of Health in the People's Republic of China had reported 10 deaths from H5N1 avian influenza in that country alone.³ Public health officials and organizations around the world remain

on high alert because of increasing concerns about the prospect of an influenza pandemic which many experts believe to be inevitable. Moreover, recent problems with the availability and strain-specificity of vaccine for annual flu epidemics in some countries and the rise of pandemic strains of avian flu in disparate geographic regions have alarmed experts about the world's ability to prevent or contain a human pandemic.⁴

Because Chinese medicine has a long history of treating various viral conditions successfully and because so many cases of avian influenza in humans have occurred in China, it is only natural for practitioners of Chinese medicine worldwide to ask what our medicine has to offer for the protection and treatment of this condition. On pages 441-443 of issue No. 6, 2005 of *Tian Jin Zhong Yi Yao (Tianjin Chinese Medicine & Medicinals)*, the Tianjin Municipal Group of Experts on the Prevention and Treatment of Avian Influenza With Chinese Medicine and Medicinals published an article titled, "Guidelines for the Diagnosis and Treatment of Human Infection by Highly Pathogenic Avian Influenza with Chinese Medicine and Medicinals." Therefore, below is an abstract of this article's discussion of the treatment based on pattern discrimination of the various stages of this disease.

Editor's note: The following abstract was abstracted, translated, compiled and annotated by Bob Flaws, LAc, Michael Johnston, LAc, Timothy Rogers, LAc, Stacey Gruber, LAc, Rachel Horner, LAc, Donna Sigmond, LAc, Kandace Cahill (student, Southwest Acupuncture College), and Jeffrey Fox (student, SWAC). The translators, all members of Bob Flaws' modern medical Chinese translation class in Boulder, Colo., translated the following after only three to four classes.

Initial Stage:

1. Evils Assailing the Lungs and Defensive Aspect Pattern

Symptoms: Effusion of heat, aversion to cold, nasal congestion, runny nose, cough, sore throat, headache, muscles aches and pain, a dry mouth with thirst, white or yellow tongue fur, and a floating, rapid or floating, tight pulse.

Treatment methods: Use acrid and cool medicinals to resolve the exterior, mildly clear, diffuse, and out-thrust.

Formula: Use *yin qiao san* (lonicera and forsythia powder) plus *sheng jiang san* (up-bearing and down-bearing powder) with additions and subtractions.

Medicinals:

- *Jin Yin Hua* (Flos lonicerae), 10-15g
- *Lian Qiao* (Fructus forsythiae), 10-15g
- *Chan Tui* (Periostracum cicadae), 6-10g
- *Jiang Can* (Bombyx batryticatus), 6-10g
- *Jie Geng* (Radix platycodi), 6-10g
- *Dan Zhu Ye* (Herba lophateri), 6-10g
- *Jing Jie* (Herba schizonepetae), 6-10g
- *Dan Dou Chi* (Semen praeparatum sojae), 6-10g
- *Niu Bang Zi* (Fructus arctii), 6-10g
- *Lu Gen* (Rhizoma phragmitis), 15-30g
- *Bo He* (Herba menthae haplocalycis), 6-10g (added later)
- *Gan Cao* (Radix glycyrrhizae), 6-10g

If aversion to cold is serious and muscles aches and pains are pronounced, one can add *qiang huo* (Radix et rhizoma notopterygii), *du huo* (Radix angelicae pubescentis) and *fang feng* (Radix saposhnikoviae). If there is a sore, swollen throat, one can add *she gan* (Rhizoma belamcandae) and *shan dou gen* (Rhizoma sophorae tonkinensis). If there is joint pain, one can add *sang zhi* (Ramulus mori) and *wei ling xian* (Radix clematidis). If there is chest and diaphragmatic fullness and oppression, one can add *huo xiang* (Herba pogostemonis) and *pei lan* (Herba eupatorii). If there is damp heat descending uninhibitedly with abdominal pain and diarrhea, one can add *ge gen* (Radix puerariae), *huang qin* (Radix scutellariae) and *huang lian* (Rhizoma coptidis). If cough is serious, one can add *zhe bei mu* (Bulbus fritillariae thunbergii), *xing ren* (Semen armeniacae) and *qian hu* (Radix peucedani).

Chinese ready-made medicines: One can also orally administer *yin qiao jie du pian* (lonicera and forsythia resolve toxins tablets), *qing wen jie du pian* (clear scourge and resolve toxins tablets), and/or *shuang huang lian kou fu ye* (double coptis oral administration liquid). In terms of injectables, one can use *qing kai ling zhu she ye* (clearing and opening efficacious injectable liquid), *chuan hu ning zhu she ye* (manitis and amber calming injectable fluid), and so on.

Note: Based on the above signs and symptoms, treatment principles, and formulas and medicinals, it seems apparent that the first stage is essentially a wind-heat exterior pattern which, in some cases, may be replaced or complicated by a wind-cold exterior pattern.

Progressive Stage:

1. Evil Toxins Congesting the Lungs Pattern

Symptoms: High heat or fever; cough; panting with a suffocating feeling; sweating; vexatious thirst; spitting up thick, yellow phlegm which is possibly streaked with threads of blood; possible chest oppression and abdominal distention; sore limbs; fatigue; yellow-red urination; possible yellowing of the body and eyes; a red tongue with yellow or slimy, yellow fur; and a slippery, rapid pulse.

Treatment methods: Clear heat and resolve toxins, drain the lungs and calm or level panting.

Formula: Use *ma xing shi gan tang* (ephedra, armeniaca, gypsum and licorice decoction) plus *ting li da zao xie fei tang* (descuriana/lepidium and red date drain the lungs decoction) with additions and subtractions.

Medicinals:

- mix-fried *ma huang* (Herba ephedrae), 3-10g
- uncooked *shi gao* (Gypsum fibrosum), 15-60g
- *xing ren* (Semen armeniacae), 6-10g
- *jin yin hua* (Flos lonicerae), 10-30g
- *lian qiao* (Fructus forsythiae), 10-30g
- *zhi mu* (Rhizoma anemarrhenae), 10-15g
- *sang bai pi* (Cortex mori), 10-15g
- *yu xing cao* (Herba hedyotis diffusae), 15-30g
- *ting li zi* (Semen descuriana/lepidii), 10-15g
- lime-processed *ban xia* (Rhizoma pinelliae), 6-10g
- *gan cao* (Radix glycyrrhizae), 6-10g
- *da zao* (Fructus jujubae), 5 pieces

If there is spitting up of blood, one can add *bai mao gen* (Rhizoma imperatae), *ce bai ye* (Cacumen platycladi) and *xian he cao* (Herba agrimoniae). If there is chest oppression and abdominal distention, sore limbs, fatigue, and yellow-red urination or yellowing of the body and eyes, one can add *gan lu xiao du dan* (sweet dew disperse toxins elixir) with additions and subtractions in order to clear heat, resolve toxins, and transform dampness.

Chinese ready-made medicines: For orally administered medicines, one can use *qing fei xiao yan wan* (clear the lungs and disperse inflammation pills), and so on. For injectables, one can use *yu xing cao zhu she ye* (hedyotis injectable liquid) and *tan re qing zhu she ye* (phlegm heat clearing injectable liquid).

2. Qi and Blood Both Blazing Pattern

Symptoms: High heat or fever; thirst; sweating; vexation; agitation; and restlessness; if extreme, stupor and deranged speech; a crimson red tongue with coarse, yellow fur; and a surging or slippery, rapid pulse.

Treatment methods: Clear both the *qi* and constructive aspects, cool the blood and resolve toxins.

Formula: use *qing wen bai du yin* (clear the scourge and vanquish toxins beverage) plus *xi jiao di huang tang* (rhinoceros horn and rehmannia decoction) with additions and subtractions.

Medicinals:

- uncooked *shi gao* (Gypsum fibrosum), 30-60g
- *sheng di* (uncooked radix rehmanniae), 10-15g
- powdered *shui niu jiao* (Cornu bubali), 10-30g, decocted first
- *huang qin* (Radix scutellariae), 6-10g
- *huang lian* (Rhizoma coptidis), 9-10g
- *zhi zi* (Fructus gardeniae), 6-10g
- *zhi mu* (Rhizoma anemarrhenae), 6-10g
- *lian qiao* (Fructus forsythiae), 10-15g
- *xuan shen* (Radix scrophulariae), 10-15g
- *chi shao* (Radix paeoniae rubrae), 10-15g
- *dan pi* (Cortex moutan), 10-15g
- *gan cao* (Radix glycyrrhizae), 6-10g

Chinese ready-made medicines: *shuang huang lian zhu she ye* (dual coptis injectable liquid).

Extreme Stage:

1. Panting and Desertion Pattern

Symptoms: Panting and distressed rapid breathing; vexation and agitation; chest oppression; a suffocating feeling; sweating like pearls; blurred consciousness; heart palpitations; a dark, purplish tongue; and a fine, rapid or deep pulse.

Treatment methods: Boost the *qi*, nourish the blood, and secure desertion.

Formula: *sheng mai zhu she ye* (engender the pulse injectable liquid) plus *dan shen zhu she ye* (salvia injectable liquid).

2. Clouded Spirit

Symptoms: Clouded spirit; deranged speech or no speech; vexation; agitation; and restlessness; shortness of breath; rapid, dyspneic breathing; reversal chilling of the hands and feet; spontaneous chilly sweating; a crimson tongue; and a fine, racing or deep, weak pulse.

Treatment methods: Cool the constructive and resolve toxins, clear the heart and open the orifices.

Formula: *qing ying tang* (clear the constructive decoction) with additions and subtractions pulse an *gong niu huang wan* (quiet the palace cow bezoar pills) or *zi xue dan* (purple snow elixir).

If there is shortness of breath with hasty, dyspneic breathing and a fine, urgent pulse, one can use *sheng mai san* (engender the pulse powder) with additions and subtractions.

If there is reversal chilling of the hands and feet, spontaneous chilly sweating, and a deep, weak or, in extreme, a faint pulse on the verge of expiry, one can use *shen fu tang* (ginseng and aconite decoction) with additions and subtractions), or alternatively one can administer *an gong niu huang wan* (quiet the palace cow bezoar pills) or *zi xue dan* (purple snow elixir).

Chinese ready-made medicines: *xing nao jing zhu she ye* (arouse the brain stilling injectable liquid) plus *shen mai zhu she ye* (ginseng vessel injectable liquid).

Recuperation stage:

1. Residual Heat Not Yet Cleared, Lung-Stomach Yin-Damaged Pattern

Symptoms: Low heat (i.e. low-grade fever) or no heat; dry cough or scanty, sticky phlegm; poor digestion; heart vexation; heart palpitations; insomnia; a dry mouth with accompanying thirst; possible diarrhea; a dry, red tongue with scanty fur; and a fine, rapid pulse.

Treatment methods: Enrich and nourish the lungs and stomach while simultaneously clearing remaining heat.

Formula: *zhu ye shi gao tang* (bamboo leaf and gypsum decoction) or *sha shen mai men dong tang* (glehnia and ophiopogon decoction) with additions and subtractions.

Medicinals:

- *dan zhu ye* (Herba lophateri), 6-10g
- uncooked *shi gao* (Gypsum fibrosum), 15-30g
- lime-processed *ban xia* (Rhizoma pinelliae), 6-10g
- *sha shen* (Radix glehniae), 10-15g
- *yu zhu* (Rhizoma polygoni odorati), 10-15g
- *mai men dong* (Tuber ophiopogonis), 10-15g
- *gan cao* (Radix glycyrrhizae), 6-10g

If diarrhea is marked, also use *ge gen qin lian tang* (puerariae, scutellaria and coptis decoction) with additions and subtractions. If heart vexation is marked, also add *zhi zi dou tang* (gardenia and Semen praeparatum sojae decoction) with additions and subtractions. If residual heat has not been cleared and low-grade fever is marked, also add *hao qin qing dan tang* (Artemisia annua and scutellaria clear the gallbladder decoction) with additions and subtractions.

Chinese ready-made medicines: *sheng mai zhu she ye* (engender the pulse injectable liquid), and so

on.

References

1. "Key Facts About Avian Influenza (Bird Flu) and Avian Influenza A (H5N1) Virus."
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3. "Avian Flu Update, March 8, 2006." World Health Organization.
4. "The Threat of Pandemic Influenza: Are We Ready?" *The National Academies Press*, Stacey L. Knobler, Alison Mack, Adel Mahmoud, Stanley M. Lemon, editors.

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