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AVIAN FLU OR CHICKEN INFLUENZA AND CANINE INFLUENZA

Following the same modus operandi that I used in 2003 for research into a "highly suggestive" homeopathic treatment for SARS (www.sarsremedy.org), and knowing the "highly suggestive" homeopathic remedy for the treatment of the **avian pneumonia** which at this moment is worrying the whole world, in order to speed up its diffusion, I have chosen the internet so that, in real time, everybody may be acquainted with this "alternative" therapy.

Influenza

Before talking about avian influenza, a brief mention of human influenza is necessary.

Definition

Influenza is an acute respiratory infection of specific viral etiology characterized by sudden onset of headache, myalgia, fever, and prostration. The term *influenza* and "flu" should be restricted to those cases with clear-cut epidemiologic or laboratory evidence of infection with influenza virus.

The etiological agent

The viruses of A and B influenza constitute one antigenic type and the virus of influenza C another type. Infection with one type confers no immunity to the other two. The designation of the influenza viruses of type A, B or C is based on the antigenic identification of the nucleoprotein (NP) and of the internal matrix proteins (M).
The three types are grouped in a virus family named Orthomyxoviridae.
The influenza A viruses are further subdivided (subtypes) on the basis of the surface antigens: hemagglutinin (H) and neuraminidase (N); the single subtype are denominated according to the place and year of their isolation, for example A/Sydney/5/97 (H3N2). The influenza B and C viruses are classified following the same criteria but they are not divided into subtypes because the H and N antigens do not show very significant variations in the type B and can even be lacking in type C. The influenza B and C viruses do not usually cause significant complications.

Epidemiology of influenza A

Influenza A viruses are the cause of outbreaks of desease almost annually. With the exception of the last two decades, world epidemics or pandemics have happened about every 10-15 years starting from the pandemic in 1957-1958.
Influenza A viruses infect pigs, horses, and fowl, expecially ducks and turkeys.

A summary of the appearance of antigen subtypes of influenza A associated with various pandemics or epidemics.

Year	Subtype of influenza A	Extension of the epidemic
1889-90	H2N8a	Serious pandemic
1900-03	H3N8a	Moderate epidemic
1918-19	H1N1b	Spanish or swine influenza - serious pandemic
1933-35	H1N1-previously HswN1	Light epidemic
1946-47	H1N1-previously H0N1	Light epidemic
1957-58	H2N2-Asian	Serious pandemic
1968-69	H3N2-Hong Kong	Moderate epidemic from horses virus
1977-78c	H1N1	Light epidemic

[a] – From retrospective serological investigations on people living in those periods ("sero-archaeology").
[b] – The hemagglutinins once denominated Hsw and HO are now classified as H1 variants.
[c] – From then up until now (1999-2000), viruses of the subtypes H1N1 or H3N2 have shown themselves in alternate years or together.

The most extensive and serious epidemics are caused by the viruses of influenza A. This is partly due to the notable capacity of the hemagglutinin and neuraminidase antigens of the virus of influenza A to undergo periodical antigenic modifications. The greatest variations are recognised as antigenic *shifts* (antigenic variants), are limited to influenza A viruses and sometimes are related to influenza pandemics. Minor variations are defined as antigenic *drifts* (antigenic modifications). These changes may regard only the hemagglutinin or the hemagglutinin and the neuraminidase. In human infections three major antigenic subtypes of hemagglutinins (H1,H2,H3) and two neuroaminidases (N1,N2) have been identified. The hemagglutinins, once denominated Ho and Hsw, are now classified as variants of H1 (see the summary).
An example of antigenic variant which affected hemagglutinin and neuraminidase took place in 1957, when the subtype of the predominant influenza A virus changed from H1N1 to H2N2 with the appearance of a serious epidemic which caused in the United States alone 70,000 deaths more than those forecast. In 1968 there was an interesting antigenic variant affecting only the hemagglutinin (from H2N2 to H3N2) and the consequent pandemic was less serious than the one in 1957. In 1977 a H1N1 virus emerged which was responsible for a pandemic affecting above all young people born after 1957. As can be observed in the summary, the H1N1 viruses appeared from 1918 to 1956 and so it was foreseeable that those born before 1957 would possess a certain degree of immunity towards the H1N1 virus. During the main influenza epidemics only one viral subtype circulated at a time. And yet, starting from 1977, the viruses H1N1 and H3N2 circulated together causing epidemics of varying gravity. In some epidemics also viruses of influenza type B circulated simultaneously with the viruses of influenza type A.
The origin of the pandemics is of *avian* origin. Given the notable difference in the primary structures of the hemagglutinins of the various subtypes of the influenza virus (H1, H2 or H3), it can be considered improbable that the antigenic variations are the fruit of spontaneous mutations of the gene of the hemagglutinin. As the segmented genome of the influenza virus may show a strong indication of rearrangement, it has been assumed that the pandemic stocks may derive from the gene rearrangement between human and animal influenza viruses. It is held that such a gene rearrangement could have happened in 1997 in Hong Kong where some cases of infection by the virus of influenza A/H5N1 were discovered in human beings during an extensive epidemic of avian influenza caused by **A/H5N1** in poultry.
Pandemics represent the most dramatic expression of influenza; and yet, the cases of illness which take place between the pandemic periods are responsible for a high total mortality and morbidity, even if observed over a longer period. The viruses of influenza A which circulate between the

pandemic periods show antigenic *drift* of the H antigen; these variations are apparently the result of punctiform mutations which involve the segment of RNA which codifies the hemagglutinin. Significant stocks from the epidemiological point of view, that is those which can cause large epidemics, show amino acid modifications in at least two greater antigenic sites in the hemagglutinin molecule. As two punctiform mutations hardly ever happen together, it is thought that antigenic *drifts* derive from punctiform mutations, which have happened sequentially during the diffusion of the virus from person to person. Antigenic *drifts* took place almost every year from 1977 onwards for H1N1 viruses, and from 1968 onwards for H3N2 viruses.

Clinical manifestations of influenza

Influenza epidemics take place almost every winter beginning brusquely and reaching their climax in a two week period; they generally last from 2 to 3 weeks and often disappear with the same rapidity with which they appeared.
Influenza is an acute respiratory disease caused by an infection of influenza viruses; the illness affects the high/low respiratory tracts and is often accompanied by systemic signs and symptoms such as headache, temperature from 38° to 41°C, headache in the forehead, sensation of coldness, shivering, widespread myalgia, bodily discomfort, pain when moving the eyeballs, photophobia and burning of the eyes; the respiratory symptoms are characterised by coughing and pharyngodinia. Influenza without complications usually reaches a solution of the acute illness in a period going from 2 to 5 days and most patients get completely better in a week.

Complications

These epidemics have a high *morbidity rate* (illness rate: the relation between the number of ill people and healthy people in a community) in the general population. On the other hand, one has a high *mortality rate* if the influenza caused by the influenza A virus causes a primary pneumonia; pneumonia is more frequent in elderly people suffering from chronic respiratory, cardiovascular, metabolic and immune-depressive diseases and it often worsens ending in death. Pneumonia must be suspected in all cases of influenza when the temperature does not come down 5 days after the onset. The differential diagnosis of parainfluential pneumonia of bacterial etiology should be made after laboratory tests and radiological enquiries. The main indications of phlogosis (VES, leucocytosis, mucoproteins, reactive C protein) are normally higher in pneumonia of bacterial etiology; in the latter, moreover, chest X-rays will show single or multiple zones of parenchymal thickening.
Pulmonary affection can even be verified 24-48 hours after the onset of the influenza; in this case it is characterised by coughing, hemoptysis, plain dyspnoea, hyperpnea and, at the end, cyanosis. During auscultation there are appreciable rhonchi, whistling and widespread rattles or the presence of hypophonia. X-rays will show an evident **widespread interstitial bronchopneumonia** and/or an **acute respiratory distress syndrome** (ARDS) whose homeopathic therapy has been described in "**SARS, a proposition for its treatment**" *

In these cases a strong hypoxia is noticed in the arterial hemogasanalysis. Hystopathological reports, in cases of lethal primary influential pneumonia, consist of a strong inflammatory reaction in the alveolar septa, with edema and infiltrates of lymphocytes, macrophages and plasma cells. In the alveolar capillaries there are fibrin thrombi, together with necrosis; the alveoli and the alveolar ducts may be covered with eosinophilic hyaline membranes. In direct immunofluorescence the antigens of the influenza virus are noticeable in the macrophages and alveoli.

The therapy is aimed above all at ensuring good respiratory functioning; in the most serious cases intensive care treatment is necessary.

In other cases the clinical course of viral pneumonia A leads to death caused by a "**hemorrhagic pneumonia"** (see for the therapy, canine influenza).

***** As the expected pandemic fortunately did not take place, the book "SARS, a proposition for its treatment" did not receive the clinical confirmation it deserved, but the *corona virus* responsible for SARS is only sleeping in its natural "reservoir", the zibet, which is still a popular dish on Chinese tables, and also in the raccoon dog. In order to fight this *corona virus* we have at our disposal a vaccine which was synthetized in record time in 2004. However, should there be an epidemic or pandemic, we cannot forecast immunity induced by a vaccine prepared with the 2003 type; patients at risk even if vaccinated could meet with serious complications even leading to death.

Avian pneumonia

The suspicion that the virus responsible for the pandemic of Spanish flu or swine influenza in 1918 was of avian origin arose 10 years ago; with the completion of the analysis of the mapping of the genome of the virus extracted from samples of tissue from corpses preserved in permafrost, it resulted that the hemagglutinin of the viruses responsible for the "*pandemics"* is of *avian* origin.

In 1997 during the Hong Kong pandemic, the virus A/H5N1 was isolated. On 17th February 2002, at the same time that the first cases of SARS were appearing, a Chinese man of 33 who had travelled in the Chinese province of Fujan died of unknown causes in Hong Kong. The day after the Hong Kong authorities announced that a virus of birds A/H5N1, had been isolated by the man and by his 9 year old son who was also in hospital. Another member of the family, an 8 year old daughter, died in Fujan.

A forecast made by experts of the next announced pandemic based on statistical patterns which take into consideration the great influenza pandemics (Spanish in 1918-19, Asian in 1957-58 and Hong Kong in 1968-69), estimates that there will be sixteen million people infected, two million people in hospital and 150 thousand victims in Italy alone.
In these days the second European conference on avian influenza has been held in San Giuliano (Malta) in order to discuss the possibility of direct transmission to human beings from birds.
Avian influenza is a bird disease caused by an influenza virus of type A and it can affect almost all types of birds, with manifestations that go from very light to very serious and contagious ones. In these cases the disease appears suddenly, followed by a rapid death in most cases of animals. At least fifteen subtypes of influenza viruses which infect birds are known. Most of the cases of transmission to human beings were caused by viruses of type A of the subtypes H5 and H7. According to the combination of surface proteins of the viruses (H=hemagglutinin, N=neuroaminidase), the virus acquires a different denomination (H5N1, H7N2, etc…). The most dangerous is held to be the subtype H5N1. The latter in the past two years has already passed from one species to another, acquiring the capacity even to infect cats and other mammals, as well as pigs (particularly important because they are receptive both to bird viruses and human viruses). Moreover, during recent epidemics, starting from 2003, the capacity of this virus to infect human beings too, causing acute forms of influenza, has been documented. The avian virus is feared because during the last three great pandemics the presence of parts of the avian virus combined with the human influenza one was verified. This makes it probable that the viruses, re-combining together, have generated a new virus, particularly fearful because it is "new". Moreover, all the viruses of type A tend to go towards changes in their genetic code every time they reproduce.
Up until today the chicken virus infected only those who work and live in close contact with these animals but, once the virus has passed to human beings and has adapted itself to them, contagion

would take place like a common flu through the respiratory ducts during coughing with no more need for the "jump to another species" and, therefore, its diffusion would be very rapid and not only limited to places where there are infected chicken.
The changed virus, passing directly from the chicken to human beings, would be "new" to the human immune system which is not yet in possession of the specific antibodies, and no human organism would probably be able to fight and limit its diffusion.
Chicken-human being contagion has happened tens of times in recent years causing a total of 64 deaths in South East Asia. This year it has killed 45 people (32 people from Vietnam, 12 from Thailand and one from Cambodia).

Avian influenza in the fowl determines a picture of acute fulminating serositis. The fowl, not having the diaphragm muscle which separates the abdominal cavity from the thoracic one, anatomically has air sacks covered with serous membrane; the bird dies from infection of all the serous membranes which, in a post mortem examination, appear hyperemic. According to the laws in force in the case of an epidemic it is not possible to treat surviving animals. The fowl farm is put under sequester and any animals still alive are killed and incinerated. This happens not only for cases of avian influenza but also for any other epidemic. In England two million heads of beef cattle were killed because of foot and mouth disease.

Avian influenza in human beings causes symptoms which go from a symptom similar to influenza up to *a very serious pneumonia with an acute respiratory distress syndrome (ARDS) picture.*

During an interview with Prof. Giovanni Rezza, director of the department of infectious diseases at the Istituto Superiore di Sanità, to the question asked by a journalist if there will really be 2 million people in hospital, he replied: "there is no room in hospitals for 2 million people! Also because if we are talking about the need for detention in hospital it is presumed we are talking about patients with serious respiratory difficulties and there is not this number of beds in intensive care anywhere." This answer, however, leaves us all dismayed.
This means that if the number of patients is superior to the number of beds available in intensive care units, those who suffer from serious influenza will not be able to receive adequate respiratory assistance and will be left to their fate. In front of a new "pandemic" emergency official medicine is not in the condition to be able to give all the patients the assistance or the anti-viral drugs they need to fight it.
The same thing could have happened with SARS but fortunately the *corona virus* spontaneously lost its virulence, only causing about 800 victims.
I do not wish to be an alarmist, but what must be done is to find in time a solution to a very serious problem before it escapes all medical control.
Today there is not an efficacious vaccine against avian influenza which could protect the population from contagion. Antiviral medicines belonging to two different classes could be used: inhibitors of the M2 (amantadine and rimantadine) and inhibitors of the neuroaminidase (zanamivir and oseltamivir). Analysis of the viruses isolated in the lethal cases of H5N1 influenza in Vietnam indicate that the type appears to be resistant to the inhibitors of M2. The inhibitors of the neuroaminidase are efficacious both with viruses of type A and type B; laboratories belonging to the global network of influenza surveillance are also working in order to confirm the efficacy of the inhibitors of neuraminidase against the H5N1 stock which is circulating at the moment.
Every year Unicist homeopathic doctors treat with specific "situational" remedies those influenza epidemics which are treated allopathically with symptomatic drugs which are not specific. During these seasonal epidemics the constitutional remedy is not efficacious as the viral epidemic gene is so powerful that it overcomes the individual's constitutionality. Influenza viruses set off a symptomatic chain superimposable on the population which is struck and it is amazing to observe the rapid resolution of symptoms with "situational" remedies which are specific for influenza.

Pneumonia caused by the avian virus could be treated homeopathically with the "highly suggestive" remedy XXX, a specific homeopathic remedy for acute respiratory distress syndrome (ARDS) which has been described in the book "SARS – a proposition for its treatment".

If the complication of an influenza induced by the A virus should be hemorrhagic pneumonia, the specific remedy is described in the treatment for canine influenza.

USA: canine influenza emerges, evolution of the stock of equine influenza

A state of alert reaches us from the United States about the emergence of a new viral pathogenous agent which is responsible for the first form of canine influenza. It is the first time that the *equine virus H3N8* infects another species of mammals other than the horse.
The virus is not correlated with the common agents of human influenza or with the virus H5N1 of avian influenza. No cases of human infection have been reported. The risk is low but, considering that dogs live in close contact with human beings, the experts' worry is justified. Some epidemiologists feel that the jump from one species to another may have happened already before January 2004. In Florida the national epidemics of canine cough (infective tracheo-bronchitis) took place in 1992, 1999 and 2003; in those years a high percentage of dogs affected presented symptoms referable to canine cough but then died of **hemorrhagic pneumonia**, not a common happening in the case of infective tracheo-bronchitis. In 2004 in Florida 22 greyhounds were struck by the virus and 8 died of hemorrhagic pneumonia. The post mortem examination revealed a serious pulmonary hemmorhage.

As has already been stressed, the permanence of dogs inside our homes requires particular attention; it is necessary to discover an efficacious weapon in order to defeat the hemmorhagic pneumonia induced by the virus H3N8 which could be transmitted from dogs to human beings.

Following the dictates of classical homeopathy, *applicable also to animals,* and by crossing the listing rubrics in the Repertories which consider influenza, pneumonia and pulmonary hemorrhage caused by the latter, it is clear that there are only two remedies which could be "highly suggestive" for the treatment of hemorrhagic pneumonia caused by the virus H3N8 in dogs.
These two remedies are: Calcarea Sulphurica and Sulphuricum Acidum.
Reading the proving of the single remedies in the medical book of Doctor Clark, only one remedy appears which could be "highly suggestive" and specific for the treatment of hemorrhagic pneumonia caused by the virus H3N8: Sulphuricum Acidum.
Doctor Clark describes in his "Materia Medica" the proving of Sulphuricum Acidum which for similarity can treat: ecchymosis, hemorrhage, influenza, pneumonia, prolonged hemoptysis, cough with hemoptysis, **profuse pulmonary hemorrhage** and the subsequent collapse. In the Repertories influenza, pneumonia, **pulmonary hemorrhage during pneumonia**, etc. can be found in the rubrics.

Not wishing to re-write a book of homeopathy only in order to indicate the "highly suggestive" homeopathic remedy for the treatment of hemorrhagic pneumonia caused by the influenza virus A which infects human beings dogs also, I would advise anyone who wishes to understand how I identified the remedy, to read the book **"SARS, a proposition for its treatment"** in which the modus operandi of classic homeopathic medicine is described.

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