

Dr. Robert Cathcart, Mike Coffee, Steven Fowkes, Phil Jacklin

SLF Panel on Preparation for an Avian Flu Pandemic

Cubberly Community Center 4000 Middlefield Road, Room H1, Palo Alto, California

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Future Speakers:

• December 15, TBD

• Jan 19, David Brownstein, MD Iodine; Why You Need it, Why You Can't Live Without It

About The Panelists

All the panelists are long time members of SLF and have made many contributions to our organization. Dr. Cathcart is a pioneer in the use of Vitamin C therapy for viral diseases. Steve Fowkes, former president, has been tracking information about antiviral therapies for three decades. Phil Jacklin, our current president, has been researching this area for the past few months and wrote most of this newsletter. Mike Coffey, our past vice president, has also contributed information for this subject.

Part I.

What is the danger we face? A new flu strain, H5N1, has appeared in China and Southeast Asia. It is unlike the regular flu viruses we see each winter. It has infected and killed millions of birds – farmed chickens and ducks as well as wild, migratory birds. This 'avian flu' has now spread to birds in Eastern Europe and it is expected to travel the globe.

At present, this flu is not very contagious to humans. It does not spread readily from birds to humans or from humans to humans. Only 60 to 100 people have been infected. But, this flu is unusually deadly. It has killed about 50 % of those infected. Seasonal influenzas kill less than 0.1 of 1 % of those infected. Even the Great Flu Pandemic of 1918 killed about 50 million people worldwide. The H5N1 virus is lethal because it is not like the usual influenzas. We have acquired no immunity to flus of this kind because they occur so rarely.

Viruses tend to change rapidly. When two flu viruses infect the same person or animal, these viruses sometimes exchange genes. Through the evolutionary process of natural selection, viruses that mutate to become easily transmitted, spread widely. A lethal flu like H5N1 will eventually acquire genes from other viruses that will make it highly contagious (a possible pandemic) among humans.

Two things are unknown:

1. Whether this mutated 'hybrid' flu will appear in the next few months or in the next few years. Most probably, it will be in the next few months.

2. Whether the new 'hybrid' flu will retain its extraordinary capacity to kill. Most probably, it will be far less lethal but chances are it will be at least as lethal as the 1918 flu.

Even if we do not face a flu which is both contagious and lethal in the next few months, it is almost certain that it will be among us in the next few years. H5N1 will exchange genes with other viruses not just once but again and again in its evolutionary history.

Now for the crusher: If and when there is an avian flu pandemic, most of us will be on our own. We will be working to survive as best we can. Few of us will be able to rely on our doctors or the medical system. So many will be seriously ill that the medical services we expect in normal times will not be available. There won't be enough doctors or hospital beds to go around. Those stricken often require ventilators. There are only 105,000 ventilators in the country and most of these are already in use right now. The medical system will rely primarily on anti-viral drugs and on vaccines. Unfortunately, the new flu may quickly acquire resistance to the two drugs in question, Tamiflu and Relenza. And, in any case, these drugs are in short supply. Stockpiles are 1/10 th of what might be needed. As for vaccines, there will be no vaccines available during the first six months to a year of the pandemic. The vaccine can not be made until it is known what form the new 'hybrid' will take. Then the vaccine has to be grown on chicken eggs in a process that takes at least six months. It will be longer before there is a substantial supply. (And, alas, recent research indicates that older people with age-weakened immune systems do not gain much immunity from flu vaccines.)

Part II.

What can you do to improve the odds that you and those you love will survive a bird flu pandemic? We will explore five important preparations which can be made by individuals and households. There are difficult questions without clear answers.

1. Self-imposed isolation and use of masks and gloves when one must go outside the home.

2. Stockpile a supply of Tamiflu or Relenza.

3. Mega C treatment - massive doses of ascorbate (vitamin C) orally or, better, by

intravenous administration without professional assistance if that is possible.

4. Use of a combination of common drugs and supplements like Thymic Protein A, each of

which improves the odds of survival. The right package might tip the balance. 5. In-home nursing to prevent dehydration and track compliance with the treatment plan.

1. **Preventive Measures**: Obviously, one can reduce the risk of 'catching the flu' by reducing social contacts. This flu is lipid-based and so it is spread not just through the coughs and exhalations of the infected but also by contact of the viral particles on and through the skin. For some, self-imposed isolation might mean taking a leave of absence, losing ones job or getting grades of incomplete. There are fates worse than losing one's job and, if others perish and you do not, survivors will find there is work to be done. Self-imposed isolation entails reducing physical contact and proximity even with friends and family who are not part of the household while still maintaining other communications. This will sometimes involve heart-breaking decisions, e.g., should I go to assist my aged parents who have the flu and so risk leaving my children fatherless? And, if I do go, should I come home again and risk the spread of the infection to myself and my wife and children?

How to handle or not handle ones mail is another issue? How does one pay ones bills without opening the envelopes? One idea is to overpay or pay an estimated six months in advance plus 20 %. Another is to use gloves and take other precautions.

In order to prepare, one should stock a three to six month supply of canned foods, medicines used, batteries for watches and clocks, and so on. When one must go out, one might wear a protective mask and gloves. These should be disposed of outside after every trip. There are more things to buy in advance but we don't have room to list them all here.

If one can reduce one's shopping trips out and all social contacts by 95 %, that will make a difference. The pandemic will last more than six or nine months but, hopefully, at some point, a flu vaccine will become available.

2. **Stockpile a supply of the anti-viral drugs Tamiflu or Relenza.** This may be impossible. That remains to be seen. And, as noted already, the flu we end up fighting may have some resistance to these drugs. Nevertheless, it is something to be done if possible. Relenza is much more expensive but it may be easier to get.

3. **Mega C Treatment** . Recent research by the NIH confirms hundreds of clinical reports that doses of 50 to 100, or even 300 grams of ascorbate (vitamin C) per day for four or five consecutive days will cure acute viral diseases like the flu. (Qi Chen, et al,

"Pharmacologic ascorbic acid..." Proc.Nat.Acad.Sci.9/05) Our panelist, Bob Cathcart, M.D. is one of the world's foremost authorities on this treatment. See his website <u>www.orthomed.com/bird.htm</u> Mike Coffey will demonstrate his procedure for maximizing oral intake. The best way to administer ascorbate is intravenously. And this may be the only practical way to get daily doses of over 75 grams or so into the body. This is not something easily done by non-professionals at home. The ascorbate and equipment is easy to get and inexpensive but it is not easy to find veins. However, it is not impossible and anyone who has given blood with the help of very competent Red Cross nurses knows that learning how to place a needle in an armpit does not require a college education. Bob, as a physician can not instruct us about this but the rest of us will do our best.

When taking ascorbate orally, Bob recommends using ascorbic acid itself unbuffered by any mineral. Sodium ascorbate is also good. Other mineral ascorbates, e.g. potassium ascorbate, bring the risk that in massive doses, the mineral balance of the body might be upset. When Bob administers ascorbate by IV, he uses sodium ascorbate instead of ascorbic acid, to avoid irritating the lining of the arteries and also to reduce acidity and not irritate the skin and tissue at the point of entry.

4. **Common drugs and supplements which might improve the odds of survival:** There are a number of these which might be suggested. The floor will be open. Let us consider some possibilities.

Bob Cathcart reports that along with IV ascorbate, he gives multiple B vitamins, vitamin E, cod liver oil, zinc, manganese, chromium, and selenium. Recently, he has added ALA, alpha lipoic acid. One might also want to add copper which is a co-factor for ascorbate and NAC, n-acetyl- cysteine, a precursor of glutathione.

What about antibiotics like tetracycline and colloidal silver? The first point is that a flu is viral infection and antibiotics kill bacteria, not viruses. Nevertheless, regular seasonal flus, to the limited extent that they are lethal, kill by creating a friendly environment in the lungs for secondary bacterial infections. This flu at some stage in its progression, if not wiped out with megaC, might do the same. So, antibiotics might have some value.

However, the avian flu kills primarily, not by supporting a bacterial infection, but by what some experts are calling "a cytokine storm". The flu causes an excessive response by the immune system and the inflammation is so intense that the lungs fill with mucous and blood. The person who is ill dies from suffocation often in the first 12 to 24 hours. This is

why the avian flu is especially lethal for those who are young and strong. The stronger ones immune response, the more danger one is in.

Steve Fowkes suggests that it is not cytokines which kill. Perhaps, the intensity of the immune response causes a rapid depletion of ascorbate and induces a scurvy like condition in the membranes of the lung so that collagen fails and the lungs hemorrhage. This hemorrhaging together with the mucosal response to inflammation fill the lungs and block respiration. This supports the megaC treatment since it heads off ascorbate depletion, that is, acute vitamin C deficiency, that is, scurvy. Fowkes hypothesis also supports an hypothesis of Bob Cathcart's that the avian flu shares a hemorrhagic element with the Ebola virus and that both kill by causing acute scurvy. In both cases, ascorbate depletion could be the cause of a rapid and bloody death.

This is all hypothetical but it makes sense of the facts and could very well be correct. If they are correct, two things follow:

(1) it may be counterproductive to supplement with substances that strengthen immune response – things like MGN3, mushroom extracts and Cat's Claw;

(2) it may be desirable to use drugs and supplements which weaken the immune response – things like aspirin, vicodin, and cortisol. Note that one can buy 1 % hydrocortisone cream (chemically similar to cortisol) without a prescription. But is the use of cortisol really a good idea? Is there a tradeoff? After all, we are depending on the immune system, supplied with ascorbate, to fight off the intruding virus?

What about hydrazine sulfate as a way to quiet the cytokine storm. It is used with cancer patients to minimize cachexia, wasting of muscle and other tissue. It does this by inhibiting production of TNF, tumor necrosis factor, one of the cytokine family. TNF was formerly known as the wasting factor. Is it possible that hydrazine sulfate might inhibit inflammatory cytokines generally without reducing the macrophage reaction which destroys the viral particles and infected cells?

The article by Jonathan Byron, "H5N1 Avian Flu Virus Therapy" recommends additional supplements and supports these recommendations with good science. See www.med-owl.com/health/h5n1-virus-therapy.html. Byron recommends NAC, resveratrol and the herbs skullcap and curcumin. He recommends curcumin as a way of damping down the inflammatory immune response caused by 'the cytokine storm".

5. In-home nursing of those who are ill. The long and excellent Grattan Woodson article provides a frightening glimpse of the problems to be faced. He is especially good on another cause of flu death – dehydration. – and how to prevent it. His essay "Preparing for the Coming Influenza Pandemic" is also linked to the Cathcart website, next to the Byron link on page 1 of 11 pages on the avian flu.

Steve Fowkes will also discuss nutritional factors which increase host resistance to viral infections and also attenuate viral virulence. For example, selenium deficiency contributes to viral virulence, which is one reason why some of the nastiest bugs come out of China, which has one of the largest (and most populated) selenium-deficient regions in the World. Steve will also discuss the less known role of vitamins D, A, and B12 and the elements magnesium, calcium, strontium, barium, copper, manganese vanadium, sulfur and oxygen in this issue.

Bring your ideas, information and questions.



