CO INFECTION INFORMATION FOR PATIENTS:

Co infections with multiple viruses, bacteria and fungus infections are a common problem in over 75% of people with moderate to severe chronic fatigue with muscle and joint aches. It seems that when the immune system is run down from one infection it is more likely to get another viral, bacterial infection or fungal infection on top of it. Often there can be as many as 2 to 4 infections at a time in patients with severe chronic fatigue and aching of over a years duration. Frequently, at that least half of these multiple infections need to be treated in order to get the patient better. The immune cells seem to loose their energy fighting one infection thus allowing another infection to come in on top of it.

The two most common infections that start this cycle seem to be Chlamydia Pneumonia also known as Chlamydophilia Pneumonia (The non sexually transmitted type of Chlamydia that causes bronchitis and pneumonia) as well as its "close cousin" Mycoplasma Pneumonia. Both of these infections require the same groups of 3 to 4 antibiotics to kill them. They are very small bacteria without a cell wall and are almost as small as a virus and, for that reason, they need to slip inside the cells in order to reproduce. They are called "cell wall deficient bacteria" because they cannot reproduce and multiply unless they invade the cells of the muscles, nerves, skin and organs to "pirate" the cell's energy stores and to multiply using the cell wall of the infected patient as protection from the antibodies in the bloodstream.

A very brilliant infectious disease physician and researcher named Charles Stratton MD, who is also a Microbiologist at Vanderbilt University in Tennessee, studied these bacteria in about 2001 to 2002 after several doctors told him that many patients with chronic fatigue and chronic atherosclerotic cardiovascular disease (patients with heart attacks and strokes) had high levels of antibodies to Chlamydia Pneumonia. Dr Stratton began to grow the bacteria in his lab and noted, under the electron microscope that they produced 2 types of eggs (called spores) and that the eggs (spores) were not killed by the same antibiotics as were used to kill the adult infection. As a matter of fact each egg (Spore) had a different coating that required different antibiotic to penetrate and kill it so that 3 different antibiotics with different effects were required to get rid of all 3 forms (the Adult form and two types of eggs (spores). If only one or two antibiotics were given then the infection would come back within 3 to 12 months.

You would think that this information would have lead to numerous studies as these cell wall deficient bacteria are a major cause of chronic sinusitis, bronchitis, chronic joint and muscle aches, chronic fatigue as well as Irritable Bowel symptoms such as heartburn, gas, bloating, constipation and diarrhea. However all physicians, especially the pediatricians, infectious disease and pulmonary specialist, were taught in medical school that bacterial resistance can occur with prolonged antibiotic therapy and that antibiotics should not be used unless there is serious disease to prevent resistance. This is true when it come to bacteria with a cell wall that reproduce outside the cells like Staph and Strep but it is NOT TRUE when it comes to infections like Mycoplasma, Chlamydophilia and Lyme Disease that reproduce inside a person's cells. Therefore more antibiotics are actually better to PREVENT resistance by simultaneously treating all three forms of the Chlamydophilia and Mycoplasma germs in order to prevent them re hatching again when just one or two antibiotics are used.
If you are wondering why these bacterial infections reproduce so well in chronically fatigued patient and patients with autoimmune and cardiovascular disease the answer is likely a combination of genetic tendency to get infections and a "tired" immune system as a result of attack by more than one type of infection. This explains why healthy people with one infection can rid their body of the cell wall deficient bacteria listed above with no treatment or only one antibiotic. Common Bacterial co infections are Chlamydia (Also called Chlamydophilia) Pneumonia along with Mycoplasma Pneumonia often occur along with CDT (A bad gut bacterial infection) or yeast intestinal infections causing diarrhea and gas on top of the fatigue and myalgia symptoms. Patients with COPD, asthma and chronic nasal allergies with persistent sinus infections often have a fungus called Candida Albicans or a mold infection called Aspergillus in their sinuses and lungs and need to have antifungal antibiotics added to the regime in conservative doses at just 2 to 3 times a week. COPD patients and Asthma patients often have a low grade TB Variant call Mycobacterium Avium in their lungs and sinuses. Lyme Disease carried by ticks is another cell wall deficient bacteria that can cause chronic fatigue and fibromyalgia.

Common VIRAL co infections include Cytomegalovirus (CMV), Epstein Barr Virus (EBV), Human Herpes virus 6 (HHV6), Herpes Simplex 1 and 2 (HSV1 and HSV2), and Herpes Zoster. Actually all of these viral co infections are a recurrence of dormant viruses walled off within the immune cells from past illnesses usually in childhood that can recur when the body is run down often from bacterial co infections. This is similar to the chickenpox virus recurring decades later as Shingles after being dormant in the body for decades.

Fortunately, for the sake of simplicity, all these viruses are "cousins" and respond to the same set of antiviral medications, the most potent being Valcyte (Valganciclovir is the generic name). Unfortunately Valcyte is very expensive averaging $3000 a month for patients without insurance on a 2 pill twice a day dose. For patients with good insurance with co pays it is affordable. However patients on most Medicare plans have to pay around $400 a month for twice a day doses of Valcyte. Despite the fact that Valcyte is better than Valtrex (Valacyclovir is the generic name) at penetrating and getting inside a patient's cells to rid the body of viral infections, Valtrex often is a good first choice when cost is a factor as it has just gone generic can be used in the early stages of viral treatments with considerable cost saving with the added benefit that killing infections more slowly at first to prevent the severe fatigue and muscle aches that often occur when a viral infection is killed too rapidly (this worsening fatigue and muscle aching is called a Herxheimer reaction or "Die off" reaction). Other generic viral medications have better coverage with certain insurance plans including Zovirax (Acyclovir is the generic name) and Famvir (Famciclovir is the generic name) and are also effective for the previously mentioned viruses however these generic antiviral medications have to be used in high dose and taken on a full stomach to be as effective as Valcyte.

In patients with bad Viral Neuropathy (nerve damage by a virus causing numbness, tingling and burning or weakness of the arms or legs) or mental decline from viral infections in the brain (which are frequently causes of Dementia such as Alzheimer's Disease), then Valcyte is better than Valtrex as it penetrates nerve and brain tissues better than Valtrex. Dr Hudson has treated about 4 patients with Multiple Sclerosis (a progressive disease which destroys brain and
spinal cord nerves) who have had 25 to 75% improvements in their nerve damage from Cytomegalovirus or Herpes 6 with their improvements persisting over 3 years. In those cases Valcyte had been necessary to penetrate the nerve tissues better than Valtrex.

A logical conclusion, after following over 1500 patients on these antibiotics and antivirals since 2007, is that chronic infections become more and more common as we age. At ages younger than 40 there are more allergic type reactions to these infections like nasal allergies and food allergies and allergic skin rashes. As we get older and our immune systems become more fatigued with aging and larger numbers of fatigue infections multiply within our cells, these infections can infect our joints causing osteoarthritis and infect our blood vessels in our heart and brain causing heart attacks and strokes. They likely can infect our thyroid glands causing hypothyroidism and infect our insulin machinery causing diabetes. They can infect our lungs and sinuses causing chronic bronchitis with emphysema and chronic sinus infection. Depending on genetic predisposition they can cause autoimmune diseases like Rheumatoid arthritis, Lupus, Crohn's Disease, Autoimmune Colitis, Multiple Sclerosis, Sarcoidosis and Psoriasis. Even more importantly, the fatigue viruses in particular likely can cause inflammation of the brain and memory loss from Alzheimer's disease and multiple other forms of dementia. In the course of treatment of hundreds of patients Dr Hudson and several other doctors communicating on the internet suspect that treating these infections can add years to decades of life span and quality of life as we age.