Where Do Some Infections Hide?

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Viruses such as **Herpes, CMV (cytomegalovirus), Ebstein Barr (mononucleosis or herpes type 5) Herpes type 1, 2, 6 or others, Zoster (chicken pox and shingles) Echovirus or Coxsackie virus** other viruses and certain bacteria (*mycoplasma, Chlamydia pneumonia, others*) have no cell walls and are called ***cell wall deficient parasitic organisms***.

They can reside inside human cells (especially white blood cells and nerve cells).These infections operate much like HIV or hepatitis. They are only detected by performing specialized tests. They infect people by inserting particles into human cells that may cause acute infections ("colds", flu, arthritis, bronchial, ear or sinus infections, urinary and genital infections) and/or very subtle and slowly progressive degeneration or infections. After the initial exposure, they can lie dormant in memory T cells (white cells) and reproduce at low rates inside immune system cells – especially macrophages (white blood cells) and dendritic (nerve cells). Without specific treatments, they can ward off immune defenses and resist antiviral or antibiotic drugs to some extent. Some of these infections are known as intracellular (inside of cells) intraphagocytic (inside of white cells) metagenomic (gene altering) infections. CWD organisms potentially hide in various cells and systems, especially the immune system, blood, circulation, lymph nodes, nervous system, ear, nose, throat, lungs, internal organs, gastrointestinal tract, kidneys or bladder, genital tract, muscles, bones, joints and skin. Some organisms generate a biofilm (mucus, sputum) or form crystal deposits (calcifications) that can protect them from the immune system and treatments.

While conventional medicine discovered all this, they have no drugs (that I am aware of) to effectively flush infections out of their hiding places. Conventional medicine has many drugs (antihistamines, steroids, others) to suppress the immune system, which can relieve symptoms, but may be counterproductive in the long run. Alternative treatments can support immune functions and break up biofilms or crystals to help deal with infections.The body deals with infections via many layers of immune defense. Key components are the monocytes (macrophages) and lymphocytes, such T Helper cells, B cells and Killer T cells. T Helper cells are often referred to as the Th1 or Th2 system. When a viral particle or CWD bacteria is engulfed (or phagocytzed) by the macrophages (specialized white cells), viral or bacterial antigens (particles) are shunted via CD 4 receptors to T Helper cells, which send out many chemicals that cause silent inflammation. Inflammation can be "good" (sets off helpful immune responses) or "bad" (impairs the immune system and/or causes a lot of symptoms).

If the Th1 & 2 system is working properly, it suppresses "bad" inflammation and produces antibodies that neutralize antigens (viral or bacterial particles). If the Th1 & 2 system is not working properly, you do not curtail "bad" inflammation and your immune system can malfunction, allowing the infection to slowly progress, often unrecognized.When a viral or bacteria is engulfed by macrophages, particles (antigens) are also shunted via CD 8 receptors to the Killer T cells. Killer T cells can kill infections, sometimes causing minor or more significant "die off" symptoms (Herxhiemer reactions) or sometimes the Killer T cells become infected themselves.If necessary or requested, we can test CD 4, CD 8, T cells, B cells, T killer cells and other immune functions to confirm you have this problem or to guide treatments.Viral and CWD bacteria are like commandos. They can hide in cells and systems, pop out and cause problems, then lie in wait to cause problems elsewhere. Antibiotics do not treat viral infections, but we have antiviral supplements and drugs to use. Standard antibiotics sometimes don't work and research suggests using lower doses may be more effective and cause less shifting of CWD bacteria from organ to organ.How do these organisms replicate? They inject their RNA into cells, especially macrophages (immune cells) and

dendritic cells (nerve cells). Their RNA makes copies of viral or bacterial DNA, instead of human DNA. The infection's DNA makes more copies of infectious RNA, which potentially disrupts mitochondrial functions (cellular factories), causing slow and subtle problems in various organs and cells.

The infectious RNA is often expressed as an immature particle, which matures into fully infectious particles to start the process again in other cells.When the viral or bacterial load gets high enough, symptoms occur than many practitioners suppress with antibiotics (or anti-parasitic or "candida" treatments if one sees alternative practitioners), but this may not work and may drive the commando-like infections into deeper hiding or other cells or organs to crop again later.Vaccines for these infections have not been developed because the virus or bacteria mutates RNA so fast, by the time a vaccine is produced, the antigen particles have already changed.There are a variety of drugs we can use for herpes and Coxsackie viral infections. Anti-herpes drugs work by blocking viral RNA replication.

Fortunately, many supplements and some drugs used in alternative fashions help all this in various technical ways best understood in appointments.All of this is very hard for clinicians and patients to understand and treatments are best used in sequences over time, adjusted as needed and guided by lab tests. Treatments are long term, typically taking 1-2 years or more.

David Overton, PA-CNatural Medicines & Family Practice360-357-8054 and natmeds.net