



PURPOSE AND MEANING OF EPSTEIN-BARR-VIRUS (EBV)

BLOOD TESTS

Specific laboratory testing measures have recently been developed which provide the medical information required to prevent and treat EBV reactivation and autoimmunity.

1. HAS THERE BEEN RECURRENT REACTIVATIONS?

- It is essential to know if the individual has had recurrent reactivations in the past. For example, an auto accident or fall in one's teenage years may have been the first reactivation. Over time, stressful events that compromise the immune system including some infections, trauma, psychologic insults, or medical procedures may cause an EBV reactivation.
- The test to determine recurrent reactivations is the viral capsid antigen antibody (IgG); usually abbreviated VCA. Recurrent reactivations can be presumed if the blood level of VCA is at least 2 times normal.

2. HAS EBV CURRENTLY REACTIVATED? It is essential to know if EBV has reactivated and is currently infiltrating tissues and causing ongoing autoimmunity.

There are 2 tests which indicate that EBV has currently reactivated.

1	<u>EARLY</u> Nuclear Antigen Antibody IgG	Usually abbreviated "Early EBNA"
2	Polymer Chain Reaction to Detect EBV DNA	Usually abbreviated PCR-DNA

3. HAS EBV CAUSED ONGOING AUTOIMMUNITY? The nuclear antigen antibody (IgG) carries some autoantibodies that cause tissue inflammation, adhesions, destruction, and pain. Although EBV autoimmunity cannot be totally cured or eliminated, it can and must be suppressed lest it cause cancer and/or a severe pain condition such as adhesive arachnoiditis (AA). The test to determine if autoimmunity is present is usually abbreviated EBNA. EBV autoimmunity can usually be presumed if the EBNA blood level is at least two times normal.

SUMMARY: The 4 blood tests described above are now available at major laboratories. It is highly recommended that all persons with AA or other intractable pain conditions have these tests to answer the 3 posed questions above and develop a treatment program to counter EBV.

Definition: Autoimmunity, autoimmune process, autoimmune disease.

A condition in which autoantibodies or cellular elements erroneously recognize tissue as virulent or pathologic and attack the tissue producing inflammation and tissue destruction.

Special Note: There is a viral capsid antigen antibody (VCA) IgM test for both acute and chronic mononucleosis. Chronic mononucleosis may rarely be found in AA.