Cerebrospinal fluid cell count

The cerebrospinal fluid (CSF) cell count is a laboratory test that measures the number of cells present in the cerebrospinal fluid, which is the clear fluid that surrounds the brain and spinal cord. The CSF cell count is an important diagnostic tool used to assess various neurological conditions.

The two main types of cells counted in the cerebrospinal fluid are:

White Blood Cells (Leukocytes): An elevated white blood cell count in the CSF can indicate inflammation or infection in the central nervous system. This can be associated with conditions such as meningitis, encephalitis, or other infectious or inflammatory disorders.

Red Blood Cells (Erythrocytes): Normally, there are very few red blood cells in the cerebrospinal fluid. An increased number of red blood cells in the CSF may suggest bleeding within the central nervous system, which could be due to trauma, hemorrhage, or other vascular issues.

The CSF cell count is often performed as part of a lumbar puncture (spinal tap), during which a needle is inserted into the space around the spinal cord to collect a sample of cerebrospinal fluid. The collected fluid is then analyzed in a laboratory.

Interpretation of the results depends on the specific circumstances and the patient's clinical presentation. Abnormal cell counts in the CSF, along with other clinical and laboratory findings, help healthcare professionals diagnose and manage various neurological conditions. It's important to consult with a healthcare provider for a comprehensive evaluation and interpretation of CSF cell count results in the context of an individual's overall health.