Multiple Sclerosis: A Neurological Disorder

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Multiple sclerosis (MS) is a long lasting, chronic and auto-immune disease which affects central nervous system. In this auto-immune disease, our own immune system damages the body. It is a disabling disease of spinal cord and brain, specially deteriorates optic nerve of eyes. The disease is caused when immune system of the body attacks on myelin sheath which is a protective layer of neurons; the structural and functional unit of nervous system. This sheath protects the nerve fibers. Damage to myelin sheath exposes the nerve fibers, which slows down or blocks the nerve impulse passing through the nerve. This disease appears between the age of 20 to 50 years in most cases. Statistics reveal that it is more common in women than men. The causes of this disease are unknown but scientists believe that the risk factor of this disease is the combination of genetics and environment. Its symptoms include effects on body movements involving loss of balance, weakness or numbness in limbs, dizziness, body pains, electric shock sensations specially in neck region, fatigue, difficulty swallowing, slurred speech and vertigo. It also involves problems relating sexual, bowel and bladder functions.

It may also cause depression and anxiety. The symptoms are different in children than adults. It starts with acute encephalomyelitis, including fever, stiff neck, seizures, coma and confusion. It these symptoms persist, doctor should be consulted immediately.

Research has shown that there are some factors which can increase the chances of its development. These factors include; age, climate, Vitamin D and other auto-immune diseases. MS can occur at any age in one’s life but its onset is common between 20 to 50 years. The risk of developing of MS in twin babies is 1 in 4 cases. However, younger and older people can be affected too. Considering the factor of climate, MS is found to be more common in countries found in temperate regions of the world. Statistics have shown that MS was common in people living in New Zealand, Canada, USA and many other European countries. All of us know what is the importance of vitamins. It has been observed that lower levels of Vitamin D and decreased sunlight exposure are related with greater risk of this disease. Many people suffer from auto-immune diseases for example pernicious anemia, Inflammatory bowel disease, Type I Diabetes Mellitus and thyroid problems. Recent studies show that person already facing the trouble of auto-immune disease is at higher risk of getting MS. Multiple sclerosis (MS) has been divided into four basic types: Primary progressive MS (PPMS), Secondary Progressive MS (SPMS), Progressive Relapsing MS (PRMS) and Relapsing Remitting MS (RRMS).

Recent findings from a National MS Society estimated that nearly 1 million people in the United States are affected with MS. This is more than double the last reported number, and the first national research on MS prevalence since 1975. The society also estimated that 2.3 million people live with MS globally.

There is no specific laboratory or diagnostic test to check for MS. For detection of MS, differential diagnosis is used in which signs, symptoms and patients condition is used to rule out the overall scenario. Some blood tests are recommended by doctors which check specific biomarkers associated with MS. MRI is helpful and it can reveal some areas of spinal cord and brain to see lesions. Spinal tap in which a small sample of cerebrospinal fluid is removed from the spinal canal for laboratory analysis. This sample can show abnormalities in antibodies that are associated with MS. Electric signals produced by nervous system in response to specific stimuli are recorded in a test called Evoked potential test. It’s unfortunate that there is no complete cure of this disease up-till now. Treatment helps to speed up the, slowing the progression of the disease.
and managing MS symptoms to help patient live a better life. Treatment for attacks includes the use of corticosteroids and plasma exchange. Previously, it was thought that this disease is uncommon in Pakistan. But new data shows its prevalence to be 10 in 10,000 of population. It is affecting the Pakistani population on same patterns as found in West. It is found to be more common in women than men. It has been affecting more people who are passing third decade of life. Among its types, Relapsing-Remitting MS (RRMS) is more common in Pakistan. It’s unfortunate that the reports about this disease are few in numbers and there is a need to conduct a thorough research in hope of finding a complete cure of this disease and making the life of patients affected by it much more comfortable.