Is Fibromyalgia Hereditary?

by BRENDA VANTA

The Genetics of Fibromyalgia

Fibromyalgia is a common condition, affecting roughly 10 million Americans and about three to six percent of the word population. Despite its prevalence, the exact cause of the condition is still unclear, but scientists are getting closer to understanding the basic mechanisms behind the disease.

Most researchers believe factors like immune system imbalances, hormonal changes, biochemistry and psychological factors, as well as genetics, play a role in the development of this condition.

Predisposition to Fibromyalgia

Recent studies have found genetics can make some people predisposed, or more susceptible, to developing fibromyalgia. A person predisposed to fibromyalgia won't necessarily develop the condition, but is more likely to, especially if they are exposed to environmental stressors like trauma and injury. The genetic component of fibromyalgia is supported by the fact that it is often prevalent within families (i.e. if you have a relative with this condition, you are more likely to develop it).

The gene polymorphism, or natural variations in a gene, DNA sequence or chromosome, of fibromyalgia has also been evaluated. Geneticists suggest polymorphisms are present in a number of the body's systems in a person with fibromyalgia. These polymorphisms are not specific to fibromyalgia, since they are found in other related conditions in the functional somatic disorders group as well, including chronic fatigue and irritable bowel syndrome.

How these genes are inherited from parents is not known, but fibromyalgia is likely linked with more than one gene. The more understanding scientists have about the genetic component of fibromyalgia, the more able doctors will be diagnose the condition. And with more knowledge in this area, in the future it may be possible to have fibromyalgia treatment tailored based on a patient's genetic makeup.

Scientists are also studying brain imaging to better evaluate the hypothesis that fibromyalgia is caused by a defect in the central nervous system that brings about abnormal pain perception.

Conclusions

So, is fibromyalgia hereditary? While the exact cause of fibromyalgia is not known, several factors, including genes passed down from one's parents, are known to play a role in the development of this condition. However, even if you have a genetic predisposition to fibromyalgia, you won't necessarily develop it — predisposition does not equal predestination.

The healthy, balanced diet and regular exercise that is recommended for fibromyalgia management may also help to prevent fibromyalgia in people who are predisposed.