



Letter to the Editor

An Explanation Why Patients with Multiple Sclerosis Typically Have High Emotional Well-Being

Rikke Thea, Karsten Buschard*

Faculty of Health and Medical Sciences, Copenhagen University, Denmark

***Corresponding author:** Karsten Buschard, Faculty of Health and Medical Sciences, Copenhagen University, Denmark

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Dear Editor

It is clinically well known that patients with multiple sclerosis (MS) typically are in a good mood. This is in spite of the seriousness of the disease and its progressive symptoms. MS is characterized by local inflammation and areas of damage in the brain. When this occurs, sphingolipids, and especially sulfatide, are released and become elevated in the cerebrospinal fluid [1]. Sulfatide is an interesting molecule composed of two fatty acid chains, one of variable length, which in the brain is typically between C16 and C24 [2]. Furthermore, it contains the amino acid serine, a galactose sugar group, and a sulfate group [2]. Sphingolipids, including sulfatide, have been shown to be involved in emotional regulation, cognitive performance, and social behavior [3]. One possible molecular mechanism may be their involvement in dopamine transporter activity [4]. Thus, we suggest that the emotional well-being often observed in patients with MS is associated with increased levels of sphingolipids, particularly sulfatide.

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References

1. Moyano AL, Pituch K, Li G, Breemen RV, Månsson JE, et al. (2013) Levels of plasma sulfatides C18:0 and C24:1 correlate with disease status in relapsing-remitting multiple sclerosis. J Neurochem 127(5): 600-604.
2. Fredman P, Månsson JE, Rynmark BM, Josefsen K, Ekblond A, et al. (2000) The glycosphingolipid sulfatide in the islets of Langerhans in rat pancreas is processed through recycling: possible involvement in insulin trafficking. Glycobiology 10(1): 39-50.
3. Kalinichenko LS, Zoicas I, Mühle C, Kornhuber J, Müller CP (2026) Sphingolipids in Emotional Well-Being. J Neurochem 170(2): e70379.
4. Barrier L, Page G, Barc S, Piriou A, Portoukalian J (2003) Sulfatide and GM1 ganglioside modulate the high-affinity dopamine uptake in rat striatal synaptosomes: evidence for the involvement of their ionic charges. Neurochem Int 42(4): 305-313.