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Anti-VEGF treatment improves neurological function in tumors of the nervous system.

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Research of various diseases of the nervous system has shown that VEGF has direct neuroprotective effects in the central and peripheral nervous systems, and indirect effects on improving neuronal vessel perfusion which leads to nerve protection. In the tumors of the nervous system, VEGF plays a critical role in tumor angiogenesis and tumor progression. The effect of anti-VEGF treatment on nerve protection and function has been recently reported - by normalizing the tumor vasculature, anti-VEGF treatment is able to relieve nerve edema and deliver oxygen more efficiently into the nerve, thus reducing nerve damage and improving nerve function. This review aims to summarize the divergent roles of VEGF in diseases of the nervous system and the recent findings of anti-VEGF therapy in nerve damage/regeneration and function in tumors, specifically, in Neurofibromatosis type 2 associated schwannomas.

KEYWORDS: Anti-VEGF treatment; Neurological function; Schwannoma

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