Vascular endothelial growth factor

In contrast with the prevailing view that most tumors and metastases begin as avascular masses, evidence is presented here that a subset of tumors instead initially grows by coopting existing host vessels. This coopted host vasculature does not immediately undergo angiogenesis to support the tumor but instead regresses, leading to a secondarily avascular tumor and massive tumor cell loss. Ultimately, however, the remaining tumor is rescued by robust angiogenesis at the tumor margin. The expression patterns of the angiogenic antagonist angiopoietin-2 and of pro-angiogenic vascular endothelial growth factor (VEGF) suggest that these proteins may be critical regulators of this balance between vascular regression and growth [1)]

Vascular endothelial growth factor (VEGF) is a member of the VEGF/platelet-derived growth factor gene family. The binding to the tyrosine kinase VEGF receptor-2 stimulates tumor progression producing angiogenesis, vascular permeability and mitogenesis [2) 3)].

In glioblastoma, tumor progression appears to be triggered by expression of VEGF, a regulator of blood vessel permeability.

Vascular endothelial growth factor (VEGF) is the major proangiogenic factor in many solid tumors. Vascular endothelial growth factor receptor (VEGFR) is expressed in abundance in pediatric patients with medulloblastoma and is associated with tumor metastases, poor prognosis, and proliferation.

Bevacizumab is a monoclonal antibody that inhibits angiogenesis by clearing circulating VEGF, resulting in a decline in the contrast-enhancing tumor, which does not always correlate with treatment response.

Malignant glioma treated with anti-vascular endothelial growth factor (VEGF) bevacizumab show progression patterns that vary with different mechanisms of resistance.

Angiopoietin is part of a family of vascular endothelial growth factors that play a role in embryonic and postnatal angiogenesis.

Vascular endothelial growth factor A (VEGF-A)

Vascular endothelial growth factor A.

Vascular endothelial growth factor C

Vascular endothelial growth factor C

Vascular Endothelial Growth Factor in chronic subdural hematoma

see Vascular Endothelial Growth Factor in chronic subdural hematoma

1)
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2)
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3)
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