

VEGFR2

Hu et al., from the Department of Neurosurgery, Navy General Hospital, [Beijing, China](#) investigated the relationship of the expression of [vascular endothelial growth factor](#) (VEGF)/vascular endothelial growth factor receptor-2 (VEGFR-2) and imaging features with the therapeutic efficacy of [Phosphorus 32 for craniopharyngioma](#).

Thirty-two patients with [craniopharyngioma recurrence](#) underwent phosphorus-32 colloid interstitial radiotherapy. The tumor imaging features were classified into 4 types according to the thickness of the cyst wall and signals of the cyst contents as shown by computed tomography (CT) and magnetic resonance imaging (MRI) images. Protein expressions of VEGF and VEGFR-2 in craniopharyngioma tissues were evaluated with immunohistochemistry before radiotherapy. The tumor radiosensitivity was determined at 12 months after the interstitial radiotherapy. VEGF mainly expressed in the tumor cytoplasm, and VEGFR-2 expressed either in vascular endothelial cells or in tumor endothelial cells. VEGF/VEGFR-2 expressions varied significantly in cases sensitive or insensitive to the radiotherapy (VEGF: $P=.028$; VEGFR-2: $P=.017$). Tumor imaging features were associated with the therapeutic efficacy of interstitial radiotherapy ($P=.000$). VEGF expression had no association with the imaging features of tumors ($P=.226$), but VEGFR-2 expression was associated with the imaging features of tumors ($P=.008$). Our results confirmed the association among imaging features, VEGFR-2 expressions, and tumor radiosensitivity in craniopharyngiomas. Imaging features and VEGFR-2 expressions may add useful data to the radiosensitive assessment of craniopharyngiomas ¹⁾.

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Hu C, Chen J, Meng Y, Zhang J, Wang Y, Liu R, Yu X. Phosphorus-32 interstitial radiotherapy for recurrent craniopharyngioma: Expressions of vascular endothelial growth factor and its receptor-2 and imaging features of tumors are associated with tumor radiosensitivity. *Medicine (Baltimore)*. 2018 Jun;97(26):e11136. doi: 10.1097/MD.00000000000011136. PubMed PMID: 29952957.

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