intracranial aneurysm surgery. Zhonghua Wai Ke Za Zhi, 2004, 42:1489-1492.[韩如泉, 王保国, 李树人, 等. 持续输注尼莫地平对颅内动脉瘤夹闭术中脑血管痉挛的影响. 中华外科杂志, 2004, 42:1489-1492.]

[11] Wang LJ, Lin CH, Shao ZK, et al. Intraoperative intracranial aneurysm rupture: an analysis of risk factors. Zhongguo Nao Xue Guan Bing Za Zhi, 2006, 3:369-372.[王立君, 林成海, 邵正凯, 等. 颅内动脉瘤术中破裂的危险因素分析. 中国脑血管病杂志, 2006, 3:369-372.]

[12] Li W, Li ZZ, Wang F, et al. Analysis on risk factors for intraoperative aneurysmal rupture. Zhonghua Shen Jing Wai Ke Za Zhi, 2009, 25:545-548.[李卫, 李宗正, 王峰, 等. 颅内动脉瘤术中破裂危险因素分析. 中华神经外科杂志, 2009, 25:545-548.]

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·临床医学图像·

第四脑室菊形团形成型胶质神经元肿瘤

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Rosette-forming glioneuronal tumor of the fourth ventricle

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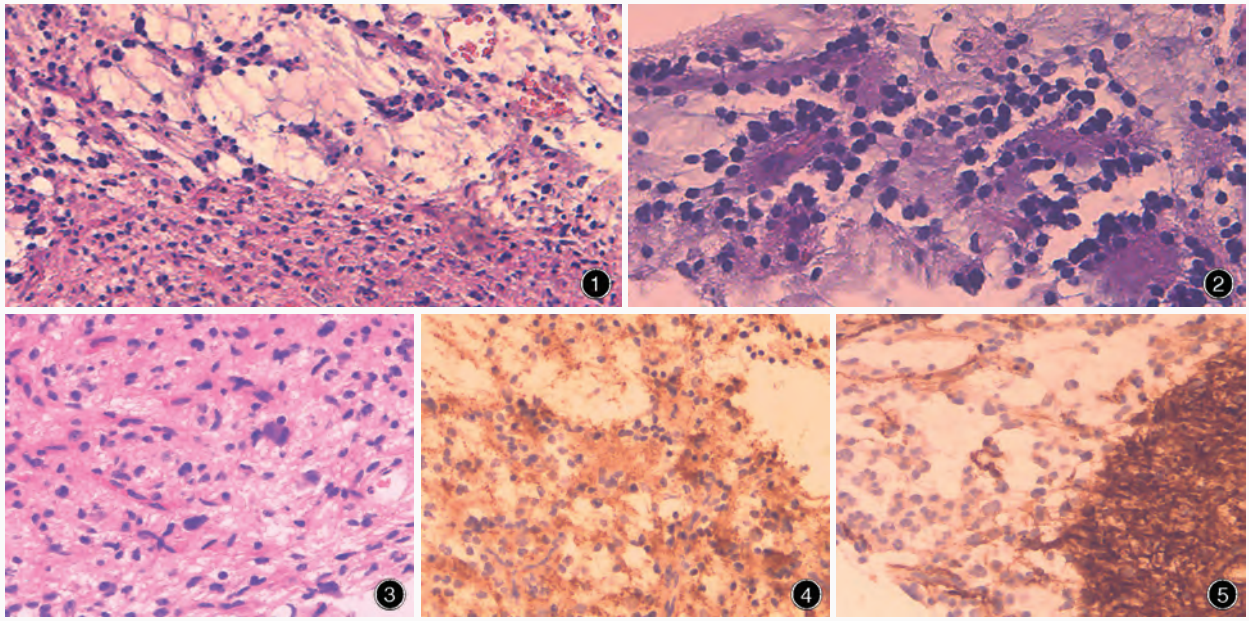

图1 可见神经元区域(上部)和胶质成分区域(下部)两种成分 HE染色(低倍放大) **图2** 神经元区域由形态一致的神经元组成的菊形团和血管周假菊形团 HE染色(中倍放大) **图3** 胶质成分,类似毛细胞型星形细胞瘤 HE染色(中倍放大) **图4** 神经元纤细的胞质突起突触素表达阳性 免疫组织化学染色(EnVision二步法,中倍放大) **图5** 胶质组织区域胶质纤维酸性蛋白表达阳性 免疫组织化学染色(EnVision二步法,中倍放大)

Figure 1 Rosette-forming glioneuronal tumor of the fourth ventricle consists of two components, neurocytic (upper part) and gliocytic (lower part) region HE (low power magnified) **Figure 2** Neuronal area is composed of rosettes and perivascular pseudorosette groups formed by uniform neuron HE (medium power magnified) **Figure 3** The glial component appears as pilocytic astrocytoma HE (medium power magnified) **Figure 4** The delicate cellular processes that extended into rosettes are positive for synaptophysin Immunohistochemical staining (medium power magnified) **Figure 5** The gliocytic region is typically positive for glial fibrillary acidic protein Immunohistochemical staining (medium power magnified)

第四脑室菊形团形成型胶质神经元肿瘤(RGNT)为临床罕见、生长缓慢的中枢神经系统肿瘤(WHO Ⅰ级),好发于青年人,主要由比较一致的神经元形成的菊形团或血管周假菊形团和类似毛细胞型星形细胞瘤的星形细胞所组成(图1)。神经元菊形团的典型特征为:神经元戒指样围绕嗜酸性纤细神经毡核心,血管周假菊形团为纤细的细胞突起放射性朝向血管(图2);神经元胞核呈球形,染色质呈淡染,核仁不明显,胞质较少,细胞突起纤细;其基质可发生囊变呈黏液状;肿瘤组织的主要成分为胶质,大部分区域为类似毛细胞型星形细胞瘤(图3)。星形肿瘤细胞呈梭形或放射状,细胞核拉长呈椭圆形,染色质中等密度,其胞质突起形成由致密到疏松的胶质纤维背景,未见核分裂和坏死。神经元菊形团中心和血管周假菊形团中神经毡免疫组织化学染色突触素(Syn)表达阳性(图4),胶质纤维酸性蛋白(GFAP)在胶质成分中呈阳性表达,在菊形团和假菊形团区域不表达(图5)。

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