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· 临床医学图像 ·

肥胖细胞型星形细胞瘤, IDH-突变

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Gemistocytic astrocytoma, IDH-mutant

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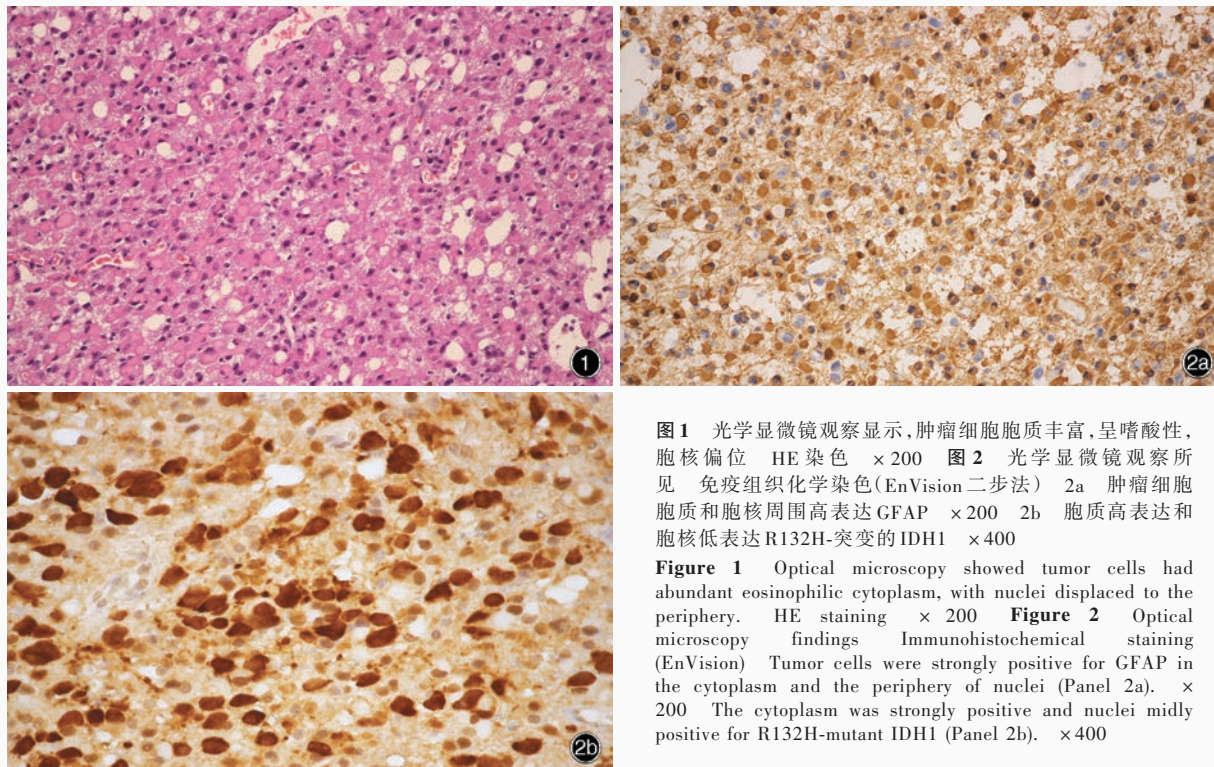


图1 光学显微镜观察显示, 肿瘤细胞胞质丰富, 呈嗜酸性, 胞核偏位 HE 染色 $\times 200$ **图2** 光学显微镜观察所见 免疫组织化学染色(EnVision 二步法) 2a 肿瘤细胞胞质和胞核周围高表达 GFAP $\times 200$ 2b 胞质高表达和胞核低表达 R132H-突变的 IDH1 $\times 400$

Figure 1 Optical microscopy showed tumor cells had abundant eosinophilic cytoplasm, with nuclei displaced to the periphery. HE staining $\times 200$ **Figure 2** Optical microscopy findings Immunohistochemical staining (EnVision) Tumor cells were strongly positive for GFAP in the cytoplasm and the periphery of nuclei (Panel 2a). $\times 200$ The cytoplasm was strongly positive and nuclei midly positive for R132H-mutant IDH1 (Panel 2b). $\times 400$

2016 年世界卫生组织(WHO)中枢神经系统肿瘤分类将肥胖细胞型星形细胞瘤, IDH-突变定义为伴异柠檬酸脱氢酶 1 或 2 (*IDH1* 或 *IDH2*) 基因突变的弥漫性星形细胞瘤的一种亚型, 以存在明显(可能数目不等)的肥胖肿瘤性星形细胞为特点。肥胖细胞约占所有肿瘤细胞的 20%, 在弥漫性星形细胞瘤中也可见少许肥胖细胞, 但不能诊断为肥胖细胞型星形细胞瘤。采用 IDH 分型命名前, 肥胖细胞型星形细胞瘤易进展为间变性星形细胞瘤或继发性胶质母细胞瘤, 但尚不清楚肥胖细胞型星形细胞瘤, IDH-突变是否更易恶性进展。组织学形态特点是肥胖肿瘤性星形细胞呈角状, 具有丰富的毛玻璃样嗜酸性胞质, 肥胖、无方向的胞突形成致密纤维网, 胞核形状怪异、偏位, 可见小核仁, 染色质浓染(图 1), 常见血管周围淋巴细胞“袖套”形成。免疫组织化学染色, 肿瘤细胞胞质和胞核周围高表达胶质纤维酸性蛋白(GFAP, 图 2a), 胞质高表达和胞核低表达 R132H-突变的 IDH1(图 2b), 胞核表达 P53。

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