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· 临床医学图像 ·

间变性星形细胞瘤, IDH-突变

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Anaplastic astrocytoma, IDH-mutant

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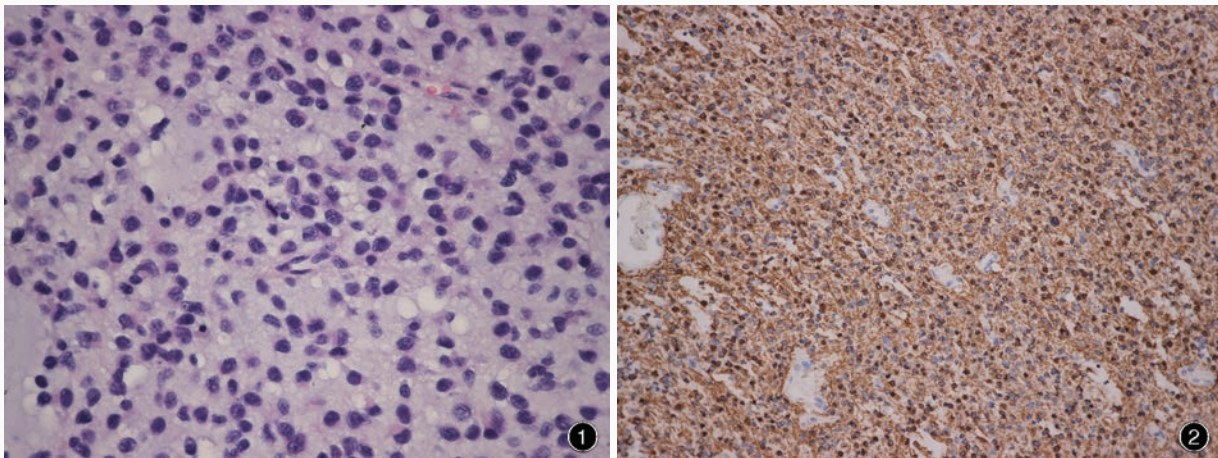


图1 光学显微镜观察显示,间变性星形细胞瘤细胞密度中等,胞核异型性明显,核分裂象可见 HE染色 ×200 图2 光学显微镜观察显示,肿瘤细胞胞质弥漫性表达GFAP 免疫组织化学染色(EnVision二步法) ×200

Figure 1 Optical microscopy showed anaplastic astrocytoma with moderate cellularity, marked nuclear atypia and mitoses. HE staining ×200 Figure 2 Optical microscopy showed GFAP immunoreactivity. Immunohistochemical staining (EnVision) ×200

2016年世界卫生组织(WHO)中枢神经系统肿瘤分类将间变性星形细胞瘤, IDH-突变定义为伴异柠檬酸脱氢酶1或2 (IDH1或IDH2)基因突变的弥漫性浸润性星形细胞瘤,发生局灶性或散在性间变,增生活跃。间变性星形细胞瘤可以源自低级别弥漫性星形细胞瘤,但尤以无低度恶性原始病变的间变性星形细胞瘤最为常见,可以进展为胶质母细胞瘤, IDH-突变。组织学形态与弥漫性星形细胞瘤相同,但细胞密度、胞核异型性和核分裂象增加(图1)。局灶性或弥漫性细胞密度增加是重要诊断标准。胞核多形性更为复杂,大小、形态不一,染色质密集或分散,核仁明显、数目增加。亦可见多核细胞和丰富的核分裂象,无微血管增生(多层血管)和坏死。免疫组织化学染色,肿瘤细胞胞质弥漫性表达胶质纤维酸性蛋白(GFAP,图2),胞核弥漫性表达P53,胞质高表达和胞核低表达R132H-突变的IDH1,通常不表达α地中海贫血X连锁智力低下综合征基因(ATRX)。

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