

脑脊液流式细胞学对小儿急性淋巴细胞白血病并发中枢神经系统疾病的诊断和鉴别价值

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Title: The value of cerebrospinal fluid flow cytology diagnosis and differential diagnosis of children with acute lymphoblastic leukemia complicated with central nervous system disease

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关键词: 脑脊液流式细胞学; 小儿; 急性淋巴细胞白血病; 中枢神经系统

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摘要: 目的:探讨分析脑脊液流式细胞学诊断及鉴别小儿急性淋巴细胞白血病并发中枢神经系统疾病(CNSL)的价值。方法:选择2012年1月至2016年6月我院收治的89例ALL患儿脑脊液标本,采用脑脊液流式细胞(FCM)技术、脑脊液细胞学(CC)法进行检测,对比分析两种检测方式对CNSL的诊断情况。结果:经脑脊液FCM检出23例异常表型细胞,检出阳性率为25.84%,经脑脊液细胞形态学检出10例异常细胞,检出阳性率为11.24%,脑脊液FCM检出阳性率明显高于脑脊液细胞形态学检查($P < 0.05$)。对于脑压增高患儿,FCM检出阳性率明显高于细胞形态学检出阳性率($P < 0.05$);对于脑脊液糖正常患儿,FCM检出阳性率明显高于细胞形态学检出阳性率($P < 0.05$)。结论:脑脊液FCM在ALL儿童CNSL诊断中具有着重要的临床意义,是脑脊液细胞形态学检查的重要补充方法。

Abstract: Objective: To explore the value of cerebrospinal fluid flow cytologic diagnosis and identification of children with acute lymphoblastic leukemia complicated with central nervous system disease. Methods: The CSF samples from 89 children with ALL diagnosed in our hospital from January 2012 to June 2016, and cerebrospinal fluid flow cytometry (FCM) and cerebrospinal fluid cytology (CC) were used to detect the diagnosis of CNSL. The diagnosis of CNSL by two methods was compared. Results: 23 cases of abnormal phenotypic cells were detected by cerebrospinal fluid FCM. The positive rate was 25.84%. 10 cases of abnormal cells were detected by CSF cell morphology, the positive rate was 11.24%, and the positive rate of CSF FCM detection was significantly higher than that of CSF cell morphology ($P < 0.05$). For children with increased brain pressure, the positive rate of FCM detection is significantly higher than that of cell morphology detection ($P < 0.05$). For children with normal CSF, the positive rate of FCM detection is significantly higher than that of cell morphology detection ($P < 0.05$). Conclusion: The FCM of cerebrospinal fluid (CSF) is of important clinical significance in the diagnosis of CNSL in children with ALL, and is an important supplementary method for the morphological examination of cerebrospinal fluid cells.

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