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◇ 临床医学 ◇

呼吸道合胞病毒感染的毛细支气管炎患儿血清半胱氨酰白三烯、嗜酸性粒细胞阳离子蛋白、免疫球蛋白 E 及血清炎症因子检测的临床价值

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摘要: **目的** 探究呼吸道合胞病毒(RSV)感染的毛细支气管炎患儿血清半胱氨酰白三烯(CysLTs)、嗜酸性粒细胞阳离子蛋白(ECP)、免疫球蛋白 E(IgE)及血清炎症因子检测的临床价值。**方法** 选取湖北医药学院附属东风医院 2017 年 1 月至 2018 年 1 月收治的 RSV 感染的毛细支气管炎患儿 100 例作为观察组, 并根据患儿病情严重程度分为轻症、中症、重症三组, 检测各组血清 CysLTs、ECP、IgE、白细胞介素-8 (IL-8) 及肿瘤坏死因子 α (TNF- α) 水平, 并与同期 30 例健康体检儿童(健康对照组)血清标本检测结果进行比较, 分析各个指标与患儿病情的相关性。另外, 记录观察组患儿随访期间哮喘发生情况, 比较哮喘发作组与未发作组治疗前血清 CysLTs、ECP、IgE、IL-8 及 TNF- α 水平及其与哮喘发生的相关性。**结果** 健康对照组、轻症组、中症组及重症组血清 CysLTs [(22.91 \pm 15.14)、(48.12 \pm 14.22)、(59.31 \pm 14.71)、(71.72 \pm 15.29) μ g/mL]、ECP [(35.96 \pm 9.28)、(63.74 \pm 10.68)、(74.16 \pm 12.11)、(91.82 \pm 13.95) ng/mL]、IgE [(107.36 \pm 20.57)、(255.71 \pm 26.49)、(282.92 \pm 26.86)、(310.03 \pm 27.08) IU/mL]、IL-8 [(14.35 \pm 5.26)、(31.74 \pm 7.19)、(40.41 \pm 7.48)、(52.48 \pm 8.37) pg/mL] 及 TNF- α [(49.21 \pm 19.64)、(107.35 \pm 25.93)、(122.47 \pm 24.58)、(139.14 \pm 26.51) pg/mL] 差异有统计学意义 ($F=45.63, 79.64, 296.87, 102.89, 62.03$, 均 $P<0.001$), 且组间两两比较差异有统计学意义 (均 $P<0.05$)。Spearman 相关性分析显示: CysLTs、ECP、IgE、IL-8 及 TNF- α 水平与患儿病情严重程度均呈显著正相关 ($r=0.70, 0.78, 0.81, 0.820, 0.70$, 均 $P<0.001$)。哮喘发作组患儿 CysLTs [(53.12 \pm 13.94) μ g/mL 比 (32.14 \pm 10.25) μ g/mL]、ECP [(69.27 \pm 10.57) μ g/mL 比 (37.18 \pm 7.22) μ g/mL]、IgE [(264.63 \pm 18.66) IU/mL 比 (116.45 \pm 18.28) IU/mL]、IL-8 [(35.73 \pm 6.48) pg/mL 比 (14.68 \pm 4.63) pg/mL] 及 TNF- α [(111.26 \pm 24.19) pg/mL 比 (56.74 \pm 15.47) pg/mL] 水平均明显高于哮喘未发作组 (均 $P<0.05$), 且与患儿哮喘发作均呈显著正相关 ($r=0.45, 0.51, 0.50, 0.52, 0.51$, 均 $P<0.001$)。**结论** 血清 CysLTs、ECP、IgE 及血清炎症因子水平可有效反映 RSV 感染的毛细支气管炎患儿的病情严重程度, 并能有效评估患儿继发性哮喘的发生风险, 具有重要临床意义。**关键词:** 呼吸道合胞病毒; 毛细支气管炎; 半胱氨酰白三烯; 嗜酸性粒细胞阳离子蛋白; 免疫球蛋白 E; 血清炎症因子

Clinical value of CysLTs, ECP, IgE and serum inflammatory factors in children with RSV-infected bronchiolitis

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Abstract: **Objective** To explore the clinical value of detecting serum cysteyle leukotrienes (CysLTs), eosinophil cationic protein (ECP), immunoglobulin E (IgE) and serum inflammatory factors in children with bronchiolitis infected by respiratory syncytial virus (RSV). **Methods** One hundred children with RSV-infected bronchiolitis who were treated in Dongfeng Hospital of Hubei Medical University from January 2017 to January 2018 were selected as the observation group, and they were assigned into three groups: mild, moderate and severe according to the severity of the disease. Detection of CysLTs, ECP, IgE, interleukin-8 (IL-8) and tumor necrosis factor α (TNF- α) levels in the observation and control groups were compared with serum-related indicators of 30 healthy children (control group) during the same period, and the correlation between the indicators and the condition of the children was analyzed. In addition, the incidence of asthma during the follow-up period in the observation group was recorded, and the serum levels of CysLTs, ECP, IgE,