

- [10] 郭明,夏中元.Sestrin2 抗氧化应激作用在缺血再灌注中的研究进展[J].中国医药导报,2017,14(17):28~31.
- [11] Shi X, Doycheva DM, Xu L, et al. Sestrin2 induced by hypoxia inducible factor1 alpha protects the blood-brain bar-

rier via inhibiting VEGF after severe hypoxic-ischemic injury in neonatal rats[J].Neurobiol Dis,2016,95(1):111~121.

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过敏性紫癜患儿临床特点分析及白介素6 C 反应蛋白水平的变化

郑志方, 陈国利, 孙鹏

(承德医学院附属医院, 河北 承德 067000)

【摘要】目的:探讨过敏性紫癜(HSP)患儿的临床特点及血清白介素6(IL-6)、C反应蛋白(CRP)水平在HSP中的变化。方法:实验组为2015年06月01日至2017年05月31日在我院住院的126例HSP患儿,其中,单纯HSP组74例,HSP合并肾损害组52例;对实验组患儿的临床特点、发病前诱因、首发症状进行回顾性分析。对照组选取同期于我院体检健康的100例儿童。分别检测对照组和实验组血清IL-6、CRP的水平。结果:①发病年龄在3~7岁者多见,占77.78%,平均年龄 5.87 ± 2.23 岁,最小年龄1.5岁。②发病诱因:感染70例,占55.56%,食物过敏18例,占14.29%。③首发症状:皮肤紫癜,以双下肢紫癜最多见,占61.90%。52例出现肾脏损害,占41.27%。④治疗前,实验组IL-6、CRP水平均高于对照组,HSP合并肾损害组IL-6、CRP水平高于单纯HSP组,差异均具有统计学意义($P < 0.05$)。疾病恢复初期,HSP合并肾损害组患儿IL-6、CRP的水平较前下降,但仍较单纯HSP组升高,差异有统计学意义($P < 0.05$)。结论:①HSP多见于学龄期儿童,诱因以感染为第一位。②IL-6和CRP参与了HSP病理过程,动态检测HSP的IL-6、CRP水平变化,可为临床判断病情转归提供一定依据。

【关键词】 过敏性紫癜; 儿童; 白介素6; C反应蛋白

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Clinical Characteristics Analysis and the Change of Serums IL-6 and C-reactive Protein in Children with Henoch-Schonlein Purpura

ZHENG Zhifang, CHEN Guoli, SUN Peng

(The Affiliated Hospital of Chengde Medical University, Hebei Chengde 067000, China)

【Abstract】 Objective: To study the clinical characteristics and to investigate the changes of serum levels of IL-6 and CRP in children of Henoch-Schonlein purpura (HSP). **Methods:** The 126 cases with HSP treated from June 1, 2015 to May 31, 2017, which were selected as the research objects, were divided into the group of patients with simple HSP (74 cases) and patients with HSP nephritis (52 cases). All patients were retrospectively studied and clinical manifestations, cause of before the onset and starting symptoms. Meanwhile, the other 100 healthy medical examination children in our hospital during the same period were selected as the control group. The levels of IL-6 and CRP in the control group and experimental group were detected respectively. **Results:** ① In the 126 cases of children with HSP, the average age of was 5.87 ± 2.23 years old, from three to seven years old was accounted for 77.78%, and minimum age was 1 year 6 months. ② Infection was the major factor to induce HSP (55.56%); and food allergy was the second factor (14.29%). ③ For starting symptoms, skin purpura was found in 78 (61.90%) patients, which was for the first in HSP, especially for double lower limbs purpura. Renal involvement was found in 52 (41.27%) patients. ④ Serum levels of IL-6 and CRP of the patients with HSP before the treatment were higher than those of the normal control group ($P < 0.05$). Serum levels of IL-6 and CRP were significantly higher in the patients with HSP nephritis than those in patients with simple HSP ($P < 0.05$). The early disease recovery, levels of IL-6 and CRP were falling in the patients with HSP nephritis, but also higher than those of in patients with simple HSP ($P < 0.05$). **Conclusion:**

- ①The onset age of HSP was among school-age children and the most important inducing factor was infection.
- ②IL-6 and CRP participated in the pathological process of HSP, and dynamic testing the changing of levels of IL-6 and CRP in HSP could provide theoretical basis for clinical judgment condition.

[Key words] Henoch-Schonlein purpura; Child; Interleukin 6; C-reactive protein

过敏性紫癜(HSP)以全身小管炎为主要病变,是儿童时期常见的自身免疫性疾病。其中,HSP合并肾脏损害是本病的严重并发症,且临床中病情迁延、易复发、预后较差。HSP发病机制尚不十分清楚,可能与免疫系统因素参与有关,同时可能有细胞因子与炎症介质的参与^[1]。因此,本研究对126例HSP患儿进行回顾性分析,旨在发现其临床特点;其次,为临床观察HSP在发病过程中免疫功能的变化情况对HSP患儿的IL-6和CRP进行了动态检测,可为临床判断病情转归提供一定依据,现将结果报道如下。

1 资料与方法

1.1 研究对象:收集我院2015年06月01日至2017年05月31日按照2013年儿童过敏性紫癜循证诊治建议^[2]确诊的126例HSP住院患儿作为实验组,对照组为同期在我院体检健康的100例儿童。所有研究对象的选取都需符合本研究的入选和排除标准,经我院伦理委员会批准,并签署患者知情同意书。入选标准:

①弥漫性腹痛;②皮肤活检提示IgA沉积;③关节痛、关节炎;④血尿和(或)蛋白尿等肾脏损害表现;可触性皮疹伴以上任何一条均可。排除标准:①免疫性血小板减少症;②风湿性关节炎;③败血症;④外科急腹症,如急性阑尾炎、肠套叠等;⑤排除如IgA肾病、乙型肝炎相关性肾病等继发性肾脏疾病。根据有无血尿和(或)蛋白尿分为单纯HSP组(74例)、HSP合并肾脏损害组(52例)。治疗前,以皮肤紫癜、关节炎、关节痛、腹痛等胃肠道症状或肾脏损害为临床表现;治疗后以临床症状消失后5d为疾病恢复早期。

1.2 研究方法:分别采取静脉血对对照组和实验组在开始治疗前检测IL-6、CRP水平。另外,实验组患儿在紫癜、关节痛、腹痛、血尿等症状消失后2d(疾病恢复初期)再次检测上述指标。IL-6试剂盒购自上海罗氏公司,采用化学发光法测定,结果以IL-6≥7pg/mL为阳性;通过免疫比浊法测定CRP,其试剂盒购自上海奥普生物药业有限公司,以CRP≥8mg/L为阳性结果。

1.3 统计方法:采用SPSS19.0统计软件进行统计分析,计量资料采用均数±标准差表示,计量资料进行t检验分析;采用构成比表示计数资料。检验结果以P<0.05为差异有统计学意义。

2 结果

2.1 一般资料:126例HSP患儿中男孩74例,女孩52

例。年龄:1岁6个月至14岁,平均年龄(5.87±2.23)岁;小于3岁2例,占1.59%;3~7岁98例,占77.78%;大于7岁26例,占20.63%。正常对照组中男孩59例,女孩41例。年龄:1岁2个月至13.52岁,平均年龄(6.02±2.66)岁;小于3岁2例,占2.00%;3~7岁76例,占76.00%;大于7岁22例,占22.00%。两组资料具有良好的可比性。

2.2 发病前诱因:实验组126例患儿中94例(74.60%)在入院前1~2周有明确诱因。其中,70例(55.56%)患儿存在不同程度的感染,以上呼吸道感染最多见(46例);另外,还包括支气管炎(10例)、支气管肺炎(8例)、病毒性肠炎(3例)以及泌尿道感染(2例)和流行性腮腺炎(1例)。食物过敏18例,占14.29%,其中海鲜类如鱼虾过敏12例,鸡蛋白过敏2例,牛羊肉过敏2例;另外,还有芒果、香蕉过敏各1例。疫苗接种后2例,其中,流感疫苗、流脑疫苗接种后各1例。接触过敏原2例,包括接触豚草属类植物及桦树过敏各1例。药物过敏2例,均为应用磺胺类药物后。不明原因者32例。

2.3 首发症状:实验组患儿首发症状者以皮肤紫癜多见,多数为典型紫癜样皮疹,共78例,占61.90%;1例合并瘀斑。以74例双下肢紫癜最多见,占94.87%;臀部紫癜20例,占25.64%;双上肢者18例,占23.77%;双手合并双足者4例,占5.13%;耳后紫癜3例,占3.85%;阴茎紫癜1例,占1.28%;其中部分患儿可见不同程度的血管神经性水肿,双上肢及手背部水肿者6例,占7.69%,头面部水肿者5例,占6.41%,阴茎水肿1例,占1.28%。单纯腹痛20例,占15.87%。单纯关节痛5例,占3.97%。以皮肤紫癜合并腹痛者11例,占8.73%;皮肤紫癜合并关节痛者10例,7.94%;合并关节痛和腹痛2例,占1.59%。52例出现肾脏损害,占41.27%。

表1 HSP患儿IL-6 CRP的水平

组别	n	IL-6 (pg/mL)	CRP (mg/L)
实验组	126	59.62±22.95 ^a	19.86±9.87 ^a
正常对照组	100	4.36±1.66	3.43±2.29

注:与对照组比较;aP<0.05

2.4 实验组与正常对照组检测指标的比较:HSP患儿血清IL-6(59.62±22.95pg/mL)、CRP(19.86±9.87mg/

L)水平均高于正常对照组,比较结果具有统计学差异(P<0.05),见表1。

2.5 单纯HSP组与HSP合并肾损害组检测指标的比较:治疗前、疾病恢复初期单纯HSP组与合并肾损害组IL-6、CRP水平经比较均有显著差异(P<0.05)。

治疗前,HSP合并肾损害组患儿IL-6、CRP的水平与单纯HSP组相比有差异(P<0.05)。在疾病恢复初期,HSP合并肾损害组IL-6、CRP水平较前下降,但较单纯HSP组比较仍有统计学意义(P<0.05),见表2。

表2 单纯HSP组与HSP合并肾损害组患儿检测指标的比较

组别	n	时间	IL-6	CRP
单纯HSP组	74	治疗前	51.33±20.46 ^{ab}	16.61±6.53 ^{ab}
		疾病恢复初期	11.78±5.67 ^a	9.13±2.02 ^a
HSP合并肾损害组	52	治疗前	71.42±21.23 ^{ac}	24.49±11.86 ^{ac}
		疾病恢复初期	23.10±7.00 ^a	15.14±3.28 ^a
对照组	100		4.36±1.66	3.43±2.29

注:a:与对照组比较P<0.05;b:单纯HSP组治疗前与疾病恢复初期比较P<0.05;c:HSP合并肾损害组治疗前与疾病恢复初期比较P<0.05。

3 讨论

HSP是儿童时期中最常见的一种脉管炎,在全世界不分种族均可发病,其发病率为10~30人/10万,其年发病率约15个/10万儿童^[3]。双下肢皮肤紫癜可见于大部分病例,胃肠道症状及肾脏损害同样可见,且在疾病急性期可表现为腹痛、关节痛及蛋白尿等。临床常见的并发症可表现为肠套叠、肠穿孔、肾衰竭等。本病的确诊主要依靠首发症状。因此,确定临床特点及识别病原体等显得尤为重要。本组研究资料显示,HSP男孩多于女孩,好发于3~7岁的儿童,占77.78%,这与国外文献多见于10岁以下儿童,平均年龄4~6岁的报道一致^[4]。

各种病原体(如细菌、病毒)的感染、食物过敏、药物、疫苗接种后等可能与HSP的病因及发病机制有关。本研究与文献^[4]报道结果一致,均提示感染占本病诱发因素中的首位。本组患儿亦发现2例疫苗接种(流感疫苗接种1例,流脑疫苗接种1例)后出现紫癜者,提示随着目前接种疫苗的普及,我们应该对此引起足够的重视,但对于哪类疫苗可能更易引起发病尚需进一步探讨。另外,临床工作中多数病例常常找不到接触过的过敏抗原物质。

迄今为止,HSP病因及发病机制尚不明确。研究认为,本病可能存在T淋巴细胞功能改变导致体液免疫紊乱及细胞因子和炎症介质的参与在发病中起重要作用^[5],其中,以体液免疫异常为主。IL-6是一种典型的促炎性细胞因子,在炎症反应及免疫应答中发挥主要的作用,在一些慢性病及自身免疫性疾病等的发病机制均有关,为一种多功能细胞因子。其主要作用是影响机体免疫、造血功能以及影响急性期反应蛋白

的分泌和肾小球系膜增殖等。同时,由于IL-6在启动抗炎反应过程中发挥重要作用,它作为关键的细胞因子可以刺激肝细胞分泌急性期蛋白,作为诱导剂能使CRP等炎症急性期蛋白升高。资料显示,IL-6在HSP患儿中高表达,因此,可能是导致HSP患儿发病的重要因素^[6]。本研究结果显示,HSP患儿治疗前及疾病恢复初期测定IL-6、CRP水平与健康对照组相比有差异(P<0.05),说明在HSP患儿的发病期间IL-6、CRP可能参与了该病的发病过程,且可能存在着相互促进的作用。其次,肾损害病例较单纯HSP病例更易复发且病情迁延可能与免疫因素的参与所致有关,本研究在疾病的治疗前与恢复初期,HSP合并肾损害组较单纯HSP组患儿IL-6、CRP的水平偏高,说明在HSP合并肾损害过程中IL-6可能起着重要作用。

总之,迄今为止,虽然HSP的病因并不十分清楚,但该病仍被认为是各种细菌、病毒等所致的免疫紊乱以及细胞因子参与的一种脉管炎。本研究认为,在本病发病过程中IL-6、CRP可能发挥了一定的作用,仍需多中心大样本的长期随机对照研究进一步探讨。

【参考文献】

- [1] 陈朋,肖凤丽.过敏性紫癜病因及发病机制研究[J].实用皮肤病学杂志,2011,4(2):93~95.
- [2] 中华医学会儿科学分会免疫学组.2013儿童过敏性紫癜询证诊治建议[J].中华儿科杂志,2013,51(7):502~507.
- [3] Hwang HH, Lim IS, Choi BS, et al. Analysis of seasonal tendencies in pediatric Henoch-Schonlein purpura and comparison with outbreak of infectious diseases [J]. 2018, 97(36): e12217.
- [4] 张碧丽,王文红,范树颖.儿童过敏性紫癜575例分析[J].中华儿科杂志,2001,39(11):646~649.

- [5] Pillebout E, Jamin A, Ayari H, et al. Biomarkers of IgA vasculitis nephritis in children [J]. PLoS One, 2017, 12 (11): e0188718.
- [6] Chang H, Zhang QY, Lin Y, et al. Correlation of TLR2 and

TLR4 expressions in peripheral blood mononuclear cells to Th1- and Th2-type immune responses in children with henoch-schonlein purpura [J]. Int Clin Exp Med, 2015, 8(8): 13532~13539.

临床研究

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重度慢性阻塞性肺疾病患者姑息照护需求水平及其影响因素分析

陈晓珊

(四川大学华西医院呼吸与危重症医学科, 四川 成都 610041)

【摘要】目的:探讨重度慢性阻塞性肺疾病(COPD)患者对于姑息照护的需求水平和影响因素。**方法:**选取2015年2月至2018年3月期间本院所收治重度COPD患者180例,采用姑息照护结局量表(POS量表)对患者的姑息照护需求水平进行评估,并采用HAD焦虑抑郁量表、KPS卡式功能量表、Borg量表对影响重度COPD患者POS量表评分的影响因素。**结果:**本次研究中,180例重度COPD患者POS量表评分平均为 14.1 ± 5.3 分;单因素分析显示,性别、经济压力、病程、肺功能等级和合并症种类均是影响重度COPD患者姑息照护需求水平的相关因素,差异具有显著性($P < 0.05$);重度COPD患者的HAD评分、Borg评分同姑息照护需求水平呈明显正相关,KPS评分与姑息照护需求水平呈明显负相关,差异具有显著性($P < 0.05$);多因素分析结果显示,肺功能等级、合并症种类、HAD评分是影响重度COPD患者姑息照护需求水平的关键因素,同患者姑息照护需求水平呈明显正相关,差异具有显著性($P < 0.05$)。**结论:**重度COPD患者存在较高的姑息照护服务需求,其中,患者的肺功能等级、合并症种类、焦虑抑郁程度均是影响此类患者姑息照护需求水平的重要因素,临床应加强对此类患者姑息照护需求的评估,对患者病程进展程度密切把握,提高对患者舒适度和尊严的关注程度,以提高重度COPD患者的生活质量。

【关键词】 重度慢性阻塞性肺疾病; 姑息照护; 需求水平; 影响因素

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Analysis on the Level of Palliative Care Demand and the Influencing Factors in Patients with Severe Chronic Obstructive Pulmonary Disease

CHEN Xiaoshan

(West China Hospital, Affiliated to Sichuan University, Sichuan Chengdu 610041, China)

【Abstract】Objective: To explore the level of demand and influencing factors for palliative care in patients with severe chronic obstructive pulmonary disease (COPD). **Methods:** A total of 180 patients with severe COPD were enrolled in our hospital from February 2015 to March 2018. The palliative care outcome scale (POS scale) was used to assess the level of palliative care needs, and the HAD anxiety and depression scale was used. Influencing factors of KPS card function scale and Borg scale on POS scale scores in patients with severe COPD. **Results:** In this study, 180 patients with severe COPD had an average POS score of 14.1 ± 5.3 . Univariate analysis showed that gender, economic stress, duration of disease, pulmonary function, and comorbidities were all palliative care for patients with severe COPD. The correlation factors of the demand level were significantly different ($P < 0.05$). The HAD score and Borg score of patients with severe COPD were positively correlated with the palliative care demand level. The KPS score was significantly negatively correlated with the palliative care demand level. The difference was significant. Sexuality ($P < 0.05$); multivariate analysis showed that lung function grade, comorbidity type, and HAD score were the key factors affecting the level