

中西医结合疗法对清创术后患者 C-反应蛋白的影响

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内容提要 本研究动态观察了中西医结合疗法对清创术后 C-反应蛋白的影响,并与单纯西药组进行了对照。结果表明:治疗 4 天后两组的 C-反应蛋白均呈下降趋势,但中西医结合组下降幅度更大,两组相比, $P < 0.01$; 治疗 1 周后,中西医结合组 C-反应蛋白恢复正常,而西药组仍高于正常范围, $P < 0.001$ 。说明中西医结合疗法在影响 C-反应蛋白水平、降低感染率方面明显优于单纯西药疗法。提示清创术后患者在常规应用抗生素的同时,加服某些具有调节机体免疫功能的中草药,可提高临床疗效。C-反应蛋白可作为判断清创术后是否继发感染及某些药物疗效的可靠客观指标。

关键词 清创术后 C-反应蛋白 中西医结合疗法

C-反应蛋白是机体遭受创伤、感染等因素刺激后出现在血液中的一种特殊蛋白质。特别是在组织损伤而又伴有感染时,其血清中的浓度可呈数十倍或百倍的上升。一旦损伤修复感染控制时,血清浓度则可迅速恢复正常。因此,不少临床医生将血清 C-反应蛋白的水平用来作为感染监测及疗效判断的客观指标,指导临床治疗。我院自 1989 年 5 月~1992 年 3 月间,对收治入院的 60 例清创术后患者,动态观察了 C-反应蛋白的变化及应用中西医结合疗法对其血清浓度的影响,现报道如下。

资料和方法

一、对象与分组 选择受伤均在 8h 以内就诊的清创术后患者 60 例,按住院顺序随机分成两组,每组 30 例。西药组:男 27 例,女 3 例,年龄 15~56 岁,平均年龄 35.2 岁。受伤部位:前臂及手部 8 例,大腿及臀部 4 例,小腿 11 例,踝及足部 7 例。中西医结合组:男 25 例,女 5 例,年龄 17~48 岁,平均年龄 38.8 岁。受伤部位:前臂及手部 13 例,大腿及臀部 2 例,小腿 10 例,踝及足部 5 例。

二、治疗方法 西药组:青霉素钠盐 800 万

u(华北制药厂生产)静脉滴注,每日 1 次,连续 1 周。中西医结合组:青霉素钠盐 560 万 u 静脉滴注,每日 1 次,另加服一盘珠冲剂(由本院药剂科制备),每次 20g,每日 2 次,温开水冲服,连续 1 周。处方:广木香、大黄、甘草各 8g,续断、乳香、没药、泽兰各 10g,桃仁、赤芍、生地各 12g,川芎、乌药、苏木、当归各 15g,红花 18g。

三、标本收集 两组患者均在清创术后第 1 天、第 4 天、第 7 天采集外周静脉血 1ml,分离血清备用。

四、检测方法 采用南京大学生化测试实验室生产的羊抗人 C-反应蛋白抗血清-琼脂糖单向免疫扩散板,使用 50 μ l 微量进样器吸取 10 μ l 血清,小心注入检测孔内,静置 5~10min,加盖,置 37 $^{\circ}$ C 恒温箱中反应 16h,取出板后观察,有沉降轮者为阳性,然后测量其沉降轮直径(mm),并根据其测得的直径查所附标准曲线,即可知 C-反应蛋白的含量。

结 果

一、清创术后 C-反应蛋白的变化 两组病例在清创术后其血清 C-反应蛋白水平均明显升高,经治疗 4 天后,两组 C-反应蛋白均开始

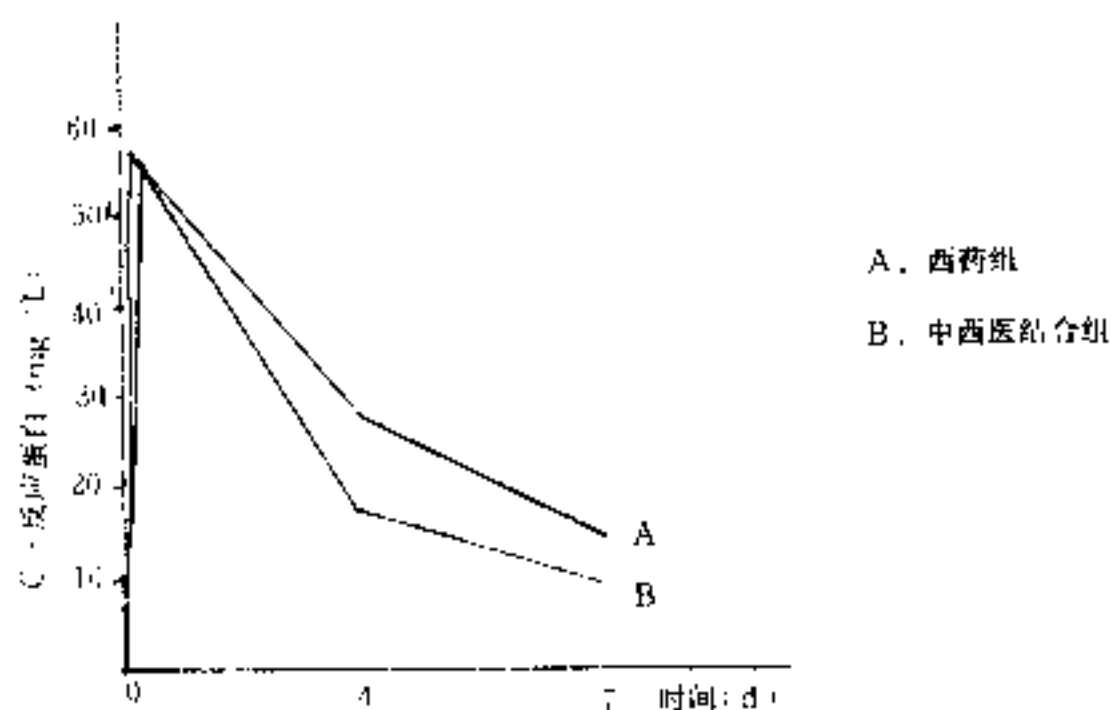
下降,但中西医结合组下降的幅度大、速度快,与西药组相比较,有显著的差异性($P<0.01$)。观察治疗期间西药组有5例发生感染,而中西医结合组仅2例发生感染,结果见附表。

附表 两组清创术后 C-反应蛋白变化 ($\mu\text{g/ml}$, $\bar{x}\pm S$)

组别	治前	治后第4天	治后第7天
中西医	57.44 \pm 11.76	18.57 \pm 6.37*	8.91 \pm 2.18**
西药	58.13 \pm 10.87	26.87 \pm 9.35	13.27 \pm 3.21

注:与西药组相应时相比较,* $P<0.01$,** $P<0.001$

二、C-反应蛋白水平变化与疗程关系 两组 C-反应蛋白水平变化与疗程关系表明,中西医结合组 C-反应蛋白下降速度快,疗程短,疗效好;而西药组疗程长、疗效欠佳,血清 C-反应蛋白下降慢,1 周后其峰值仍未完全降至正常。见附图。



附图 C-反应蛋白水平变化与疗程关系

讨 论

正常情况下,人体血清中 C-反应蛋白含量甚微,其浓度 $<10\mu\text{g/ml}$ 。但在创伤、手术、感染等致病因素的作用下,被激活的单核细胞释放白细胞介素-1,在后者的刺激下,参与制造、合成 C-反应蛋白的肝细胞数量大量增加,数小时即可使血清中 C-反应蛋白浓度迅速上升。因此,C-反应蛋白被认为是一种重要的急性期反应物质^[1]。由于其半衰期短于 24h,在损伤修复、感染控制时,血清浓度又可大幅度降低,故

C-反应蛋白水平的变化在一定程度上反映了患者的临床状况。根据 C-反应蛋白的生物性质,我们在观察治疗期间每隔 3 天测定 1 次。西药组中有 5 例 C-反应蛋白值术后持续波动在 32~56 $\mu\text{g/ml}$ 之间,下降迟缓,结果均不同程度地发生伤口感染。中西医结合组 1 例小腿皮肤、肌肉撕裂伤的患者,术后第 4 天时 C-反应蛋白较治疗前无明显下降,仔细检查伤口,发现其下缘有一约 $2.5\times 1.5\text{cm}^2$ 之红肿隆起,当即拆除缝线,见伤口深部肌间隙内有积脓约 5ml,遂扩创引流,局部换药,并仍予中药一盘珠冲剂口服治疗。1 周后伤口炎症消退,复查 C-反应蛋白降至正常。可见 C-反应蛋白的检测对判断清创术后患者是否合并感染准确性好、灵敏度高,且操作方法简单易行,是早期发现继发感染的有效观测指标之一。

一盘珠冲剂具有消肿散瘀、益气活血的功效,研究表明,它能提高血清补体第二途径的溶血活素,增强巨噬细胞吞噬功能^[2],并能调节 T 淋巴细胞中 Th 细胞与 Ts 细胞的比值,调整二者所构成的免疫调控网络,改善机体的免疫功能^[3]。本结果显示,治疗创伤术后患者,在常规应用抗生素的基础上,加服一盘珠冲剂后,其 C-反应蛋白下降开始早,降至正常的时间同单纯西药组比较,明显提前,且临床疗效好,感染发生率低。两组感染发生率分别为 6.7% 和 16.7%。这可能与该方激活补体,活跃吞噬细胞的吞噬功能,调节炎症感染时机体免疫功能有关。

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I, the ascending range of heart rate (HR) lessened during exercise and recovered more rapid than that before treatment. The difference was significant ($P < 0.05$). The HR was also significant different between the KDG groups of Group I and II during resting, exercise and recovering status ($P < 0.05$). Furthermore, after treatment the level of salivary progesterone of the aged female was significantly. The determination of bone mineral content showed that in KDG after treatment, the density of ulnar line was remarkably elevated. These results showed that through tonifying Kidney and replenishing Qi could improve the functions of heart, brain, bone and endocrine systems of the aged persons, therefore improve their compliability.

Key words tonifying Kidney, the aged, compliability

(Original article on page 208)

Metrological Analysis for Efficacy of Acupuncture on Angina Pectoris

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Acupuncture (Acupoints: Neiguan P6, Shenmen H7, Shaohai H3 or auriculo-points: Heart, Shenmen) was administrated once or 7 times in a week on 40 patients with stable type of angina pectoris. The effect was assessed quantitatively or semi-quantitatively according to the extent, area, frequency, duration of attack, the time of attack during exercise, and the vanishing of suffering after exercise. Just after one performance of acupuncture, 15 patients' angina pectoris were significantly alleviated ($P < 0.001$) both in degree and area. After 7 times of acupuncture 10 patients' angina pectoris were not only significantly alleviated both in extent and area, but also in frequency and duration of attack. 15 patients were randomized to an acupuncture, non-acupuncture or acupuncture at non-acupoints (ANA) in a single blind design. The time from the beginning of exercise to the anginal attack in active acupuncture group was longer than that in non-acupuncture or ANA group ($P < 0.01$), but they were similar ($P > 0.05$) in both non-acupuncture group and ANA group. The time from the end of exercise to the disappearance of angina pectoris in acupuncture group was shorter than that in the other two groups ($P < 0.05$).

Key words acupuncture, Nei-guan, Shen-men, Shao-hai, coronary heart disease, angina pectoris, metrological analysis

(Original article on page 212).

Effect of Combined Therapy of Traditional Chinese and Western Medicine on C-Reactive Protein in Patients of Postdebridement

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Closely monitoring whether the secondary infection in the patients of post-debridement occurred or not and appropriately treating these patients were the important ways to reduce the incidence of infection. Through estimating the level of the serum C-reactive protein (CRP) as the monitoring index of infection, dynamically observed the effect of the combined traditional Chinese and Western medicine therapy (TCM-WM) on CRP after debridement, as was compared with the effect of the Western medicine therapy (WM) group in which only the WM was administrated. The result showed that the levels of CRP decreased in both TCM-WM and WM group on 4th day after the operation, but the level of CRP in former group was lower than that in latter one, the difference was very significant ($P < 0.001$). So that, it was assumed that TCM-WM significantly excelled the WM on affecting the level of CRP and reducing the incidence of infection. It was suggested that CRP could be used as an effective and objective index to determine whether the secondary infection has happened and to assess the efficacy of some drugs.

Key words C-reactive protein, combined therapy of traditional Chinese and Western medicine, postdebridement

(Original article on page 215)