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红藤养胃汤对胃癌患者血清 MG7-Ag、TPS 及 OPN 水平的影响 *

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摘要 目的:探讨红藤养胃汤治疗胃癌的疗效及对血清胃癌相关抗原(MG7-Ag)、骨桥蛋白(OPN)、组织多肽特异性抗原(TPS)水平的影响。**方法:**选择 2015 年 2 月至 2017 年 1 月在我院进行胃癌治疗的 86 例患者,将其随机均分为观察组和对照组,每组 43 例。对照组患者给予奥美拉唑治疗,观察组患者在对照组基础上给予红藤养胃汤治疗,比较两组患者的临床疗效,治疗前后血清 MG7-Ag、TPS、OPN 水平变化及不良反应的发生情况。**结果:**治疗后,观察组总有效率显著高于对照组,血清 MG7-Ag、TPS、OPN 水平均显著低于对照组,差异均具有统计学意义($P < 0.05$),且恶心呕吐、发热及白细胞减少等不良反应的发生率显著低于对照组($P < 0.05$)。**结论:**红藤养胃汤可显著提高胃癌患者的临床疗效,减少不良反应,有效降低患者血清 MG7-Ag、TPS、OPN 水平。

关键词:红藤养胃汤;胃癌;胃癌相关抗原(MG7-Ag);骨桥蛋白(OPN);组织多肽特异性抗原(TPS)

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Effects of Hongteng Yangwei Decoction on Serum MG7-Ag, TPS and OPN Levels of Patients with Gastric Cancer*

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ABSTRACT Objective: To study the effect of Hongteng yangwei decoction on the serum MG7-Ag, OPN and TPS levels of patients with gastric cancer. **Methods:** 86 patients with gastric cancer treated in our hospital from February 2015 to January 2017 were randomly divided into the observation group and the control group. 43 patients in each group. The control groups was treated with omeprazole capsules, while the observation group of patients were additionally treated by Hong Teng Yangwei Decoction based on the control group. The clinical efficacy, serum MG7-Ag, TPS, OPN levels before and after treatment as well as the incidence of adverse reactions were compared between two groups. **Results:** After treatment, the total effective rate in the observation group was significantly higher than that of the control group, levels of serum MG7-Ag, TPS and OPN were significantly lower than those of the control group ($P < 0.05$), the incidence of nausea and vomiting, fever, leucopenia, etc was significantly higher than that in the control group. **Conclusion:** Hongteng yangwei decoction can enhance the clinical effect and decrease the adverse reactions on the gastric cancer patients, which may be related to reduce the serum MG7-Ag, TPS and OPN levels.

Key words: Hongteng yangwei decoction; Gastric cancer; MG7-Ag; OPN; TPS

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前言

胃癌属于消化道常见的恶性肿瘤之一^[1],关研究表明^[2]其致死率在恶性肿瘤中名列前茅。在癌变过程中,癌基因的表达会产生抗原等活性物质,使患者体液、血清及排泄物均能检测到肿瘤标志物的存在,但对正常组织及良性疾疾病而言,无法检测到肿瘤标志物^[3],故可以采用肿瘤标志物对肿瘤的发生及发展过程进行研究,其中, MG7-Ag、OPN、TPS 水平均能反映胃癌的变化情况。由于临床治疗胃癌的方法较多,手术治疗和药物治疗对 MG7-Ag、OPN、TPS 表达水平的影响程度不同,且临床疗效结论尚不明确^[4];据国内中医药相关研究表明^[5,6],红藤养胃汤对胃癌的相关临床症状有显著的改善作用,能充分发挥抗幽门

螺杆菌在调控胃黏膜细胞增殖凋亡的作用。因此,本研究重点研究了红藤养胃汤治疗胃癌患者的临床疗效及对患者血清 MG7-Ag、TPS 及 OPN 水平的影响。现报道如下。

1 资料与方法

1.1 一般资料

选择我院 2015 年 2 月至 2017 年 1 月治疗的 86 例胃癌患者,纳入标准^[7]:(1)经胃镜及胃癌病理学明确诊断者;(2)近期无创伤史、手术史及放疗或化疗;(3)无其他系统性疾病;(4)治疗方案经患者及其家属知情同意。排除标准^[8]:(1)近期有创伤史、进行过手术治疗、放疗及化疗者;(2)有其他系统性疾病者;(3)患者及家属不同意者;(4)对实验药物过敏者。将所纳入的 86 例

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患者随机将其均分为观察组(43例)和对照组(43例),其中观察组患者中男性23例,女性20例,年龄42~67岁,平均年龄(53.15 ± 8.62)岁,对照组患者中男性22例,女性21例,年龄43~68岁,平均年龄(53.86 ± 8.97)岁,两组患者以上指标比较差异无统计学意义($P > 0.05$),具有可比性。

1.2 治疗方法

对照组给予常规方案治疗,采用奥美拉唑胶囊(山东罗欣药业集团股份有限公司 国药准字 H20033444)治疗,1~2次/d,一次20 mg,同时还口服替普瑞酮(卫材药业有限公司 国药准字 H20093656),3次/d,每次50 mg,如果患者的幽门螺杆菌检测出来呈阳性,则还需采用阿莫西林、洛赛克及克拉霉素等配合治疗;观察组患者则在对照组治疗方案的基础上增加红藤养胃汤对其进行治疗,其中红藤养胃汤的主要成分有丹参15 g、红藤30 g、川连6 g、党参10 g、姜半夏10 g、木香10 g、九节茶15 g,2次/d,每次一剂。连续两个月。

1.3 观察指标

入院前后均要采集5 mL清晨空腹肘静脉血,随后采用离心机以3500 r/min的速度将其离心10 min,吸取上层血清分装后,置于保温箱中备用,温度设置为-20℃,采用酶联免疫吸附试验法对MG7-Ag、TPS及OPN水平值进行检测,所使用的试

剂盒均由美国R&D公司生产提供,所有步骤严格按照试剂盒的说明进行操作,其中酶联免疫吸附试验所使用的机器是Thermo Multiskan MK3酶标仪,由赛默飞世尔仪器(上海)有限公司生产提供。

根据临床不良反应对疗效进行评价:完全缓解(CR):恶性呕吐、发热及白细胞减少等不良反应消失;部分缓解(PR):恶性呕吐、发热及白细胞减少等不良反应消失一半以上;无效(NC):恶性呕吐、发热及白细胞减少等不良反应无明显改善;进展(PD):不良反应增多。总有效率=CR+PR。

1.4 统计学分析

采用SPSS 18.0统计软件分析数据,计量资料均用均数 $\pm$ 标准差($\bar{x} \pm s$)表示,组间比较采用t检验,计数资料均用[(n)%]表示,组间比较采用 χ^2 检验,以 $P < 0.05$ 表示差异具有统计学意义。

2 结果

2.1 两组患者治疗前后血清MG7-Ag水平的比较

两组患者治疗前血清MG7-Ag水平比较差异无统计学意义($P > 0.05$),两组患者治疗后的血清MG7-Ag水平显著低于本组治疗前的血清MG7-Ag水平值,且治疗后,观察患者的血清MG7-Ag水平明显对于对照组($P < 0.05$)。详见表1。

表1 两组患者治疗前后血清MG7-Ag水平比较($\bar{x} \pm s$)

Table 1 Comparison of MG7-Ag levels between two groups before and after treatment($\bar{x} \pm s$)

Groups	n	MG7-Ag(ng/mL)		T value	P value
		Before treatment	After treatment		
Observation group	43	142.03 $\pm$ 16.72	130.83 $\pm$ 8.51 ^{*#}	3.915	0.000
Control group	43	143.15 $\pm$ 18.67	136.08 $\pm$ 8.86 [*]	2.243	0.028
P value		0.770	0.006		

Note: Compared with the same group before treatment, ^{*} $P < 0.05$; After treatment, compared with the control group, [#] $P < 0.05$.

2.2 两组患者治疗前后血清TPS水平的比较

两组患者治疗后的血清TPS水平较本组治疗前相比均有

显著下降,且治疗后,观察组患者血清TPS水平值显著低于对照组($P < 0.05$)。详见表2。

表2 两组患者治疗前后血清TPS水平比较($\bar{x} \pm s$)

Table 2 Comparison of serum TPS levels between two groups before and after treatment($\bar{x} \pm s$)

Groups	n	TPS(ng/mL)		T value	P value
		Before treatment	After treatment		
Observation group	43	98.13 $\pm$ 11.51	56.43 $\pm$ 9.84 ^{*#}	18.058	0.000
Control group	43	99.32 $\pm$ 13.82	63.15 $\pm$ 10.57 [*]	13.632	0.000
T value		0.434	3.051		
P value		0.666	0.003		

Note: Compared with the same group before treatment, ^{*} $P < 0.05$; After treatment, compared with the control group, [#] $P < 0.05$.

2.3 两组患者治疗前后血清OPN水平变化的比较

治疗前,两组患者血清OPN水平比较差异无统计学意义($p > 0.05$),观察组患者治疗后的血清OPN水平值显著低于本组治疗前及对照组($P < 0.05$)。详见表3。

2.4 两组患者治疗后不良反应的发生情况比较

治疗后,观察组患者在恶心呕吐、发热及白细胞减少的发生率显著低于对照组,且观察组的总不良反应率(30.2%)显著小于对照组(97.7%)两组差异有统计学意义($P < 0.05$)。详见表4。

2.5 两组患者治疗后的疗效比较

治疗后,观察组的总有效率是81.4%,对照组的总有效率是53.5%,在总有效率方面比较,观察组显著高于对照组($P < 0.05$)。详见表5。

3 讨论

胃癌是致死率较高的恶性肿瘤之一,进展期的胃癌占90%,在晚期胃癌患者的治疗中,化疗占据重要位置。有研究表

表 3 两组患者治疗前后血清 OPN 水平比较($\bar{x} \pm s$)Table 3 Comparison of the serum OPN levels before and after treatment between the two groups ($\bar{x} \pm s$)

Groups	n	OPN(ng/mL)		T value	P value
		Before treatment	After treatment		
Observation group	43	89.34 $\pm$ 10.64	49.08 $\pm$ 9.53* [#]	18.483	0.000
Control group	43	88.25 $\pm$ 13.06	60.47 $\pm$ 9.82*	11.148	0.000
T value		0.424	5.458		
P value		0.672	0.000		

Note: Compared with the same group before treatment, *P<0.05; After treatment, compared with the control group, [#]P<0.05.

表 4 两组患者不良反应发生率比较[(n)%]

Table 4 Comparison of the incidence of adverse reactions between two groups [(n)%]

Groups	n	Malignant vomiting	Fever	Leukopenia	Total adverse reaction rate
Observation group	43	3(7.0)	5(11.6)	5(11.6)	13(30.2)
Control group	43	15(34.9)	13(30.2)	14(32.6)	42(97.7)
P value		0.002	0.034	0.019	0.000

表 5 两组患者临床疗效比较[(n)%]

Table 5 Comparison of the clinical efficacy between two groups [(n)%]

Groups	n	CR	PR	NC	PD	Total efficiency
Observation group	43	15(32.6)	21(48.8)	6(16.3)	1(2.3)	36(81.4)
Control group	43	13(30.2)	9(23.3)	11(27.9)	10(18.6)	22(53.5)
P value			0.020			0.001

明^[9]化疗可以有效延长晚期胃癌患者的生存时间及无进展生存期,相比而言,化疗更胜于最好的支持性治疗,然而在治疗晚期胃癌时,大多数是采用沿用大肠癌的化疗方式,目前为止,还未确定标准有效的化疗方案,且因为癌变早期症状不明显,确诊时已是癌症的中晚期,失去了临床最佳治疗时机。相关研究表明^[10,11]采用肿瘤标志物可以有效的诊断胃癌及跟踪病情发展,临床上运用较多的治疗方案是手术治疗及中药、西药治疗,但对肿瘤标志物 MG7-Ag、TPS、OPN 水平影响程度不同,且临床疗效结论尚不明确。

随着学者们的深入研究得知^[12],胃癌大多数是因为饮食结构不规范、疲劳过度、情志失调而导致脾胃受损,久而久之使得气滞血瘀,必克伐正气,最终耗伤气血,胃膜失养,脾胃虚脱,在治疗过程中,应健脾益气,活血化瘀,可根据以下理论依据对其进行治疗,其一,胃是多血多气之腑,水谷精微善消,脾胃的气化跟人体的营血生存之间的关系密不可分,久病之后,因病情反复发作,脾胃虚弱,气血俱弱,必将导致胃黏膜萎缩;其二,中医认为气为血之帅,血因气虚而泣,因气滞而瘀,一旦病程较长,必然造成血络瘀滞,引起胃黏膜萎缩;故气虚血瘀是胃癌病理的关键,据国内中医药相关研究表明^[13,14]:红藤养胃汤是针对滞、虚、痰、热及瘀进行组方,该药物的主要成分包括党参、红藤、木香、丹参、半夏、川连及九节茶等,每种成分均有独特之功效,其中红藤和丹参具有活血化瘀,解散凉血的作用,党参具有固本扶正和健脾益气的作用,木香和半夏不仅可以化痰调气,而且还可以止痛和胃,九节茶和川连具有解毒和利湿清热之功效,各种药物相辅相成,共同发挥其独特作用,能够起到清热解毒、益气调气及化痰祛瘀的作用^[15-17];经研究显示,红藤养胃汤

治疗组治疗后的恶心呕吐、发热及白细胞减少等不良反应症状均显著少于单一西药治疗组,且红藤养胃汤治疗组总有效率(81.4%)显著高于单一西药治疗组的总有效率(53.5%),与 Shan T 等研究结论相似^[18]。患者血清 MG7-Ag、TPS、OPN 的表达水平方面,有研究表明^[19,20]:MG7-Ag 是肿瘤标志物中的糖蛋白抗原,且 MG7-Ag 水平的高低是根据胃症状的严重程度而定,起初的表性胃炎、随后恶化成胃溃疡及萎缩性胃炎,直到演变成胃癌,其 MG7-Ag 的表达水平均出现逐渐上升的趋势,胃癌早期,血清中的 MG7-Ag 检出率较高,对于胃癌的诊断筛查价值巨大^[21];TPS 作为细胞角蛋白 18 片段上的可溶性片段,即细胞角蛋白的 M3 抗原决定簇^[22,23],TPS 在正常组织细胞中的水平值较低,而在上皮源性恶性肿瘤中水平值较高,以致于在肿瘤细胞中过度表达,释放进入血清,由此患者机体血清 TPS 的水平能较强反应出肿瘤细胞的增殖能力^[24];OPN 是一种磷酸蛋白,具有分泌性作用,且位于人类染色体 4q22.1 之上的 SPPI 基因编码产生而来,OPN 的生物学功能广泛,不仅在多种恶性肿瘤发生及发展过程中有着重要的作用,而且在免疫应答及侵袭性转移中的作用也很显著,本研究显示,治疗后,红藤养胃汤治疗组血清 MG7-Ag、TPS、OPN 的表达水平显著低于单一西药治疗组,两组比较差异显著,具有统计学意义(P<0.05)。

综上所述,红藤养胃汤可显著提高胃癌患者的临床疗效,减少不良反应,有效降低患者血清 MG7-Ag、TPS、OPN 水平。

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