

扶正化瘀方药抗胃癌术后转移及 对鸟氨酸脱羧酶的影响观察

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摘要 对 32 例手术后的胃癌患者投扶正化瘀中药治疗,并与西药组对照。结果:6 个月后中药组不仅转移复发率明显降低,而且鸟氨酸脱羧酶亦明显下降。据此认为,中药抗胃癌术后转移复发可能与其能降低患者鸟氨酸脱羧酶活性有关。

主题词 胃肿瘤/外科手术 肿瘤转移 @扶正化瘀方

鸟氨酸脱羧酶(以下简称 ODC)作为参与细胞增殖所必需的多胺生物合成中的限速酶,其诱癌、促癌,在胃癌发生发展转移复发过程中所起的重要作用已被近年来的研究证实^[1,2]。1992~1994 年间,笔者在日本东京大学医学部客座研究期间,就扶正化瘀方抗胃癌术后转移复发的临床及对 ODC 的影响,进行了部分探索性研究,取得了一定进展,现报告如下。

1 临床资料

本组 63 例均为在日本东京大学医学部附属医院进行胃切除术后胃癌患者,其中男 41 例,女 22 例。年龄 25~85 岁,平均 63.2 岁。经手术组织病理诊断,早期胃癌 23 例,进展期胃癌 40 例。其中,分化型癌 42 例(含乳头腺癌、管状腺癌,其中 I 级 9 例,II 级 8 例,III~IV 级 25 例),未分化型癌 21 例(含未分化腺癌 6 例,其中未分化粘液性腺癌 6 例,低分化腺癌 4 例,印戒细胞癌 5 例),已有淋巴转移 39 例,未见淋巴转移 24 例。

2 治疗及观察方法

本组 63 例患者,手术后随机分两组治疗。两组患者在年龄、性别、病情、术式、肿瘤大小、浸润深度、组织分型、是否转移等方面经统计学处理无显著性差异($P>0.05$)。

西药组 31 例,采用 FAP 方案化疗,5—

Fu300mg/m² × 5 静注,ADM40mg/m²,第 1 天;CODP60mg/m² 静滴。

中西医结合组 32 例,在上述西医治疗方案基础上加服中药制剂。药用六君子散(人参、白术、茯苓、半夏各 4g,陈皮、大枣各 2g,甘草 1g,干生姜 0.5g,日本ツムラ株式会社产)、桂枝茯苓丸(桂枝、茯苓、牡丹皮、桃仁、芍药各 4g,药厂同上)。六君子散每日 3 次,每次 1g;桂枝茯苓丸每日 3 次,每次 3g。6 个月为 1 疗程。

全部病例均于术中于手术组织病变处与临界正常胃粘膜处作 ODC 检测,ODC 检测方法根据 Furihata 法进行^[1]。

术后两治疗组中,未复发者于 6 个月时胃镜复查,于手术吻合口旁活检正常胃粘膜(10 例非胃癌患者为正常对照组),活检组织立即液氮冷冻,−80℃ 保存,2 周内测定 ODC。每份标本均测定两次,以均值计算,并与手术时肿瘤直径、浸润程度、组织分型、淋巴结转移情况等行相关性分析。

3 结果分析

63 例患者中半年内复发 4 例,西药组 3 例,中西药组 1 例,具有比较显著的统计学差异($P<0.05$)。ODC 检测 10 例非胃癌患者为 83.2 ± 6.9 (均值 ± 标准差,单位 CO₂ nmol/mg 蛋白/h,下同)。63 例胃癌患者肿瘤直径在 0.5~13.8cm 之间,平均 4.98cm。<4.9cm 和 ≥5.0cm 患者 ODC 含量分别为 364.2 ± 47.3 与 598.8 ± 79.4 ;早期癌和进展期癌分别为 378.3 ± 49.5 与 563.4 ± 69.8 ;分化型与未分化型分别为 441.3 ± 36.9 与 538.1 ± 77.3 ;淋巴转移阳性与阴性者分别为 358.5 ± 50.5 与 698.8 ± 151.2 。正常胃粘膜 ODC 含量两组治疗前无显著差异($P>0.05$),治疗前后比较中西药组有显著差异($P<0.01$),西药组无显著差异($P>$

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收稿日期:1995-10-31;修回日期:1996-01-16

0.05);两组间治疗前后差值比较有显著差异($P<0.01$),详见表1。

西药组胃粘膜 ODC 治疗前后无显著性差异,中西药组及两组治疗后比较统计学意义非常显著。两组治疗前后正常胃粘膜 ODC 变化与相关因素比较分析如表2所示。

表2 两组治疗前后正常胃粘膜 ODC 变化与相关因素分析

		中 西 药 组		西 药 组	
肿瘤直径(cm)					
	<4.9	194.2/128.4	65.7±9.03(18)*	188.3/181.8	6.5±1.23(16)
	≥5.0	269.8/248.8	21.1±4.63(14)	270.1/262.1	8.0±1.73(15)
浸润深度	早期癌	153.2/88.5	64.7±10.63(12)*	150.9/151.8	-0.9±0.21(11)
	进展癌	288.3/261.8	26.5±4.2(20)	269.8/255.1	14.7±2.95(20)
组织分型	分化	201.1/125.8	75.3±10.89(21)*	211.3/193.4	17.9±2.27(2)
	未分化	288.5/268.8	19.7±3.58(11)	276.8/282.5	-5.7±1.29(10)
淋巴转移	阴性	198.8/176.5	22.3±3.98(13)	201.1/188.5	12.6±3.13(11)
	阳性	381.3/255.3	126±17.17(19)**	373.8/365.4	8.4±1.09(20)

表中数字为治前均值/治后均值,均差值±标准误(例数)

治疗前后比较 * $P<0.05$ ** $P<0.01$

表2示,其正常临界胃粘膜内 ODC 含量升高与手术切除的肿瘤直径大小、浸润深度、组织分化程度、淋巴结是否转移明显相关。中西药组治疗对肿瘤直径<4.9cm、早期胃癌、分化程度较好、淋巴结转移阳性者,ODC 下降具有显著的统计学意义。推测扶正化瘀中药抗胃癌术后转移与降低 ODC 活性相关。

4 讨论

血瘀作为恶性肿瘤形成发展各个阶段中的重要机制与胃癌有着十分密切的关系,这已被近年来的许多研究所证实。我们观察到,胃癌手术后患者瘀血内阻类似现代医学的血液高凝状态(血液高凝状态为游离的癌细胞在小血管中着床,侵入其他组织形成转移灶,创造了条件),这部分患者在表现为不同程度的瘀血内阻证同时,还存在着手术创伤,正气虚弱一面。我们采取标本兼治法,使用日本产的六君子散和桂枝茯苓丸治疗,补益气血扶助正气,活血化瘀,扶正驱邪。6个月后不仅转移复发率降低,而且胃粘膜中 ODC 明显下降。

研究认为,实验动物经促癌剂处理后,细胞中最早出现的最明显的生化反应是迅速大量地诱导 ODC 活性。ODC 不仅有早期诱癌作用,而且具有明显的促癌转移、恶化作用^[2,3],本组资料中,全部胃癌患者不仅癌变处而且临界正常

表1 两组治疗前后正常胃粘膜 ODC(CO₂ nmol/mg 蛋白/h)比较

	例数	治疗前均值	治疗后均值	治前一治后均差值±标准误
中西药组	32	246.9	191.7	55.1±6.49
西药组	31	239.9	225.1	14.8±2.01

胃粘膜中 ODC 水平明显高于正常对照组,且升高幅度与肿瘤大小、浸润深度、组织分化程度、淋巴结是否转移明显相关。治疗6个月后单纯化疗组 ODC 变化无显著差异,而服用扶正化瘀中药组明显下降。说明中药抗胃癌术后转移与能降低 ODC 有相关性,但中药抗胃癌术后转移是怎样通过降低 ODC 活性实现的,还有待进一步深入研究。

5 参考文献

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- 3 O'Brien TG. The induction of ornithine decarboxylase as an early, possibly obligatory event in mouse skin carcinogenesis. Cancer Res 1976;36: 644.

本研究蒙日本东京大学医学部寺野彰教授指导与帮助,统计学处理蒙本院卫生统计学教研室唐尧教师审阅,一并致谢。江苏省中医药管理局 P513 资助项目

• 征 文 •

中华特种针法全国第二届学术交流会7月下旬在庐山召开。征文内容:毫、头、耳、眼、面、舌、颈、拳、手、足、粗、提、捻、气、指、水、火针、腕踝、梅花、全息、运动、小宽、过梁针;独特手法、灸法等30余种。

会务费570元。发给全国学术会议论文证书与论文集。来稿与审稿费10元于6月25日前寄至:北京朝外高井民航医院许亭、徐丹收,邮编:100025。

ABSTRACTS OF ORIGINAL ARTICLES

Influence of Acupuncturing Fengchi - Point on Cerebral Blood Flowing.

Yuan Xiaojun, Hao Xishu, Lai Zhongping, et al

By using percerebral Dopler Ultrasonic exam. observation was made on the changes of blood flowing in basilar artery before and after acupuncturing of Fengchi points in 97 cases. Results showed that there was significant changes in blood flowing velocity before and after acupuncturing in the treating group of rapid blood flowing and slow blood flowing types ($P < 0.001$). And the significance of samples from the treating group and controlled group before and after acupuncturing was also significant ($P < 0.001$).

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Key Words: plethysmography/impedance acupuncture effect/point, Fengchi

(Original article on page 285)

Action of Remedies of Supporting Resistance and Relieving Blood Stasis on Metastasis of Post-operative Gastric Cancer and Its Influence on Ornithine Decarboxylase.

Bu Ping

Thirty-two cases of post-operative cancer of stomach were treated with remedies of supporting resistance and relieving stasis with another group treated with western drugs for comparison. Results revealed that the metastatic rate had been greatly decreased, also the content of ornithine decarboxylase was markedly dropped, suggesting that lowering rate of post-operative metastasis might be related to the activity of ornithine decarboxylase.

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Key Words: cancer of stomach/surgical operation

(Original article on page 290)

One-hundred Fifty Cases of Chronic Brucellosis Treated with Differential Diagnosis of Syndromes.

Sheng Yongfu, Hu Suhua

Four types, including deficiencies of Qi-blood, Yin-deficiency of Liver-kidney, blood-stasis and damp-heat, were differentiated in 150 cases of chronic brucellosis for treatment with respective traditional materia medica. 59 cases were cured. 54 case basically

cured. 25 cases mitigated and 12 cases ineffective, the total effective rate being 92 %.

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Key Words: Brucella/TCM therapy Treatment based on differentiation of syndromes

(Original article on page 292)

Diagnosis and Treatment of 52 Cases of Protracted Pneumonia in Children.

Bao Jing

Since antibiotic therapy is not satisfactory to children's protracted pneumonia, the patients used to pursue TCM therapy. 52 cases of such patients were treated by this author since 1983. Results revealed that the treating principle of dispersing and clearing method along with tonification as core therapy was satisfactory to elevate the therapeutic effect. The patients were differentiated into 4 types, lung-heat with deficient fluid, failure of spleen (earth) to support lung (metal), weakness of Ying and defensive levels, and stagnant pathogens due to Qi-deficiency.

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Key Words: Protracted pneumonia/TCM therapy treatment based on differentiation of syndromes

(Original article on page 294)

Influence of Semen Raphani on Tonic Action of Radix Ginseng.

Wu Xinghe, Guan Yunli, Zhou Dehe, et al

In ancient recipe books and according to ancient physicians, it was said that Semen Raphani might neutralize the tonic action of Radix Ginseng, and it was also a folk belief that raddish and Semen Raphani were tabooed when administering Radix Ginseng. In our experiments, results showed that Radix Ginseng yielded marked actions of anti-fatigue, anti-anoxia and anti-irritation in mice, mean while no influence can be observed when administering Semen Raphani at the same time in such experiments.

Authors' Address: Shaoxing City Hospital, Shaoxing Zhejiang Province 312000

Key Words: Radix Ginseng/ pharmacology Semen Raphani/pharmacology compatibility of drugs

(Original article on page 300)