

原发性肝癌的肝癭线与血液流变学关系初探

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内容提要 本文对31例原发性肝癌有肝癭线患者进行血液流变学测定。结果发现:全血粘度、血浆粘度、红细胞压积、血沉、血沉方程K值、红细胞电泳、纤维蛋白原值明显高于健康人组。认为患者血液处于浓、粘、聚、凝状态是形成肝癭线的病理基础,肝癭线可能是原发性肝癌长期瘀血后继发性变化,是全身微循环障碍的局部表现。

肝癭线可作为对原发性肝癌(PLC)辅助诊断的依据之一,文献已屡有报道^(1~3)。为了进一步研究肝癭线的临床意义,本文试从血液流变学角度进行初步探讨。

资料与方法

一、观察对象:患者均为符合1977年全国肝癌防治研究协作会议拟定诊断标准⁽⁴⁾的住院者。对照组均为健康者。

1. 肝癭线标准:患者取端坐位,张口伸舌,迅速仔细观察舌面与边缘,并照相记录。舌边缘存在明显的条纹状或斑点,块状青紫色即可确诊。

2. PLC肝癭线组:31例中男26例,女5例,年龄20~73岁。分型:硬化型15例,均为男性;单纯型16例,男11例、女5例。分期:Ⅱ期9例,男7例、女2例;Ⅲ期22例,男19例、女3例。其中经病理证实12例。舌诊:淡红舌6例(男5例、女1例);红绛舌25例(男21例、女4例)。

3. 健康人组:66例中男45名,女21名,年龄25~60岁。均为经过临床及实验室检查无异常发现者。

二、测定指标与方法

1. PLC患者入院后未经治疗,早晨空腹采血,送福建省中医研究所测定,健康人组亦系该所同一实验室测定值。

2. 测定血液流变学的全血粘度、血浆粘度、全血还原粘度、红细胞压积、血沉、血沉方程K值、红细胞电泳、纤维蛋白原8项指标,方法按已报道文献⁽⁵⁾进行。

结 果

一、肝癭线组与健康人组比,全血粘度、血浆粘度、红细胞压积、血沉、血沉方程K值、红细胞电泳、纤维蛋白原值均升高,经t检验有非常显著性差异 $(P<0.01\sim0.001)$,余项比值无显著性差异 $(P>0.05)$,见附表。

二、肝癭线组中,硬化与单纯型、Ⅱ与Ⅲ期、淡红与红绛舌血液流变学8项指标的各值

附表 肝癭线组与健康人组血液流变学值比较 (M±SD)

	例数	全血粘度 (比)	血浆粘度 (比)	全血还原 粘度(比)	红细胞压积 (%)	血 沉 (mm/h)	血沉方程 K值(比)	红细胞电泳 (s)	纤维蛋白原 (mg%)
肝癭线组	男26	3.88±0.85			37.57±9.02	36.90±18.87**			
	女5	4.09±0.78*	1.55±0.12**	7.52±1.26	45.20±11.52*	26.80±21.68	94.05±44.02**	21.71±1.31**	360.52±163.39**
健康人组	男45	3.77±0.38			38.00±4.80	10.40±7.40			
	女21	3.41±0.37	1.44±0.11	7.20±0.69	35.00±4.80	18.40±9.00	32.00±21.00	18.40±1.60	211.00±58.50

* $P<0.01$, ** $P<0.001$, 均为t检验

比较, 经t检验均无显著性差异($P>0.05$)。

讨 论

一、PLC出现肝癭线时已多属中、晚期。肝癭线组全血粘度、血浆粘度、红细胞压积、血沉、血沉方程K值、红细胞电泳、纤维蛋白原值明显地高于健康人组, 表明患者血液处于高度的浓、粘、聚、凝状态, 是形成肝癭线的病理基础。这可能由于肝癌细胞常沿门静脉分支侵入其它肝实质增殖, 压迫血管网, 使之畸形、闭塞, 甚则压迫门、肝静脉, 造成门静脉高压, 并且破坏肝功能, 使Kupffer细胞清除能力下降, 异常蛋白大量增多, 在脉管内形成网状结构, 遮蔽红细胞表面负电荷, 造成红细胞易于相互迭合聚集⁽⁶⁾, 致使全身血液粘度增加, 血流缓慢不畅。同时还造成血液缺氧, 代谢产物堆积, 某些毒素刺激血管壁, 使毛细血管脆性增加, 通透性升高, 血液易渗出血管外凝固、沉着, 因此肝癭线又可能是PLC长期瘀血后继发性变化, 属于中医学的“恶血”范畴⁽⁷⁾。

二、舌是人体的外露器官, 由于舌固有层血管丰富薄脆而浅表, 故其在瘀血后继发出血形成显而易见的肝癭线。实际上PLC与肝硬化关系密切, 门静脉高压是常见的症候群, 它不仅通过食道静脉、上腔静脉等影响舌微血管网, 还影响腹腔内各脏器血管。解剖发现这时门静脉所容纳的各静脉群均有不同程度的出血、渗

出, 如胃肠粘膜呈胶冻样外观, 腹腔内大量腹水等现象⁽⁸⁾。因此, 肝癭线也可能只是全身微循环障碍的局部表现。

三、PLC伴高纤维蛋白血症日益受到重视, Sherlock认为PLC患者纤维蛋白原增高可能与肝癌有异常蛋白合成有关⁽⁹⁾。本文测定结果提示肝癭线组纤维蛋白原平均值约高于健康人组1.7倍。因此对有PLC临床症状而AFP阴性者, 可否参考纤维蛋白原值升高和肝癭线出现, 作为中西医结合辅助判别条件之一。

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“临床科研设计、衡量、评价讲习班”在京举办

中国中西医结合研究会于1987年6月29~7月11日在北京举办了“临床科研设计、衡量、评价(DME)讲习班”, 由富有科研和教学经验的中山医科大学的侯灿教授、广州中医学院DME国家培训中心副主任赖世隆副教授担任主讲。学员为来自全国的35名教授、副教授、主任、主治医师和科研处长等。

DME是近年来国际上临床医学领域中一门新兴学科, 因此在学习过程中, 学员们表现出极大的兴趣与

热情, 针对讲课进行热烈地讨论及答疑, 并能结合专业杂志发表的论文进行分析, 找出问题, 从而提高了实际科研设计能力和对科研成果评价的能力。学员们表示, 回到原单位后要积极宣传、普及DME, 进一步提高中医、中西医结合临床科研水平和医疗质量, 并希望总会继续举办DME学习班, 也建议总会成立DME分会。

(钟 希)

A Preliminary Study on Relationship between "Line of Ganyin" (肝痕线) and Hemorheology of Primary Liver Cancer Patients

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Many reports has found out that "line of Ganyin" (LGY), i. e., purple strips or spots and lumps on the tongue edges, was one of the auxiliary bases for diagnosing primary cancer of liver (PLC). The present article analysed hemorheological changes of the LGY of PLC. From this study, it was found that the whole blood viscosity, plasma viscosity, hematocrit, ESR and its equational coefficient K, RBC electrophoresis, fibrinogen levels of 31 cases in the LGY group were significantly higher than those of 66 cases in normal control group ($P < 0.01$), but in the LGY group, there was no significant difference between the blood rheological values of the sclerotic type and simple type, stage II and stage III, light red tongue and deep red tongue ($P > 0.05$). The pathological bases of LGY were the high degree of blood density, stickiness, agglutination and coagulation. The LGY possibly was the secondary changes after a long-term blood stasis in PLC. It belonged to the category of "extravasated blood" of TCM, and LGY was a local manifestation of constitutional microcirculatory disturbance only.

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A Study of *Psoralea corylifolia* Extract Against Amino-Formal Ethylate Induced Lung Adenocarcinoma in Mice

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This paper aims at investigating the anticarcinoma action of Chinese drug *Psoralea corylifolia* extract (contains Psoralen and isopsoralen). The preventive and therapeutic effects of *Psoralea corylifolia* extracts on the lung-adenocarcinoma mice which is induced by amino-formal-ethylate, was observed. The lung tissue pathologic changes, its characteristic ultrastructural alterations confirmed that *Psoralea corylifolia* extract markedly enhanced the immunologic function on the mice with lung cancer.

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Sedative, Analgesic, Antipyrexia and Anti-inflammatory Actions of Neutral Oil

Isolated from *Ligusticus sinensis*

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The spontaneous activity and the excitatory activities induced by amphetamine sulfate in mice could be inhibited significantly by oral administration of neutral oil isolated from *Ligusticus sinensis* (NOLS). Orally administered with NOLS, the sleeping time of mice induced by thiopental sodium was prolonged and the number of writhing of mice induced by potassium antimony tartrate was reduced and pain threshold of mice in hot-plate test was raised. The NOLS possessed a marked antifebrile effect. The fever of rabbits and mice was induced by injecting typho-paratyphoid vaccine. The rectal temperature was markedly reduced by oral administration of NOLS. The rectal temperature of normal mice also could be reduced by it. Furthermore, NOLS possessed an anti-inflammatory effect. Swelling of mice's ear induced by xylene was inhibited by the NOLS. The acute toxicity test showed that LD_{50} in mice of NOLS was found to be 70.17 ± 4.95 g/kg (crude drug).

The above data revealed that the NOLS possessed effects of sedation, analgesia, antipyrexia and anti-inflammation. The results also indicated that NOLS was one of the active ingredients of *Ligusticus sinensis*.

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