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肝硬变患者血清腺苷脱氨酶和外周血 T 细胞亚群与中医证型关系

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内容提要　用改良 Martinek 微量测定法检测 74 例肝硬变患者和 100 名健康人血清腺苷脱氨酶(ADA)含量，用间接免疫荧光法检测 38 例肝硬变患者和 60 名健康人外周血 T 淋巴细胞亚群，并探讨其与中医证型间的关系。结果显示：肝硬变患者血清 ADA 显著高于健康人($P<0.01$)，并按肝郁脾虚型、热郁血瘀型、阴虚络阻型顺序依次递增，各证型间有非常显著差异($P<0.01$)；OKT_8明显高于健康人、OKT_4/OKT_8比值则明显低于健康人($P<0.05\sim0.01$)，但 3 个证型间无明显差异($P>0.05$)。本研究结果表明血清 ADA 似与肝硬变程度及中医证型有关，可考虑作为本病中医辨证分型、判断病情与预后的参考指标之一。

关键词　肝硬变　腺苷脱氨酶　T 淋巴细胞亚群

肝硬变是一种全身性疾病，近年来有人报道肝硬变患者血清腺苷脱氨酶(ADA)和外周血 T 淋巴细胞亚群有改变[1~4]，但肝硬变患者血清 ADA、外周血 T 淋巴细胞亚群及其与中医证型之间的关系尚未见报道。因而，我们对此进行了初步探讨。现报告如下。

资料与方法

一、观察对象　(1)74 例肝硬变患者：男 53 例，女 21 例，年龄 29～68 岁，平均 44.78 岁。根据病史、症状、体征和肝功能等检查，参照有关"门脉性肝硬变"的诊断标准[5]，B 超有典型肝硬变图像改变作为观察对象。全部病例均为代偿期，并排除肝、肺、淋巴结等恶性病变及结缔组织疾病，谷丙转氨酶(ALT)、血尿素氮及肌酐在正常范围。(2)健康人：血清 ADA 检测 100 名，其中男 59 名，女 41 名，年龄 23～63 岁，平均 42.54 岁；T 淋巴细胞亚群检测 60 名，其中男 30 名，女 30 名，年龄 24～57 岁，平均 41.32 岁。均为健康献血者和部分本院健康工作人员。

二、检测方法　血清 ADA 检测采用南通医学院消化研究室的改良 Martinek 微量测定法[2]，T 淋巴细胞亚群(OKT_1、OKT_4、OKT_8)检测，由卫生部武汉生物制品研究所单克隆抗体技术开发部提供药盒，根据武汉(Wu)系列抗人淋巴细胞及其亚群单克隆抗体(单抗)说明书，按间接免疫荧光法进行。

三、辨证分型　鉴于肝硬变目前尚无统一辨证分型标准，根据代偿期肝硬变的临床特点自拟分为 3 型：(1)肝郁脾虚型：脘胁胀满或疼痛，嗳气纳呆，食后作胀更甚，神疲乏力，面色萎黄，大便溏，舌淡苔白，脉弦或细滑。(2)热郁血瘀型：脘腹满闷，胁腹攻痛，面色萎黄或黯红，烦热口干，身重倦怠，纳呆唇紫，大便溏垢不爽或便秘，小便短赤，头颈胸臂可见蜘蛛痣，肝脾肿大，舌紫，苔黄或腻，脉弦滑或弦数。(3)阴虚络阻型：胁下疼痛，脘腹满闷，面色黯黑，手足心热或午后潮热，形瘦唇紫，心烦口燥，大便不畅，小便短少，头颈胸臂可见蜘蛛痣或见肝掌，肝脾肿大，舌质紫红少津，脉弦细数或弦细涩。

四、统计分析法　数据处理采用 t 检验、F 检验、q 检验、χ^2检验和直线相关分析。方差不齐时经对数变换后再分析。血清 ADA 指标测定按健康人的 $\bar{x}\pm S$ 正常上、下限值。

结　果

一、肝硬变患者血清 ADA 检测结果与中医证型的关系　肝硬变患者血清 ADA(22.19±10.36 u/L)与健康人(12.88±4.65 u/L)比较显著升高($P<0.01$)，并按肝郁脾

虚型(13.72±5.31 u/L, n = 29)、热郁血瘀型(22.47±5.96 u/L, n = 25)、阴虚络阻型(34.11±8.15 u/L, n = 20)顺序依次递增，各证型间比较有非常显著性差异($P<0.01$)。

二、肝硬变患者外周血 T 淋巴细胞亚群检测结果与中医证型的关系　结果见附表。肝

附表　肝硬变患者外周血 T 淋巴细胞亚群检测结果与中医证型的关系　(%, $\bar{x}\pm S$)

证型	例数	OKT_1	OKT_4	OKT_8	OKT_4/OKT_8
健康人	60	75.79±5.63	46.35±4.43	25.82±1.95	1.79±0.42
肝硬变	38	74.34±3.84	48.00±5.17	29.63±1.87**	1.63±0.45*
肝郁脾虚	14	74.07±3.91	48.35±3.88	29.57±1.74	1.64±0.18
热郁血瘀	11	73.00±3.44	45.73±6.37	30.18±1.94	1.53±0.28
阴虚络阻	13	75.77±3.90	49.54±4.98	29.23±1.96	1.71±0.30

注：与健康人比较，*$P<0.05$，**$P<0.01$

硬变患者与健康人比较，T 淋巴细胞亚群 OKT_8显著升高($P<0.01$)，OKT_4/OKT_8比值明显降低($P<0.05$)，而 3 个证型间比较无明显差异($P>0.05$)。

三、肝硬变患者血清 ADA 及外周血 T 淋巴细胞亚群与血清蛋白的关系　经直线相关分析，肝硬变患者血清 ADA 与血清总蛋白(TP)、白蛋白(A)含量及白/球蛋白比值呈负相关(分别 r = −0.316，$P<0.05$；r = −0.391，$P<0.01$，r = −0.394，$P<0.01$)；与球蛋白(G)含量呈正相关(r = 0.379；$P<0.01$)；与 OKT_1、OKT_4、OKT_8、OKT_4/OKT_8均无相关关系；T 淋巴细胞亚群与 TP、A、G 也未见有相关关系。

讨　论

肝实质损伤时，细胞内 ADA 可逸入血中导致血清酶升高。本组患者 ALT 在正常范围，其血清 ADA 增高难以用肝实质损伤来解释。有人报道血清 ADA 活性与肝纤维化程度有关[2]，且随肝纤维化程度加重而渐增[1]。本组结果显示，血清 ADA 与血清 TP、A 含量，A/G 比值呈负相关，与血清 G 含量呈正相关，似也支持这一论点。

代偿期肝硬变多因肝、脾、肾功能失调所致，整个病变过程，有肝郁脾虚→热郁血瘀→阴虚络阻发展的趋势。本组患者各证型间血清 ADA 有非常显著差异($P<0.01$)，并按肝郁脾虚型、热郁血瘀型、阴虚络阻型顺序依次递增。3 个证型中，肝郁脾虚型病处早期，血清 ADA 上升不明显；而阴虚络阻型病情较重，则血清 ADA 上升较显著。提示血清 ADA 可能与肝硬变病情程度及中医证型有关，因此可考虑将血清 ADA 检测作为本病辨证分型、判断病情与预后的参考指标之一。本组患者外周血 T 淋巴细胞亚群 OKT_8显著升高，OKT_4/OKT_8比值显著降低，与文献报道一致[3-4]，说明肝硬变患者免疫调节存在某种程度的异常。但 3 个证型间 T 淋巴细胞亚群未见有显著性差异，表明外周血 T 淋巴细胞亚群与中医证型无关，这可能因外周血与肝组织的 T 淋巴细胞亚群分布不一致[5]，而外周血 T 淋巴细胞亚群可能仅反映肝硬变患者全身免疫状态的一种改变所致，尚待继续探讨。

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blood liprotein-a level. It is worth while to use JYL as an antihyperlipemic agent clinically.
Key words Jian Yan Ling, antihyperlipemic agent, apoprotein, lipoprotein—a
(Original article on page 142)

Clinical and Experimental Study of No.90—Dasheng Jiangya oral Liquid (90 大圣降压口服液) in Treating Hypertension

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109 cases of hypertension patients were divided into two groups at random. No.90 Dasheng Jiangya (DSJY) oral liquid was administered to the TCM group, while nifedipine to the control. Results: The level of hypertension was lowered in both TCM and control groups. The effective rates of which were 92.3% and 94.7% respectively. No significant difference was seen betweem them ($P>0.05$). The TCM groups has an advantage of decreasing blood-lipid, increasing high density lipoprotein, improving microcirculation and reducing the atherogenic index as well. The difference between the two groups was significant ($P<0.05$ or 0.01). Animal studies have shown that TCM groups has effect in decreasing blood pressure of the spontaneously hypertensive rat, and in rising of anoxia tolerance in mice. Both clinical and toxicological tests showed that this drug was non-toxic with no marked side-effects. Therefore this paper provides a basis for use of No.90 Dasheng Jiangya oral liquid in preventing and treating hypertension.
Key words hypertension, N0.90 Dasheng Jiangya oral liquid, nifedipine
(Original article on page 145)

Correlation between Serum Adenosine Deaminase, Peripheral T Lymphocyte Subsets and Syndrome Types of TCM in Liver Cirrhosis Patients

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Serum adenosine deaminase (ADA) of 74 liver cirrhosis patients and 100 healthy subjects as control were examined with improved Martinek microassay and peripheral T lymphocyte subsets of 38 liver cirrhosis patients and 60 healthy subjects studied by indirect immunofluorescence assay (IFA) for exploring the relationship between them and syndrome types of TCM. The result showed that level of ADA of liver cirrhosis patients was higher than that of control ($P<0.01$) and increased in following order: the type of Liver-energy Depression and Spleen Deficiency, that of Heat -Stagnation and Blood Stasis and that of Yin-Deficiency and Microvessel Obstruction. The difference of serum ADA among the types were significant ($P<0.01$). The result also showed that OKT_8 of liver cirrhosis patients was higher, the ratio of OKT_4/OKT_8 was lower than the healthy subjects ($P<0.05-0.01$), but the difference among the types were not significnat ($P>0.05$). Serum ADA seemed to be one of the teference indexes in differentiating syndrome types of TCM, determining the patient's condition and prognosis.
Key words hepatocirrhosis, serum adenosine deaminase, T lymphocyte-subsets
(Original article on page 148)

Clinical Observation on Verrucous Gastritis with Combined Therapy of Traditional Chinese and Western Medicine

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Controlled study of verrucous gastritis treated with combined therapy of TCM-WM was compared with that of WM only. The result showed that the total effective rate and the cured rate of former were 97.83% and 84.78%, while that of latter were 77.14% and 22.86% respectively. The