

紫舌、淡白舌与 TXA_2 — PGI_2 平衡调节系统关系的临床观察

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内容提要 本组观察了 45 例正常人和 70 例不同舌象冠心病患者血浆 TXB_2 、6-keto- $\text{PGF}_{1\alpha}$ 值。结果表明, 淡白舌组血浆 6-keto- $\text{PGF}_{1\alpha}$ 水平比正常组明显降低。紫舌(紫舌与紫斑舌)组血浆 TXB_2 水平比正常组和淡白舌组明显增高。血浆 $\text{TXB}_2/6\text{-keto-PGF}_{1\alpha}$ 比值, 正常组与淡白舌组和紫舌组比较, 以及淡白舌组与紫舌组比较均有显著性差异。随着淡白舌—紫舌的演变过程, 血浆 TXB_2 、6-keto- $\text{PGF}_{1\alpha}$ 水平也有相应改变。认为 TXA_2 — PGI_2 平衡失调这一特点, 似可作为舌诊的客观指标。

关键词 紫舌 淡白舌 TXA_2 PGI_2

为探讨舌象变化规律的实质, 我们测定了冠心病紫舌组和淡白舌组患者血浆 TXB_2 和 6-keto- $\text{PGF}_{1\alpha}$ 水平, 并与正常人组对照, 分析紫舌、淡白舌与 TXA_2 — PGI_2 平衡调节的关系。

资料与方法

一、临床资料: (1) 正常对照组: 45 例, 男 23 例, 女 22 例。年龄 25~72 岁, 平均 54.9 岁。均为献血员和体检健康者。(2) 冠心病组: 70 例, 男 45 例, 女 25 例; 年龄平均 58.8(29~83) 岁; 按照 WHO “缺血性心脏病的命名及诊断标准” 进行诊断分型^①, 急性心肌梗塞 20 例, 陈旧性心肌梗塞 23 例, 不稳定性心绞痛 15 例, 稳定性心绞痛 12 例。

舌象诊断由固定的三名医生在自然光线下用肉眼观察。以全国中医学会舌象诊断标准分组。紫舌组 23 例, 其中急性心肌梗塞 10 例, 陈旧性心肌梗塞 6 例, 不稳定性心绞痛 7 例。紫斑舌组 9 例, 其中急性心肌梗塞 6 例, 不稳定性心绞痛 3 例。淡白舌组 38 例, 其中急性心肌梗塞 4 例, 陈旧性心肌梗塞 17 例, 不稳定性心绞痛 5 例, 稳定性心绞痛 12 例。

二、观察方法

急性心肌梗塞、不稳定性心绞痛患者, 采血前未用过阿司匹林、潘生丁、消炎痛等影响

前列腺素合成的药物。其他各组病例采血前两周以上未用或停用上述药物。急性患者就诊时即采血, 其他各组则于上午 8 时取空腹静脉血。以放免法同时测定血浆 TXB_2 和 6-keto- $\text{PGF}_{1\alpha}$ ^②。放免药盒由解放军总医院提供。抽样批间试验相对误差(CV)5.4%, 批内试验(CV)2.65%, 反应—误差关系(RER)0.034 和回收实验回收率 92.5~108%, 测定结果可信。

结 果

一、冠心病和正常对照组血浆 TXB_2 、6-keto- $\text{PGF}_{1\alpha}$ 测定结果: 见表 1。

表 1 正常人与冠心病患者血浆 TXB_2 、6-keto- $\text{PGF}_{1\alpha}$ 水平比较($\bar{x} \pm S$, 下同)

	例数	TXB_2 (pg/ml)	6-Keto- $\text{PGF}_{1\alpha}$ (pg/ml)	$\text{TXB}_2/6\text{-Keto-}\text{PGF}_{1\alpha}$
正 常 对 照 组	45	164.49 ± 10.85	244.00 ± 19.31	0.72 ± 0.04
急 性 心 肌 梗 塞	20	424.31*** $\pm 54.10^{\Delta\Delta\Delta}$	247.99 ± 18.15	1.99*** $\pm 0.31^{\Delta\Delta}$
陈 旧 性 心 肌 梗 塞	23	314.54*** $\pm 49.10^{\Delta}$	150.88** $\pm 11.75^{\Delta}$	2.22*** $\pm 0.30^{\Delta\Delta\Delta}$
不 稳 定 性 心 绞 痛	15	243.10** $\pm 31.06^{\Delta\Delta}$	175.64 ± 19.03	1.42*** $\pm 0.12^{\Delta\Delta\Delta}$
稳 定 性 心 绞 痛	12	138.02 ± 15.88	195.90 ± 9.94	0.72 ± 0.09

注: 与正常对照组比较, * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$; 与稳定性心绞痛比较, $\Delta P < 0.05$, $\Delta\Delta P < 0.01$, $\Delta\Delta\Delta P < 0.001$

二、不同舌象患者血浆 TXB_2 、6-keto- $\text{PGF}_{1\alpha}$ 水平、 $\text{TXB}_2/6\text{-keto-PGF}_{1\alpha}$ 比值, 见表 2。

表 2 不同舌象患者血浆 TXB_2 、6-keto- $\text{PGF}_{1\alpha}$ 水平
 $\text{TXB}_2/6\text{-keto-PGF}_{1\alpha}$ 比值

组别	例数	TXB_2 (pg/ml)	6-keto- $\text{PGF}_{1\alpha}$ (pg/ml)	$\text{TXB}_2/6\text{-keto-PGF}_{1\alpha}$
紫舌	23	360.10** ± 31.30	185.08 ± 17.07	2.12** ± 0.22
紫斑舌	9	485.07** ± 106.10	229.30 ± 33.20	2.25** ± 0.55
淡白舌	38	217.76 $\Delta\Delta$ ± 30.50	179.29** ± 9.08	1.33 $\Delta\Delta$ ± 0.18
正常对照	45	164.49 ± 10.85	244.00 ± 19.31	0.72 ± 0.04

注: 与正常对照组比较, ** $P < 0.01$; 与紫舌组比较, $\Delta\Delta P < 0.01$; 与紫斑舌组比较, $\Delta\Delta P < 0.01$

讨 论

舌象的变化可以反映疾病发生发展的内在变化。冠心病舌象随不同病期和不同病情而呈现动态演变, 并有一定的变化规律^[3]。本虚标实是冠心病一个共同特点。反映气血异常变化的主要表现是血瘀和气虚。因此紫舌和淡白舌的辨证具有重要意义。

淡白舌和紫舌的形成与血液流变学、血小板功能和微循环的异常有密切关系。并且演变规律与其严重程度相平行^[4,5]。而上述诸因素的变化均受到 TXA_2 — PGI_2 的调节。本文研究发现淡白舌、紫舌的形成与这一平衡调节系统失调有密切关系。

淡白舌患者血浆 6-keto- $\text{PGF}_{1\alpha}$ 水平比正常组明显降低($P < 0.01$)。提示淡白舌的形成可能与血浆 6-keto- $\text{PGF}_{1\alpha}$ 水平降低有密切关系。 PGI_2 具有扩张血管, 改善心功能的作用^[6,7]。淡白舌是心气虚证的主要见证。其产生与心搏量下降有关。可见血浆 6-keto- $\text{PGF}_{1\alpha}$ 水平降低可能是淡白舌的一个重要特征, 可能为淡白舌形成的物质基础之一。

淡白舌组血浆 $\text{TXB}_2/6\text{-keto-PGF}_{1\alpha}$ 比值比正常人显著增高($P < 0.01$)。并且血浆 6-keto- $\text{PGF}_{1\alpha}$ 水平下降的同时 TXB_2 水平也比正常组增高, 尽管比较无显著性差异($P >$

0.05)。这一结果提示冠心病淡白舌尽管属于气虚范畴, 但仍然有血瘀的因素存在。只是病理变化的阶段不同, 从而反映证候的主要特点不一样。临床证候的演变是体内物质变化的结果。临床舌象的演变过程也反映了这一点^[8]。

紫斑舌组、紫舌组血浆 TXB_2 水平明显高于正常组和淡白舌组($P < 0.01$)。血浆 $\text{TXB}_2/6\text{-keto-PGF}_{1\alpha}$ 比值也比正常组和淡白舌组明显增高($P < 0.05, 0.01$)。这一结果表明血浆 TXB_2 水平的增高可能是紫舌的一个重要特征。 TXB_2 可能是紫舌形成的物质基础之一。但紫舌和紫斑舌两组之间三项指标比较均无显著性差异($P > 0.05$)。这点表明此两种舌象发生机制可能是一致的, 只是随着病程发展阶段的不同而表现病状的轻重不一。提示临床舌诊只需辨别紫舌, 即包括紫舌和紫斑舌, 就可以达到辨证目的。但血浆 TXB_2 水平量的不同, 对辨别病情程度的轻重可能具有重要意义。

鉴于淡白舌、紫舌的形成与 TXB_2 —6-keto- $\text{PGF}_{1\alpha}$ 的平衡失调有密切关系, 并且血浆 TXB_2 、6-keto- $\text{PGF}_{1\alpha}$ 水平随着淡白舌和紫舌的演变过程而相应改变。认为血浆 TXB_2 和 6-keto- $\text{PGF}_{1\alpha}$ 水平可作为临床舌诊的客观指标。

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Circadian Rhythm of Immune Adhesion Activity of RBC in the Aged and the Kidney-Deficiency Patients

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The authors observed the variation of immune adhesion activity of RBC of the healthy aged and the Kidney-deficiency patients in different phases of day and night. The results showed that the C₃b receptor rosette formation rate of RBC of the aged were in lower level except You(酉) phase, while that of the patients were the highest at Mao(卯) phase and declined step by step from Mao to Zi(子) phase in a day. The peak and valley values of immune complex rosette of formation rate of RBC of the aged appeared at Mao and Zi phases respectively. But in the Kidney-deficiency patients these rhythms were disappeared. On the basis, the authors discussed the difference and connection between physiological aging and pathological aging.

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Clinical Observation of Relationship Between Pale Tongue, Purplish Tongue and TXA₂-PGI₂ Regulation System

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This paper analysed the relationship between pale tongue, purplish tongue and TXB₂, 6-keto-PGF_{1α} levels in plasma of 70 cases with coronary heart disease (CHD) and 45 normal subjects. The result showed the following characteristics: The pale tongue group (217.76 ± 30.5 pg/ml) showed no significant difference in TXB₂ level compared with the normal group (164.49 ± 10.85 pg/ml, $P > 0.05$), while both showed significant difference compared with the purplish tongue group (360.1 ± 31.3 pg/ml) and that with purple spots (485.07 ± 106.1 pg/ml, $P < 0.01$). The pale tongue group (179.29 ± 9.08 pg/ml) showed a significant difference in 6-keto-PGF_{1α} level compared with the normal group (244 ± 19.31 pg/ml, $P < 0.01$), but it showed no significant difference compared with the purplish tongue group (185.08 ± 17.07 pg/ml) and that with purple spots (229.3 ± 33.2 pg/ml, $P > 0.05$). The comparison between the groups of purplish tongue and that with purple spots and the normal group showed no significant difference ($P > 0.05$). The pale tongue group (1.33 ± 0.18) showed a marked difference in TXB₂/6-keto-PGF_{1α} ratio compared with the normal group (0.72 ± 0.04 , $P < 0.01$), the purplish tongue group (2.12 ± 0.22 , $P < 0.01$) and that with purple spots (2.25 ± 0.55 , $P < 0.05$). The purplish tongue group and that with purple spots showed significant difference compared with the normal group ($P < 0.01$). Finally, the comparison between the purplish tongue group and that with purple spots in TXB₂, 6-keto-PGF_{1α} and TXB₂/6-keto-PGF_{1α} ratio showed no significant difference ($P > 0.05$). These characteristics may be used for the diagnosis of tongue and the differentiation of Qi (气) and Blood.

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Observation of the Antiviral and Interferon-Inducing Effect of Fang-Gan Mixture(防感合剂)

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The present study was carried out by using the plaque formation test, microdosage cytopathic effect (CPE) method, and mice nasal-cavity-attacking method to observe the antiviral and interferon-inducing effect of Fang-Gan mixture (FGM). The results showed that FGM has direct respiratory syncytia virus (RSV) inactivation effect, and protection effect after mice infected by RSV. FGM could also decrease mice death rate ($P < 0.01$) in the experimentation of using parainfluenza virus to attack them, and work in coordination with interferon induced by Newcastle disease virus. After 8, 16, 24, 32 hours of injecting FGM into mice abdominal cavity, the authors used CPE method to determine interferon titer of L₉₂₉ cells, and found that the highest interferon titer was 98.23 u/m at the 24th hour. The interferon induced by FGM was in keeping with the nature of Type I interferon. The results suggested that FGM might have strong antiviral effect which is achieved by inducing interferon.