

九十岁以上长寿老人舌质与血气关系初探

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内容提要 本文报道吉林市 68 例 90 岁以上长寿老人舌质情况, 结果: 淡红舌为 57.3%, 异常舌质为 42.7%, 其中以绛、紫舌为多。对其中 52 例作了血气分析, 表明紫舌组在血氧含量方面明显低于淡红舌组 ($P < 0.001$); 各组 pH 值、二氧化碳分压、碳酸氢根无明显差异 ($P > 0.05$)。本文讨论了紫舌与低氧血症和气血虚弱、气滞血瘀的关系, 并提出对长寿老人养生保健的初浅见解。

舌诊是祖国医学诊断手段之一。近年来有人认为舌质与舌微循环、血液流变性有关。为探讨老年人舌质特点和舌质与血气变化的关系, 我们观察了吉林市 68 例 90 岁以上长寿老人的舌质, 并对其中 52 例作了血气分析。现报道如下。

对象与方法

一、对象: 本组 68 例长寿老人, 均为居住在吉林市区、生活基本能自理的健康老人。男 33 例, 女 35 例, 对其中来院进行全面检查的 52 例做了血气分析, 年龄在 90~102 岁, 均龄为 91.6 ± 2.4 岁。

二、方法: (1) 被检者于饭后 2 小时来检查室, 取端坐位, 面向光源, 张口伸舌, 舌面保持松弛平坦, 由中医专人负责观察舌质, 并将舌质分为淡红舌、淡白舌、红舌、绛舌、紫舌五种进行统计比较。(2) 休息半小时以上, 用

50u/ml 肝素处理过的 1 ml 注射器, 常规消毒, 抽取股动脉血 1 ml, 摇匀、密封, 立即使用瑞士产 AVL-940 型血气自动分析仪检测, 每例均输入体温及血红蛋白值进行校正, 直接测得并自动报告动脉血酸碱度 (pH)、二氧化碳分压 (P_aCO_2)、碳酸氢根 (HCO_3^-)、氧分压 (P_aO_2)、血氧饱和度 (O_2ST) 等, 并计算出肺泡—动脉氧分压差 ($A-aDO_2$)。

结 果

68 例长寿老人舌质分布情况为: 淡红舌 39 例 (57.3%)、红舌 6 例 (8.8%)、绛舌 12 例 (17.7%)、紫舌 10 例 (14.7%)、淡白舌 1 例 (1.5%)。可见正常舌质者 (淡红舌) 39 例, 占 57.3%, 异常舌质以绛舌、紫舌居多、淡白舌较少共 29 例, 占 42.7%。

将红舌、绛舌、紫舌各组血气分析结果与淡红舌组进行比较 (附表), 可见各组间 pH 值、

附表 四种舌质血气测定结果比较 ($M \pm SE$)

例数	pH	P_aCO_2 (mmHg)	HCO_3^- (mmol/L)	P_aO_2 (mmHg)	O_2ST (%)	$A-aDO_2$ (mmHg)
淡红舌 26	7.412 ± 0.01	34.7 ± 1.08	21.6 ± 0.62	66.7 ± 1.82	93.4 ± 0.53	33.4 ± 1.61
红舌 5	7.390 ± 0.02	34.5 ± 3.36	20.3 ± 1.37	61.4 ± 6.78	91.8 ± 2.41	37.1 ± 2.47
绛舌 11	7.431 ± 0.02	33.3 ± 2.11	21.0 ± 1.37	63.1 ± 2.41	93.1 ± 2.41	37.7 ± 3.00
紫舌 10	7.418 ± 0.01	37.1 ± 3.31	23.5 ± 2.22	$54.4 \pm 3.83^*$	$88.5 \pm 2.80^{**}$	$48.8 \pm 2.51^*$

紫舌与淡红舌比, $*P < 0.001$, $**P < 0.02$

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P_aCO_2 、 HCO_3^- 比较均无明显差异 (P 均 $>$

0.05), 且多在正常范围内波动; PaO_2 、 O_2ST 紫舌组明显低于淡红舌组, 而 A-aDO_2 高于淡红舌组, 二组差异非常显著 ($P < 0.001$)。

讨 论

察舌质可验气血之虚实。本组长寿老人虽早已处于天癸竭、肾气衰之年, 但仍有 57.3% 属于正常的淡红舌质, 表明这些老人阴平阳秘, 气血条达, 这可能是维持寿龄的重要内因之一。本组淡红舌比例较陈氏报道的 40~78 岁组淡红舌 (66.7%) 为低^①, 符合其淡红舌随增龄而递减之说。本组 42.7% 老人呈现不同的异常舌质, 其中以阴虚火旺的绛舌和气血壅滞的紫舌居多, 这表明在长寿老人中, 由于肝肾阴虚、气血虚弱不能正常运行血液, 而致气虚血瘀, 气滞血瘀。实为因虚致实或本虚标实之证。故老年人因此而致冠心病及由于肾阴不足而致阴虚阳亢的高血压病、中风病症颇为多见。

现代医学研究表明, 青紫舌可能与静脉郁血或缺氧而致还原血红蛋白增加等因素有关^②。本组长寿老人血气分析结果, 表明紫舌组反映氧含量的 PaO_2 、 O_2ST 明显低于淡红舌组; 反映氧合障碍的 A-aDO_2 则较淡红舌组明显增高, 故支持上述观点。一般认为 PaO_2 随增龄而降低, A-aDO_2 随增龄而增高, 这与老年人闭合气量降低有关^③。但本组结果表明, 同龄健康老人其舌质不同, 而 PaO_2 、 O_2ST 、 A-aDO_2 也有差异, 尤其紫舌与淡红舌比较差异非常显著。由此可见紫舌可能与血氧含量降低

及氧合障碍有关。祖国医学则认为老年人多气血虚弱, 其主要原因与宗气虚弱有关。吸进新鲜清气(氧气)不足, 脾胃功能低下, 化生气血亦不足, 结果导致宗气不足, 不能正常地运行血液, 故气虚或气滞导致血瘀。现代医学认为老年人肺气体交换功能也有障碍, 使其 PaO_2 降低^④, 二者认识颇为接近。由于气滞血瘀, PaO_2 、 O_2ST 降低, A-aDO_2 增高, 反映在舌质上则呈现紫舌。因此, 随着寿龄增高紫舌的出现率也会增加。此外本组血气分析结果也表明, 舌质变化与 pH 值、 PaCO_2 、 HCO_3^- 无关。这与朴氏报道的紫舌也与 PaCO_2 增高及酸碱中毒有关^⑤不尽一致, 这可能与朴氏以肺心病患者为检测对象有关。

综上所述, 通过对长寿老人舌质的观察分析, 发现舌质改变的机理除与祖国医学的气血有关外, 与现代医学血气改变有关, 紫舌与低氧血症有明显关系。当然舌质毕竟只能反映外周情况, 对舌质与血液气体分析的关系, 尚待进一步深入探讨。

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中国中西医结合研究会 安徽淮南分会成立

中国中西医结合研究会安徽省淮南分会于 1985 年 11 月 17~19 日正式成立。会议酝酿选举了首届分会理事会, 由 10 人组成, 杨永陶任理事长, 谢建国任秘书长; 研究通过了 1986 年分会工作规划。会议期间, 进行了学术交流, 宣读中西医结合论文 5 篇, 上海中医学院屠伯言等 3 名中西医结合专家应邀为大会讲学。淮南中西医结合研究分会的成立, 对淮南地区的中西医结合研究事业的发展, 将起到积极的推动作用。

(益 民)

membranaceus, *Salvia miltiorrhiza*, etc, which is made in oral ampoule form. Following an unified programme, 583 cases of the four observing units had been given "Vita-Rev" orally for three months. 507 cases (87%) were checked, among which, 77% (287 cases) of the "Vita-Rev" group was effective, while the effective rate of control group (220 cases) was 35.5%. The difference was significant statistically, $P < 0.001$. In the treatment group, the recipients felt that they were full of vigour, their physical strength enhanced, sleeping and appetite improved, trichomadesis and poliosis corrected, and that the vision and grip strength also showed better improvement than the control. In "Vita-Rev" group, the activities of antioxidase (SOD, peroxidase, cuprein, etc.) and their cellular immunity were much higher elevated than those of the control group, but the quantitative test of lipofuscin was apparently lower than the control. These results showed that the "Vita-Rev" possessed the antisenility function. The mechanism of "Vita-Rev" might activate the activity of antioxidase, inhibit the harmful oxidation of metabolic free-base, and improve the stability of the cellular biomembrane. It might also correlate to the reduction of lipofuscin production. "Vita-Rev" has a rich resource with mild actions and negligible side-effects, and is not expensive.

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Study on the Relationship Between the Nature of Tongue Proper and Blood Gas of Aged Persons Over 90 Years Old

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Investigation on the nature of tongue proper in 68 cases of aged persons over 90 years old is reported. It shows that 57.3% of them are the normal light red tongues; while 42.7% are abnormal. The majority of the abnormal tongue are crimson and purple. The analysis on blood gas of 52 persons displays that the blood oxygen of the purple tongue group is significantly lower than that of the normal ($P < 0.01$). The differences between various groups are insignificant in the value of pH, P_{aCO_2} and hydrocarbon radical ($P < 0.05$). The purple tongue may have something to do with hypoxemia as well as deficiency or stagnation of vital energy and blood. A preliminary view on the health care of aged persons has been discussed.

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Relations Between the Changes of Cytology and SIgA of Nasal Cavity and Energy Deficiency of the Lung and Kidney in Allergic Rhinitis

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Local pathological changes of nasal cavity were observed in 92 patients with allergic rhinitis. Shed squamous epithelial cells of nasal mucosa are dominant in normal subjects, while shed ciliated cells of nasal mucosa are dominant in patients with rhinitis, which is more obvious in the patients with energy deficiency of both the lung and kidney than in patients with energy deficiency of the lung only. Moreover, the more the shed ciliated cells are, the higher the incidence of common cold is. The mast cells in nasal secretions are found to be more in patients with energy deficiency of the lung than in patients with energy deficiency of both the lung and kidney. The SIgA level in nasal secretions is almost the same in the patients and the controls, but, that of the patients with energy deficiency of the lung is a little higher than in the controls, and markedly lower in patients with energy deficiency of both the lung and kidney.

It is assumed the ciliated epithelial cells of the nasal mucosa and their functioning are damaged to varied degrees in patients with allergic rhinitis, which is even more serious in patients with energy deficiency of both the lung and kidney. So it is suggested that the count of shed ciliated cells of nasal mucosa might serve as a reference for diagnosing energy deficiency of the lung or kidney in patients with allergic rhinitis. The test of SIgA is a usable index to differentiate the different degrees of energy deficiency of this kind of patients. The increased number of mast cells in nasal secretions might suggest participation of mast cells in type I allergic reaction. The reason why the mast cells in nasal secretions are more in patients with energy deficiency of the lung than in patients with energy deficiency of both the lung and kidney awaits further research.

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