

# 沟纹舌患者唾液流量和成分分析

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**内容提要** 我们对 30 例沟纹舌患者和健康人的唾液流量、pH 值、钠/钾比值及含量、唾液分泌型免疫球蛋白 A(SIgA)进行了测定。结果显示:沟纹舌患者唾液流量减少、pH 值降低,钠/钾比值和 SIgA 含量增高。表明沟纹舌的形成与患病后机体水电解质平衡失调、营养障碍、免疫及内分泌功能等因素有一定关系。

**关键词** 沟纹舌 唾液 口腔粘膜病

沟纹舌(fissured tongue)是指舌背上有多数深沟,又被称为阴囊舌(serotal tongue),属于口腔粘膜病的范畴。我们通过对 30 例患者唾液流量、唾液 pH 值、唾液钠钾含量、钠/钾比值及唾液分泌型免疫球蛋白 A(SIgA)的测定,探讨沟纹舌与上述因素的关系及对机体的影响。现报告如下。

## 资料与方法

一、资料 30 例沟纹舌患者均为住院患者,男 20 例,女 10 例,平均年龄 47.33 岁。健康人对照组 42 例,系广州中医学院学生和教职工,近期体检正常,并无口腔疾病者,男 32 例,女 10 例,平均年龄 45.41 岁。

二、唾液收集方法 取 10 ml 刻度试管和 40 mm 口径玻璃漏斗,清洁消毒烤干备用。收集唾液的前一天晚上 10 时后不再进食(可饮少量开水,不可饮茶、咖啡等),睡前清洁口腔。早晨 6~7 时起床,以坐位收集唾液 5 min。收集前不作任何活动,也不准漱口和进食。收集时不能将唾液咽下,而全部张口轻度伸舌,让唾液自然流入漏斗和试管。5 min 终了时,将口腔所含唾液全部吐入试管,但不能将痰液吐入。收集完毕,将试管垂直插入试管架,置 4℃ 自然沉淀 24 h,按刻度记录唾液量。倾斜试管,以精密试纸探入试管口,接触唾液面,取出比色,记录 pH 值。

三、唾液钠、钾含量测定 用火焰光度法<sup>①</sup>。

四、唾液 SIgA 含量测定 用放射免疫分析法<sup>②</sup>。采用 <sup>125</sup>I SIgA 放射免疫测定药盒,由上海放射分析技术研究所提供。

## 结 果

一、两组唾液量及唾液 pH 值比较 见表 1。沟纹舌患者的 5 min 唾液流量比对照组显著减少,唾液 pH 值亦较低。

表 1 两组唾液流量和唾液 pH 值比较 ( $\bar{x} \pm S$ )

组别	例数	唾 液	
		5 min 流量(ml)	pH 值
对 照	42	3.01±1.55	6.87±0.32
沟纹舌	30	2.08±1.18*	6.53±0.54*

注:与对照组比较,\* $P < 0.01$

二、两组唾液钠、钾及 SIgA 含量比较 见表 2。沟纹舌患者的唾液钾与对照组比较无显著性差异,但唾液钠比对照组显著增高,因而钠/钾比值也较对照组高。唾液 SIgA 含量亦较对照组显著增高。

表 2 两组唾液钠、钾和 SIgA 含量比较 ( $\bar{x} \pm S$ )

组别	例数	唾液(mmol/L)		钠/钾 比值	唾液 SIgA (g/L)
		钾	钠		
对 照	20	21.61 ±8.49	22.57 ±9.84	1.10 ±0.49	0.316 ±0.147
沟纹舌	15	24.41 ±12.03	38.13 ±14.87*	1.95 ±1.13*	0.804 ±0.227*

注:与对照组比较,\* $P < 0.01$

## 讨 论

关于沟纹舌的形成多认为与先天性舌发育异常、遗传、迟发型变态反应、植物神经活动不平衡等多种因素有关<sup>(3)</sup>。从病理学上看,舌裂纹是由于舌粘膜萎缩、断裂所致。用电镜观察发现,裂纹舌上皮脚向下延长、增宽,角化障碍而致次级乳头缺乏,次级真皮乳头泡沫细胞减少或消失<sup>(4)</sup>。本组 30 例沟纹舌均发生在患病之后,均非先天性原因。其形成多与患病后机体出现水电解质平衡失调、营养障碍、免疫及内分泌功能异常等因素有关。如发热、吐泻过度、利尿过多,机体失水可引起唾液分泌量减少、舌干燥。持续舌干燥则致乳头萎缩。同样,当酸性代谢产物堆积,或口腔活动减少,自洁能力下降时,局部口腔环境改变,也可导致舌粘膜受损。据研究人类唾液腺小叶内导管,也是肾上腺皮质激素之作用部位<sup>(5)</sup>,唾液分泌在唾液腺小叶内导管也存在潴钠排钾作用,受肾上腺皮质激素影响,当肾上腺皮质机能不全时,会致唾液中钠的增多和钾的减少,使钠/钾比值增高。

沟纹舌患者唾液 SIgA 浓度增高的机理,一是在病理情况下,唾液溶菌酶降低,口腔菌群活性增加,大量繁殖的细菌又作为抗原侵犯舌粘膜下组织,出现舌体局部炎症反应,促使唾液 SIgA 分泌增加。另一方面,机体其他部位之抗原刺激亦增加,如呼吸道、泌尿道、胃肠道的炎症感染及胃肠屏障功能下降,抗原性刺激增加,使在这些部位致敏的淋巴细胞移居到唾液腺等组织,转化为产生特异性 IgA 的浆细胞<sup>(6)</sup>。因而它有全身和局部双重机制。但沟纹舌的舌粘膜完整性破坏较剧,局部抗原刺激亦剧,故局部免疫反应可能是主要的。

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## 活血理肠散治疗手术后肠粘连 30 例

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笔者 1986 年 6 月~1992 年 3 月用自拟活血理肠散治疗手术后肠粘连 30 例, 取得较好疗效。

**临床资料** 30 例中, 男 22 例, 女 8 例; 年龄 18~56 岁。均有腹部手术史。其中做过阑尾切除术者 26 例, 子宫切除术者 3 例, 腹腔引流术者 1 例。临床表现: 屡发腹痛, 有时发现腹胀、恶心、呕吐, 腹部可触及痞块, 腹泻与便秘交替或有大便不畅感。多见舌质青紫或舌有瘀点。脉弦或涩。实验室检查: X 线检查排除肠梗阻与腹膜粘连。

**治疗方法** 服用活血理肠散。药物组成: 三七 6g 醋制延胡索 6g 丹参 9g 为 1 日量, 研成细面分 2 次开水冲服。10 天为 1 个疗程, 一般服药 1~2 个疗程。

**结 果** (1) 疗效标准: 自觉症状消失, 局部无压痛、无包块, 0.5 年内无复发者为痊愈。自觉症状

消失, 局部无压痛、无包块, 复发间隔时间较未治疗前显著延长, 复发时症状较前轻微者为好转。经治疗 2 个疗程, 症状有所改善, 但仍经常复发者为无效。(2) 结果: 痊愈 21 例, 其中 1 个疗程治愈 9 例, 2 个疗程治愈 12 例; 好转 7 例; 无效 2 例。

**讨 论** 中医认为手术伤及血络, 瘀血内阻, 影响气血运行, 致使肠腑运动功能失调, 腑气通降失利, 气机阻滞而致腹痛, 腹胀、呕吐、腹内痞块等症。治宜活血化瘀理气止痛为主。笔者据此拟治肠粘连专方活血理肠散。方中三七化瘀定痛。延胡索行气止痛, 现代药理研究认为其对痉挛疼痛有效率大致与度冷丁相当。并有松弛肌肉、解痉作用。丹参活血化瘀止痛, 现代药理证明其能改善外周循环, 抑制过度增生的纤维母细胞的生长。三药配合相得益彰, 切中肠粘连病因病机。故取得较好疗效。

group (31 cases) and normal control group (28 cases). Treated group used intravenously injected Ligustrazine 160 mg a day for 10 days. The plasma lipid peroxidation (LPO), superoxide dismutase (SOD) and sulfhydryl group were measured before and after treatment in the treated group, in comparing with normal control group. The results showed the levels of LPO significantly reduced ( $P < 0.01$ ), and SOD, sulfhydryl group was obviously increased after Ligustrazine administration ( $P < 0.05$ ). Attack of angina pectoris was reduced. Between these two group, the difference was significant ( $P < 0.05$ ). Mechanism of Ligustrazine in reducing LPO and increasing SOD could be the inhibiting of platelet aggregation, regulating the  $TXA_2/PGI_2$  ratio in plasma, protecting myocardial cell membrane and improving the myocardial ischemia. Ligustrazine could reduce the production of LPO due to the accelerating clearance of oxygen free radical.

**Key words** Ligustrazine, coronary heart disease, lipid peroxidation, superoxide dismutase

(Original article on page 26)

### Study of *Andrographis Paniculata* Extracts on Antiplatelet

#### Aggregation and Release Reaction and its Mechanism

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63 patients of cardiac and cerebral vascular diseases were observed at 3 hours and/or one week after taking *Andrographis paniculata* (AP) extracts. Results showed that both 1 min. and 5 min. platelet aggregation induced by ADP were significantly inhibited ( $P < 0.001$ ), 33 cases of them were observed for one week. The aggregation rate was even significantly lower than that of 3 hours. Serotonin (5-HT) release reaction from platelet was observed in 20 volunteers taking AP. Result showed 5-HT released from platelet decreased ( $P < 0.01$ ), but plasma 5-HT level remained unchanged. The ultrastructural observation showed that AP could inhibit the releasing of dense and  $\alpha$  agranules from platelet and dilating of canalicular system. It suggested that a raise of platelet cAMP level might be the mechanism of antiplatelet effect of AP.

**Key words** *Andrographis paniculata*, platelet aggregation, platelet release, serotonin

(Original article on page 28)

### Relationship between Fissured Tongue with Flow and Components of Saliva

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Observation on 30 patients with fissured tongue (FT) and 42 normal subjects, through the measurement of flow and the elements of saliva, pH value, the Na and K content, SIgA, it was shown that: in FT patients, the flow of saliva and pH decreased, while the Na/K ratio and the content of SIgA increased (each  $P < 0.01$ , compared with the normal). It was also showed that the formation of FT has to a certain extent something to do with the electrolyte disturbance in aqueous solution, malnutrition, as well as immunity and endocrinic function of patients.

**Key words** oral membranous disease, fissured tongue, saliva

(Original article on page 31)

### Effects and Mechanism of Total Saponins of *Panax Notoginseng* on

#### Anti-Inflammation and Analgesia

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In this study the effects of total saponins of *Panax notoginseng* (TSPN) and electroacupuncture (EA) were compared. Liquid paraffin was intraperitoneally injected (0.1ml/mouse) to establish the animal model with inflammation. The mice were randomly divided into 4 groups with different treatments for 7 days: EA group, TSPN group (100mg/kg intraperitoneal administration), Naloxone (Nx) plus TSPN group and EA plus TSPN group. The pain threshold was measured by a detector