

实验研究

实验性胃粘膜癌前病变大鼠舌与胃粘膜象观察

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摘要 为了观察实验性胃粘膜癌前病变大鼠的舌与胃粘膜相关变化,以健康雄性 Wistar 大鼠造成胃粘膜癌前病变模型,对照观察了健康与造模组大鼠的舌、舌面 pH 值、舌苔脱落细胞、舌组织学及相应的胃粘膜、胃液 pH 值、粘膜组织学改变。结果示:胃粘膜癌前病变大鼠的舌苔以少苔或无苔,舌质以紫暗或有瘀斑为主,舌与胃液 pH 值升高,与胃气亏虚、瘀血阻络证型吻合。

主题词 胃粘膜/病理学 癌前状态/诊断 舌/病理学

胃粘膜病变时舌的系统观察已有较多报道,但动物实验的资料尚不多。我们以健康雄性 Wistar 大鼠制造胃粘膜癌前病变模型,对照观察了健康与造模组大鼠的舌、舌面 pH 值、舌苔脱落细胞、舌组织学及相应的胃粘膜、胃液 pH 值、粘膜组织学改变,现分析如下。

1 材料与方法

1.1 动物:健康雄性 Wistar 大鼠 29 只,体重 120~140g,购自中国医学科学院实验动物繁育场。

1.2 造模方法^[1]:上述动物随机分为健康对照组 15 只,造模组 14 只。健康组每天自由饮用自来水,食标准颗粒饲料(购自山东医科大学实验动物中心);造模组每天饮用浓度为 50 μ g/ml 的甲基硝基亚硝基胍(MNNG, Flukd 产品),喂食含 0.01% 雷尼替丁的标准颗粒饲料,共 20 周,随后与健康组同样饮用自来水,食标准颗粒饲料(饲料来源同上),至 43 周结束观察。

1.3 舌肉眼观察:以 4%戊巴比妥腹腔注射,轻度麻醉大鼠后,将头固定在一硬纸壳的圆孔中,用细线拉开上下门齿,拿湿棉棒轻触舌面,舌就会自然伸出,由 3 位医师在自然光线下观察,作出结论,并摄像。

1.4 舌面 pH 值测定:舌肉眼观察后,将精密 pH 试纸(山东师范大学化工厂出品,批号 9507027),置于被测舌体前 2/3 处,待完全浸润,不再变色,取下比色,记录 pH 值。

1.5 舌苔脱落细胞检查:用一干净推玻片于舌中部中等度用力刮取舌苔,均匀推涂,即刻置于 95%酒精内固定,经巴氏染色后,在光镜下观察上皮细胞角化情况。用细胞分类计数器计数 100 个上皮细胞,分别计数其中不完全角化细胞与完全角化细胞个数,求出百分比。

1.6 舌组织学检查:将大鼠的舌沿舌根剪下,迅速置于 10%福尔马林溶液中固定,经切片,HE 染色,置光镜下观察草状乳头毛细血管个数与舌底毛细血管扩张、充血情况。

1.7 胃部观测:以上处理结束,立即将大鼠剖腹取出胃,沿胃大弯侧剪开,将 pH 试纸浸入胃液后,取出比色,记录 pH 值;除去胃内容物,用生理盐水冲洗胃腔后由 3 位医师在自然光线下观察胃粘膜,并摄像。分别从腺胃部,胃窦部和/或病变边缘处取活组织,经常规固定、切片、HE 染色,置光镜下观察。

2 结果

2.1 大鼠舌肉眼观察比较:表 1 示,健康组大鼠舌苔薄白,舌质淡紫;造模组大鼠则以少苔或无苔,舌质紫暗或有瘀斑为主。两组比较差异显著($P < 0.01$)。

表 1 两组大鼠舌肉眼观察比较

组别	鼠数	舌 质			舌 苔	
		淡紫	紫暗	瘀斑	薄白	少(无)苔
健康组	15	15	0	0	15	0
造模组	14	6	6	2	8	6

2.2 大鼠舌面 pH 值比较:健康组 15 只大鼠舌面 pH 值平均为 8.27 ± 0.42 ($\bar{X} \pm S$,下同),造模组 14 只大鼠平均为 9.54 ± 0.63 ,组间差异有显著性($P < 0.01$)。

2.3 大鼠舌苔脱落细胞检查比较:健康组与造模组大鼠均以完全角化细胞为主(90%~99%),不完全角化细胞占少数(1%~9%),两组间对比,差异无显著性($P > 0.05$)。两组均未发现角化前细胞。

2.4 大鼠舌组织学检查比较:健康组大鼠舌草状乳头毛细血管多为 2~3 个,舌底毛细血管无明显扩张、充血;造模组草状乳头毛细血管以 4~5 个为主,舌底毛细血管明显扩张、充血,两组对比差异有显著性($P < 0.01$)。

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表 2 两组大鼠胃粘膜组织光镜下观察比较

组别	鼠数	炎细胞浸润 只(%)	单纯增生 只(%)	肠化生 只(%)	异型增生 只(%)	胃癌 只(%)
健康组	15	3(20.0)	1(6.7)	1(6.7)	0(0)	0(0)
造模组	14	9(64.3)	12(85.7)	7(50.0)	6(42.9)	4(28.6)

2.5 大鼠胃液 pH 值比较:健康组大鼠胃液 pH 值平均为 3.35 ± 0.37 ,造模组平均为 4.69 ± 0.52 。两组比较差异有显著性($P < 0.01$)。

2.6 大鼠胃粘膜肉眼与光镜下观察比较:健康组胃粘膜色泽暗红润泽,皱襞清晰,光滑;造模组粘膜色泽灰暗,皱襞粗乱或变浅消失,可见散在出血点,部分区域有结节状增生或溃疡形成,其中 4 只胃窦部有巨块状肿瘤,经组织检查证实为高分化腺癌。两组大鼠胃粘膜组织光镜下比较差异有显著性($P < 0.01$)。见表 2。

3 讨论

舌诊是中医学诊法的重要内容,也是辨证施治的主要依据之一。由于舌位于口腔,下接食管、胃脘,且有经脉相互连络,故舌与脾胃(胃肠)的关系尤为密切^[2]。

近年来,国内众多学者以舌诊宏观辨证与内镜观察微观辨病结合,深入探讨了胃粘膜病变时舌苔、舌质的变化以及某些理化指标的检测。旨在探索舌的变化与胃粘膜病变之间内在联系及其规律性,从而使舌诊对胃部疾病的诊断更具客观化和特异性。我们采用标准的实验动物和先进的造模方法,造模成功大鼠胃粘膜癌前病变模型。结果表明:造模组胃粘膜色泽灰暗,皱襞粗乱或变浅消失,或有结节状增生甚者胃癌发生,其舌苔则以少苔或无苔为主,舌质以紫暗或有瘀斑为主,舌面与胃液 pH 值升高,舌底毛细血管扩张、充血。与健康组对比,经统计学处理差异有显著性。造模组的舌与胃粘膜表现符合胃气亏虚、瘀血阻络证型,实验结果证明萎缩性胃炎癌前病变舌与胃粘膜具有相关变化。

4 参考文献

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中药治疗真菌性角膜炎 24 例

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真菌性角膜炎用抗真菌药治疗往往效果不佳,且常出现较多并发症,我们自 1993~1997 年,采用中药治疗 24 例,效果较为满意,兹报道如下。

1 资料与方法

本组 24 例 24 眼均由门诊确诊为真菌性角膜炎,年龄 18~65 岁,平均年龄 40.5 岁,病程在 2 月~1 年。合并角膜溃疡 6 例;合并虹膜睫状体炎 2 例;合并前房积脓 1 例;形成角膜穿孔 1 例。其中 13 例经细菌培养为曲霉菌感染;11 例为镰刀菌感染,3 例为念珠菌感染。其中 5 例已用制霉菌素和克霉素治疗 2 月,并出现了角膜溃疡和前房积脓,除一例角膜穿孔者采用了结膜遮盖法外,其余病例单纯用本方治疗。

处方:龙胆草 10g,栀子 10g,蒲公英 20g,紫花地丁 20g,菊花 20g,牛蒡子 10g,赤芍 10g,丹皮 10g,竹叶 10g,薄荷 10g,金银花 20g,大青叶 10g,桑叶 10g。水煎,每日 1 剂,分 2 次口服,并停用其它药物。

2 治疗结果

疗效标准:治愈:主症及兼症经治疗后全部消失,

角膜溃疡愈合,荧光素染色阴性,或只留有浅层角膜云翳,随访 2 年未复发;显效:主症及兼症治疗后显著好转,前房积脓消失,虹膜炎症状明显减轻,溃疡基本愈合,部分留有角膜斑翳;进步:主症及兼症较治疗前好转;无效:主症及兼症治后无改善,溃疡继续加深,症状反复发作。

结果本组病例门诊治疗 19 例,住院治疗 5 例,疗程最长 21 天,最短 7 天。治愈 18 例,显效 3 例,进步 2 例,无效 1 例,总有效率为 95.8%。

3 小结

真菌性角膜炎以麦芒、玉米叶划伤最多见,本病一旦发生,极易形成角膜溃疡,浸润至角膜基质层形成角膜斑翳,而且易反复发作,严重者并发前房积脓,重者形成角膜穿孔,严重影响视力,甚至形成失明,为农村致盲的重要因素。目前用西药抗真菌治疗效果不显,而且时愈时发。本病属中医的聚星障、凝脂翳、黄膜上冲证。其发生多由于感受外邪,引动肝风,风热相搏,上攻于目所致。我们采用清肝泻火,祛风明目法收到了满意效果。方中龙胆草、栀子、薄荷、大青叶清肝泻火,金银花、蒲公英、紫花地丁、桑叶、菊花散风明目,为治疗真菌性角膜炎的有效方剂。

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ABSTRACTS FROM ORIGINAL ARTICLES

Clinical Observation on Improvement of Left Ventricular Contraction in Cardiac Infarction Treated by Gengfukang

Chen Keyuan, Miao Yang, Tu Xiuhua, et al

To investigate the clinical effects of Gengfukang decoction on improving left ventricular systolic function of patients with myocardial infarction, on the basis of conventional treatment of western medicine, eighteen myocardial infarction (MI) cases were treated with Gengfukang decoction additionally. Before and after treatment, the changes of left ventricular systolic function were measured by echocardiography. After patients were treated with Gengfukang decoction for 4 weeks, the left ventricular systolic function such as SV, LVEF and %FS were significantly improved ($P < 0.01$) and Vmax was increased ($P < 0.05$), but no any change was found in Dd. The blood stasis scores of patients were significantly decreased ($P < 0.01$). Gengfukang decoction has certain effect on improvement of left ventricular systolic function of patients with myocardial infarction.

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Key words: cardiac infarction/TCM therapy ventricular function left/drug actions @Gengfukang
(Original article on page 151)

Clinical observation on 105 Cases of Enterization of Gastric Mucosa and Heterohyperplasia Treated by Fuwei Decoction

Li Shunmin, Li Huilin, Huang Bin, et al

One hundred forty cases were treated with Fuwei decoction, with a control group treated by Weimeisu and Sanjiuweitai. The effective rates were 93.3% and 74.3% respectively. Pathological exams showed that, in the treatment group the effective rates of atrophic gastric mucosa enterization and heterohyperplasia were 88.6%, 86.6% and control group were 72.4% and 19.4% respectively, with significant difference between all groups, demonstrating the definite efficacy of Fuweitang on these ailments.

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Key words: Stomach disorders/TCM therapy Gastric

mucosa/pathology @ Weifu decoction

(Original article on page 153)

Influence of Niupozhibaodan on Plasmal Tumor Necrotic Factor — α and Activity of Serum Transaminase in Rats in Shock State Induced by Endotoxin

Ma Chaoying, Geng Yun, Peng Rencai, et al

Shock rat models were made by injecting a one lethal dose E — coli deactivated endotoxin to cause serious infectious shock. For the treatment group, Niupozhibaodan was administered in advance, which was compared with normal group and endotoxin — shock group. Results show that, in the endotoxin group, the plasma TNF — α , serum ALT and AST contents were all markedly higher, while in the experimental group, the increase of the indexes was markedly lower than the shock — group, all with significant difference.

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(Original article on page 172)

Observation on Manifestations of Tongue and Gastric Mucosa in Rats with Experimental Precancerous Lesion of Gastric Mucosa

Yao Baotai, Sun Xuehua, Wang Li, et al

Healthy male Wistar rats were prepared as model of precancerous lesion of gastric mucosa. The tongue, pH of tongue surface, dropped cells from tongue fur, histology of tongue, and corresponding gastric mucosa, pH of gastric juice, mucosal histological changes in both groups were observed. Results revealed that, in the rats with precancerous lesion, the tongues were bare or only with little fur, dark purplish tongue with petechia, pH of both tongue and gastric juice were high, which were both coincided with the syndrome type of asthenic gastric — qi and blockage of collaterals by stagnant blood.

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Key words: Gastric mucosa/pathology precancerous lesion/diagnosis tongue/pathology

(Original article on page 174)