

# 黄杨宁与地高辛联合治疗充血性心力衰竭疗效观察

## ——地高辛血浓度研究

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**内容提要** 本文报告以黄杨宁(Cycloviobuxine D)与地高辛联合治疗 11 例充血性心力衰竭取得良好疗效, 显效者占 45.5%; 11 例患者地高辛血浓度研究发现, 治疗前、后的地高辛血浓度无明显差异( $P>0.05$ ), 为临床长期、安全地应用该类药物组合提供了可靠的药物动力学依据。

**关键词** 黄杨宁 地高辛 充血性心力衰竭 血药浓度

黄杨宁用于治疗充血性心力衰竭的初步观察表明, 具有较好的正性肌力作用, 可增强心肌收缩力, 改善心功能<sup>①</sup>。但临床发现, 地高辛与包括抗心律失常药物在内的多种药物同时使用, 可使地高辛血浓度显著升高<sup>②</sup>。鉴于黄杨宁的有效成分为环维黄杨星 D (Cycloviobuxine D), 能延长心肌细胞的动作电位时间及有效不应期<sup>③</sup>, 可用为防治心律失常, 故与地高辛配伍治疗各类心血管疾病的适应症极多。据此, 本文报告 11 例黄杨宁联合地高辛治疗充血性心力衰竭的疗效以及患者的地高辛血浓度的研究结果, 旨在为长期、安全地应用这一类型的药物组合提供可靠的药物动力学实验室依据。

### 对象与方法

一、病例选择: 年龄 30~76 岁, 平均 59.3 岁, 60 岁以上占 63.7% (7/11 例), 男 4 例, 女 7 例。其中风湿性心脏病 4 例, 高血压冠状动脉粥样硬化性心脏病 4 例, 扩张型心肌病 2 例, 慢性肺源性心脏病 1 例。心功能 IV 级 1 例, III 级 7 例, II 级 3 例。

二、给药方法: 全数病例均系住院患者,

于早餐后 8 时整口服地高辛 0.125mg, 1 日 1 次, 共 7 日。嗣后, 地高辛按原剂量继续服用并配伍黄杨宁 2mg, 1 日 3 次, 共 2 周。服药期停用利尿剂及血管扩张药。

三、观察指标: 全数患者均逐日记录治疗前、后症状, 体征及副反应。于服用地高辛至第 7 日下午 2 时整检测其稳态血清药物浓度; 此后延至联合用药第 2 周末, 按同样方法再次抽血检测地高辛血浓度。各例均进行治疗前、后肝、肾功能及血清电解质等项目检查。

### 结 果

一、疗效: 凡经治疗后心功能改善在 II 级以上者属显效, 改善 I 级者属有效, 不足 I 级者为无效。本组各例服药后均属有效。显效者共 5 例, 占 45.5%。

二、治疗前后地高辛血浓度变化: 本组共 11 例, 服药 1 周后地高辛稳态血浓度值为  $0.6927 \pm 0.5110 \text{ ng/ml}$  ( $\bar{x} \pm s$ , 下同); 增用黄杨宁 2 周后复查药液浓度为  $0.9736 \pm 0.4187 \text{ ng/ml}$ , 两者无显著差异 ( $t=1.3445$ ,  $P>0.05$ )。

三、治疗前后实验室检查指标的变化: 治疗前后血肝功能无异常发现; 肾功能检查治疗前 BUN 为  $6.38 \pm 1.48 \text{ mmol/L}$  ( $17.88 \pm 4.15 \text{ mg}$

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%,  $n=9$ ), Cr为 $104.05 \pm 11.23 \mu\text{mol/L}$  ( $1.177 \pm 0.127 \text{mg\%}$ ,  $n=10$ , 内生肌酐廓清率为 $62.14 \pm 17.89 \text{ml/min}$  ( $n=8$ ), 血清电介质钾为 $4.6 \pm 0.503 \text{mmol/L}$  ( $4.6 \pm 0.503 \text{mEq/L}$ ,  $n=9$ ); 治疗后复查BUN为 $7.21 \pm 2.26 \text{mmol/L}$  ( $20.22 \pm 6.34 \text{mg\%}$ ), Cr为 $94.32 \pm 19.44 \mu\text{mol/L}$  ( $1.067 \pm 0.22 \text{mg\%}$ ), 内生肌酐廓清率为 $56.78 \pm 14.90 \text{ml/min}$ , 血清钾为 $4.33 \pm 0.44 \text{mmol/L}$  ( $4.33 \pm 0.44 \text{mEq/L}$ )。上述所查各项指标治疗前后对比, 差别均无显著性意义 ( $P > 0.05$ )。

### 讨 论

动物实验发现, 环维黄杨星D能抑制 Na-K-ATP 酶活力, 使心肌细胞在每一收缩周期中钠离子浓度瞬时增加, 从而促使胞内钠离子与胞外钙离子, 或者与胞内结合的钙进行交换, 使胞内游离的钙离子浓度升高, 导致收缩力加强<sup>[1]</sup>。临床研究表明, 本品在纠正充血性心力衰竭时所出现的作用甚似洋地黄制剂, 若与后者联合应用, 每可获得协同效果, 且不增加毒性。本文报告11例黄杨宁与地高辛联合治疗充血性心力衰竭的结果, 皆获良效, 其中显效者5例(45.5%)。

时至今日, 地高辛仍不失为治疗充血性心力衰竭时的首选药物, 但其治疗剂量范围狭小, 中毒发生率很高。临床发现, 强心配糖体与其他药物的相互作用可使洋地黄中毒发生率明显增高, 因而研究地高辛与其他药物间的相

互作用显得十分必要<sup>[2]</sup>。引致地高辛血浓度增高并已见诸报告者有抗心律失常药(奎尼丁、胺碘酮)、钙通道阻滞(维拉帕米及硫氮草酮)、保钾利尿剂(安体舒通)以及抗生素(红霉素、四环素)等。机制之一与降低地高辛肾脏清除率、减少非肾清除率以及延长地高辛半衰期有关, 而地高辛肾脏清除率的降低是由于肾小管分泌受抑所致。鉴于上述药物与地高辛配伍应用后在个体病员中血清的药浓不一, 为策安全, 需给予严密的动态观察, 这给临床治疗工作带来极大的困难。本文报告11例黄杨宁联合地高辛治疗充血性心力衰竭的结果。于治疗前、后检查地高辛血浓水平无明显差异 ( $P > 0.05$ )。且本组的研究并表明, 治疗前、后各项实验室指标, 包括肝功能、电介质以及BUN、Cr和内生肌酐廓清率等皆无明显异常 ( $P > 0.05$ ), 指示黄杨宁无诱发抑制肾小管分泌地高辛的机制, 从而维持地高辛处于恒定而安全的水平上, 这将给需长期接受地高辛治疗的患者, 安全地联合应用本品提供了确切可靠的实验室依据。

### 参 考 文 献

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### • 简 讯 •

中国中西医结合研究会浙江分会精神疾病专业委员会成立暨学术交流会于1989年11月10~12日在杭州市召开。参加会议代表40余人。会上省、市和分会领导到会祝贺, 中国中西医结合研究会精神疾病专业委员会、江西省中西医结合精神疾病专业委员会等单位给大会发来了贺信与贺电。会上收到论文26篇, 交流了全省各地中西医结合治疗精神疾病的经验, 并邀请

了国内著名中西医结合精神疾病专家作了“中西医结合精神疾病研究及展望”, “精神科中西医结合临床研究的几点线索”等专题报告, 启发了代表们的思路。会上还充分讨论了科研协作规划及今后的攻关项目。会议选举产生了浙江省精神疾病专业委员会组成人员, 同时聘请国内中西医结合精神疾病专家为顾问, 中国中西医结合研究会浙江分会秘书长向专业委员会成员颁发了聘书。

(王慧琴)

### **Congestive Heart Failure Treated by Combination of Cyclovirobuxine D with Digoxin**

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The patients with congestive heart failure which were treated by combination of digoxin with cyclovirobuxine D were described, with good result, of which promoting effect was 45.5%. Researchful result of 11 patients showed serum concentration of digoxin before and after combined treatment was not obviously different ( $P < 0.05$ ). Basis of pharmacokinetics was provided for using combined treatment of these drugs, with long time and greater safeness.

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### **Preliminary Research of Senility Index of TCM and Age of TCM**

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According to the senile theory of TCM and the experience of the old generation, the authors chose 14 items which could represent the body's senility level. These items were graded. The total grade of these items were named "Senility Index of TCM" (SITCM). The age calculated from the regression equation of SITCM and age were named "Age of TCM", and the authors tried to estimate the body's senility level with it. According to the correlation analysis: with the rising of SITCM, lipid peroxide and viscosity of blood increase, function of heart, lung, brain decline and ATPase of RBC reduce, etc.

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### **Therapeutic Effects of Borneol-Walnut Oil in Treatment of Purulent Otitis Media**

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170 patients were treated with borneol-walnut oil of various concentrations, and the controls (108 patients) were treated with neomycin compound. As a result, the total effective rates were 98.06% and 84.26% respectively ( $P < 0.001$ ). This indicated that the therapeutic effects of borneol-walnut oil for the treatment of purulent otitis media were superior to that of neomycin compound.

The most optimal concentration of borneol-walnut oil was 20% through clinical and laboratory observations. Due to its simple composition, significant therapeutic effects and nontoxic reactions, the borneol-walnut oil has been proved a promising external remedy for the treatment of purulent otitis media.

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### **Study on the Immunomodulatory Action of the Total Saponin of *Gynostemma pentaphylla***

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The specimen of the total saponin for this experimental study was extracted from *Gynostemma pentaphylla* growing in Suining county in Hunan province. Weight of immune organs, content of anti-SRBC hemolysin, rate of special Ea-RFC formation and percentage of NK cell activity had been employed for the study as experimental indices, both the normal healthy mice and the mice with immunity impairment due to Cyclophosphamidum(Cy) management as experimental models. The results of the study exhibited: (1) The total saponin of *Gynostemma pentaphylla* could markedly act against the immunity inhibition due to Cy management in the experimental animals, showing a variant recovery in mice treated by Cy in weight of the immune organs, content of hemolysin, forming rate of Ea-RFC and unequivocally elevating NK cell activity, by significant difference in comparison with the Cy control groups ( $P < 0.05 \sim 0.01$ ). (2) The total saponin showed a definiteness of