Aβ  APPmRNA  IL-1β  IL-6

Effect of Heart Benefiting Recipe in Controlling IL-1β, IL-6 and APPmRNA Expression in Brain of β-Amyloid Protein Induced Rat Model of Dementia ZHOU Hui† ZHAO Wei-kang† JIN Guo-qin Shanghai University of TCM Shanghai 200032

Objective To investigate the neuro-immune regulatory mechanism of Heart Benefiting recipe HBR an effective recipe for treatment of Alzheimer’s disease AD. Methods Using immunohistochemical and RT-PCR methods the neuro-immunological pathological changes in the AD rat model induced by β-amyloid protein Aβ−40 via lateral cerebral ventricle injection including mainly the glial fibrillary acidic protein expression and inflammatory cytokines IL-1β IL-6mRNA and β-amyloid protein precursor APPmRNA gene expression were studied. And the effects of HBR on these parameters were observed. Results Deposition of Aβ in cerebral tissue could induce activation of stellate glial cells and abnormal increased levels of inflammatory cytokines IL-1β and IL-6mRNA also the elevation of APPmRNA level. HBR could effectively control the above-mentioned pathological changes. Conclusion HBR could effectively control the inflammation and the Aβ immune cascade reaction in brain of AD patients it is one of the important therapeutic mechanisms of the recipe.

Key words Heart Benefiting recipe β-amyloid protein glial fibrillary acidic protein interleukin-1β interleukin-6 β-amyloid protein precursor
看家基因监控

2. 每组给药

3. 抽提结果

4. GFAP

5. RNA

5.3 PCR

5.4 PCR

6. PCR

7. GFAP

8. GFAP

9. GFAP

10. GFAP

GFAP

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GFAP
2.2 Aβ, IL-1β, IL-6 mRNA, GAPDH mRNA, 105bp, 273bp, 330bp, 348bp, 567bp, 748bp.  

2.3. Aβ, APP mRNA, 105bp, 273bp, 330bp, 348bp, 567bp, 748bp.

Note: 1. Normal group; 2. Surgery control group; 3. Model group; 4. Medicated group; 5. Other medicine group; 6. Tacrine group. See Figure 1 for details.

Figure 1: GAPDH mRNA expression in agarose gel electrophoresis

Figure 2: Effect of the medicated group on Aβ, IL-1β, and IL-6 mRNA levels in the rat cortex and hippocampus.
图3 调心方对Aβ大鼠皮质、海马APP mRNA水平的影响

参考文献
分泌物减少情况。

### 烧伤膏

将烧伤膏油纱采用山东华润制药有限公司生产的紫花烧伤膏（由紫草、花椒、地黄、冰片等组成）制成。石蜡油油纱用石蜡油（约30%），石蜡油浸润医用纱布高压灭菌后备用，药物组成比例14:1:5:3，5%的盐酸金霉素溶液，5%的盐酸金霉素溶液5:7:7:3，3%的双氧水溶液，3%的双氧水溶液10:5:5:10，60%的乙醇溶液，12%的乙醇溶液，12%的乙醇溶液，2%的乙醇溶液。

### 创面处理

用无菌干纱覆盖创面行包扎或半暴露处理。残余创面在清洁创面后用油纱行半暴露疗法。两组病例不同创面类型的全身治疗相同。

### 治疗组

对照组创面用传统石蜡油油纱作内层敷料，治疗组共35例，男15例，女20例；平均年龄（45±2）岁；其中浅度烧伤32例，深度及残余创面3例。对照组35例，男15例，女20例；平均年龄（45±2）岁；其中浅度烧伤32例，深度及残余创面3例。治疗组在用药过程中无过敏反应发生，对照组各有1例对烧伤膏及石蜡油油纱敏感。

### 结果

止痛效果、创面渗出减少效果治疗组均优于对照组。

<table>
<thead>
<tr>
<th>组别</th>
<th>例数</th>
<th>年龄</th>
<th>烧伤原因</th>
<th>创面类型</th>
<th>愈合时间</th>
<th>P值</th>
<th>方差</th>
<th>均值</th>
<th>标准差</th>
</tr>
</thead>
<tbody>
<tr>
<td>对照组</td>
<td>35</td>
<td>45±2</td>
<td>15例</td>
<td>32例</td>
<td>12例</td>
<td>0.05</td>
<td>1</td>
<td>13.11±0.18</td>
<td>55</td>
</tr>
<tr>
<td>治疗组</td>
<td>35</td>
<td>45±2</td>
<td>15例</td>
<td>32例</td>
<td>12例</td>
<td>0.05</td>
<td>1</td>
<td>10.37±0.15</td>
<td>65</td>
</tr>
</tbody>
</table>

注：与对照组比较，*P<0.05。

### 体会

紫花烧伤膏主要含紫草、花椒、地黄、冰片等成分，能解表凉血、清热解毒、凉血化瘀、止痛抗炎、去腐生肌，将分泌物减少情况。

将烧伤膏油纱应用于不同类型的烧伤创面，与常规石蜡油油纱比较，烧伤膏油纱布对浅度烧伤、残余创面在减轻创面疼痛、减少创面渗出、创面加深情况、创面愈合时间等方面效果显著优于对照组。但由于其引流不畅常导致创面感染。烧伤膏的上述优点与石蜡油油纱良好的引流作用，克服了烧伤膏应用于临床过程中的不足，减少了工作量及创面疼痛刺激，临床应用起来较为方便，取得较好效果。