

# 针刺加埋针耳心穴对扩张型心肌病患者左心功能及体液、内分泌的影响

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**内容提要** 将 12 例扩张型心肌病心衰患者随机分为针刺加埋针耳心穴(穴位组)和耳非穴位组(非穴位组)。两组均先用多普勒超声心动仪评定心功能各项指标,同时测定血肾素活性、醛固酮、心钠素、内源性拟洋地黄类物质。分别于针刺加埋针耳心穴及耳非穴位后 24 h,重复评定心功能指标及测定内分泌各项参数。结果穴位组心输出量(CO)、每搏量(SV)、心指数(CI)、心钠素(ANF)、内源性拟洋地黄类物质(EDLS)增加,醛固酮(ALD)降低( $P < 0.01$  或  $< 0.05$ );而非穴位组上述各指标均无改变(均  $P > 0.05$ )。提示针刺加埋针耳心穴对扩张型心肌病心衰患者具有增加心功能的效应,其作用机制可能与体液、内分泌的变化相关。印证了传统中医理论穴位与非穴位有本质的区别,穴位有其特异性。

**关键词** 针刺 耳针 埋针 扩张型心肌病 心力衰竭 体液 内分泌 心功能

国内外研究针灸对心功能影响及其机理的文献认为,针灸对心功能的影响是肯定的。其作用机理可能与植物神经、中枢神经及体液内分泌因素的综合调节相关<sup>①</sup>。本研究旨在观察慢性扩张型心肌病心衰患者针刺耳心穴加埋针后左心功能的改变及其体液、内分泌诸因素的变化。

## 资料与方法

### 一、研究对象

将 12 例扩张型心肌病心衰患者随机分成穴位组和非穴位组。穴位组 7 例,男 6 例,女 1 例;平均年龄为  $40.62 \pm 2.9$  岁;根据 NYHA 分级,心功能 III 级 3 例,IV 级 4 例。非穴位组 5 例,男 4 例,女 1 例;平均年龄为  $39.87 \pm 8.8$  岁;心功能 III 级 2 例,IV 级 3 例。

### 二、方法

1. 心功能测定方法 用美国惠普公司出品 77025A 型伪彩色多普勒超声心动仪,采用脉冲多普勒技术取心尖五腔切面与主动脉瓣环左室长轴切面,将取样容积置于主动脉瓣下直至

记录到典型的窄长单峰的主动脉血流频谱图,据此计算得出心输出量(CO)、每搏量(SV)和心指数(CI)。

2. 内分泌激素测定法 用放射免疫(RIA)法测定肾素活性(PRA)、醛固酮(ALD)、内源性拟洋地黄类物质(EDLS)、心钠素(ANF)。均由中国同位素公司北方免疫试剂研究所提供药盒。严格按说明书操作,符合质控要求。

3. 针刺和埋针方法 穴位组针刺和埋针取患者右耳甲腔心穴;非穴位组采用同侧耳背非穴位点。两组均首先给予手捻针 15 min,继之在刺激点埋针。

### 三、疗效评价

12 例充血型心肌病心衰患者情绪稳定,取平卧位,先用伪彩色多普勒超声心动仪评定心功能各项指标,同时采血测定各项实验指标。针刺加埋针耳心穴或耳背非穴位点后 24 h,重复评定心功能和测定各项实验指标。

### 四、重复性试验

测定心功能指标对 30 例健康人进行心功能评定时,其误差系数在 10% 以下。

## 结 果

一、穴位组 针刺加埋针后 CO、SV、CI、ANF、EDLS 较前增加, ALD、PRA 有降低。见表 1。

表 1 穴位组心功能、内分泌指标变化 ( $\bar{x} \pm S$ )

参 数	针 前 (n=7)	针 后 (n=7)
CO(L/min)	3.35±0.41	4.17±0.59*
SV(L/搏)	55.94±5.71	64.19±4.07△
CI(L/min·m <sup>2</sup> )	2.66±0.47	3.12±0.25*
ANF(ng/ml)	2.55±0.08	3.23±0.39*
EDLS(pg/ml)	0.13±0.03	0.24±0.06*
PRA(ng/ml)	5.34±0.71	1.18±0.38**
ALD(ng/L)	387.42±47.2	307±50.2*

注: 针刺前后比较, \* $P < 0.01$ , \*\* $P < 0.001$ , △ $P < 0.05$

二、非穴位组 针刺加埋针后除 SV、ANF、EDLS 降低有显著意义( $P < 0.05$ )外, 其余心功能和实验指标均无明显变化( $P$  均  $> 0.05$ )。见表 2。

表 2 非穴位组心功能、内分泌等变化 ( $\bar{x} \pm S$ )

参 数	针 前(n=5)	针 后(n=5)
CO(L/min)	3.64±0.25	3.48±0.37 **
SV(L/每搏)	58.64±1.09	54.96±2.27 *
CI(L/min/m <sup>2</sup> )	2.42±0.13	2.26±0.13 **
ANF(ng/ml)	2.57±0.28	2.40±0.28 *
EDLS(pg/ml)	0.16±0.01	0.12±0.02 *
PRA(ng/ml)	5.20±0.52	5.22±0.40 **
ALD(ng/L)	3940.4±21.94	397.8±20.18 **

注: 针刺前后比较, \* $P < 0.05$ , \*\* $P > 0.05$

## 讨 论

吴信法等<sup>[2]</sup>观察到耳针家兔“心穴”10 min, 能使其左室内压增加, 可增强心肌收缩力。笔者观察到针刺加埋针扩张型心肌病心衰患者耳心穴后, 其 CO、SV、CI 均增加, 心功能得到增强, 提示针刺可能是扩张型心肌病心衰患者的一种治疗手段。

有人报道<sup>[3]</sup>, 针刺某些穴位可以使患者原

先增高的血清 ALD 水平降至正常。笔者观察到针刺加埋针扩张型心肌病心衰患者耳心穴后其血 ALD、PRA 水平降低, ANF 水平增高。由于体内 PRA、ALD 下降, 致使抗利尿激素分泌下降; 而 ANF 具强大的利尿、利钠作用<sup>[4]</sup>, 故使水钠潴留明显减轻, 达到增强心功能效应。耳穴针刺加埋针后, 患者 EDLS 增高, 存在于下丘脑和心脏内的 EDLS 具强大的利尿和强心作用<sup>[5]</sup>。这可能是针刺改善扩张型心肌病患者心功能的体液、内分泌机制。

耳廓刺激引起体液、内分泌改变的确切机制尚不明, 有人认为<sup>[6]</sup>耳廓的传入神经属于作用最大的传入神经, 它直接向网状结构发生冲动, 这是为什么刺激耳廓能对机体许多内脏内分泌功能产生各种有效反射的生理基础。

心力衰竭患者血浆 ANF 含量明显低于健康人, 心肌病 ANF 含量降低特别显著, 可能由于病毒感染因素引起心肌自身免疫反应, 心肌受损, 导致心钠素产生和分泌衰竭<sup>[7]</sup>。针刺加埋针后扩张型心肌病心衰患者的血浆 ANF 含量增高, 可能提示针刺加埋针对这类患者具独到的治疗价值。

针刺加埋针扩张型心肌病心衰患者耳心穴及其非穴位, 两者具有不同的效应, 说明穴位与非穴位有着本质的区别, 穴位有其特异性, 这印证了传统中医理论。

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spleen YaDS and 5 cases (17.2%) in Spleen YiDS showed marked effect after 3-month treatment. It showed that the effect in Spleen YaDS was better than YiDS. The XSW was superior than that of SSN. The effects were related to the syndromes and the degrees of pathologic change. This showed that the recipe could somewhat reverse and restore the abnormal glands of gastric mucosa.

**Key words** chronic atrophic gastritis, pathologic picture, treatment based on Syndrome Differentiation

(Original article on page 144)

### **A Prospective Clinical Study on Resersion of 200 Precancerous Patients with Hua-sheng-ping (化生平)**

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200 precancerous patients were treated by the drug Hua-sheng-ping, the process was monitored by endoscopic histo-pathologic examination, and biochemical criteria. Results: The total effective rate was 95.5%, which was higher than that of control group (57%),  $P < 0.01$ . The recipe is composed of some medicinal herbs such as *Chrysanthemum morifolium*, *Glycyrrhiza uralensis*, *Panax notoginseng*. It is indicated for Syndromes such as Spleen-Stomach Asthenic Cold etc. and has been proved to be an effective prescription for precancerous lesions.

**Key words** precancer, Hua-sheng-ping

(Original article on page 147)

### **Clinical Observation on 32 Cases of Postoperative Osteogenic Sarcoma Treated by Chemotherapy Combined with Chinese Medicinal Herbs**

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32 cases of postoperative osteogenic sarcoma treated by chemotherapy combined with Chinese medicinal herbs were compared with 26 similar cases as control group. The drugs used in chemotherapy consisted of two regimens, DDP and high-dose MTX plus VCR. The results showed that the side effects of chemotherapy in control group were consistent with literatures; while the group treated with Chinese medicinal herbs suffered less toxic effects, the difference between two groups was statistically significant. The medicinal herbs used to reduce the side effects induced by DDP was *Pinellia ternata*, *Amomum cardamomum*, *Bambusa textilis*, *Citrus reticulata* etc.; while the herbs used to alleviate the adverse effects of high-dose MTX plus VCR was *Gypsum*, *Anemarrhena asphodeloides*, *Rehmannia glutinosa*, *Ophiopogon japonicus*, *Scrophularia ningpoensis*, etc.

**Key words** osteogenic sarcoma, side effect of chemotherapy, Chinese herbal medicine treatment

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### **Effect of Auriculoacupuncture plus Needle Embedding in Heart Point on Left Cardiac, Humoral and Endocrine Function**

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Twelve patients with dilating cardiomyopathy complicated heart failure were divided randomly into auriculo-acupuncture group ( $n=7$ ) and controls ( $n=5$ ). Left cardiac function and plasma levels of PRA, ALD, EDLS, ANF were measured. Results showed that CO, CI, ANF, EDLS, ALD were decreased in test group ( $P < 0.05$ ), which indicated that auriculoacupuncture plus needle-embedding in Heart acupoint could improve the left cardiac function in patients with dilating cardiomyopathy complicated heart failure and that the function of acupoints is distinctly different from that of non-point.

**Key words** auriculo-acupuncture, needle-embedding, dilating cardiomyopathy, heart failure

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