

电刺激耳胆穴实时超声观察胆囊收缩功能

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内容提要 本文用电刺激耳胆穴对 100 例健康人及 100 例胆系疾病患者在实时超声下观察胆囊收缩功能, 结果五分钟内正常组胆囊平均面积收缩为 6.64cm^2 (64.5%), 异常组为 2.43cm^2 (26.6%), 与电刺激前相比均有非常显著差异, $P < 0.01$ 。正常组胆囊收缩功能良好 91 例, 异常组 11 例, 两组相比差异显著, $P < 0.01$ 。此方法可以作为检查胆囊收缩功能的途径之一。

本文根据中医经络理论学说^①, 用电刺激耳胆穴新途径在实时超声观察下对胆囊收缩功能进行探讨。以面积平方厘米(cm^2)计算, 对 100 例健康人(以下简称健康组)及 100 例有胆系疾病患者(以下简称异常组)胆囊探查结果, 认为此方法对检查胆囊收缩功能很有价值。

资料与方法

一、观察对象: 健康组: 男 52 例, 女 48 例, 年龄 20~62 岁, 均系工人及学生。此组均排除胆系病史, 无临床症状, 实时超声检查, 胆囊大小正常, 囊壁光滑、厚度小于 0.3cm, 胆囊暗区透声性良好。异常组: 男 35 例, 女 65 例, 年龄 21~71 岁, 均系我院门诊及住院病例。此组病例有明显胆系病史, 有典型的临床症状, 实时超声检查, 胆囊明显增大, 或明显缩小, 囊壁增厚、毛糙, 胆囊区透声差, 并伴有结石。其中有 64 例作过胆囊 X 线造影, 37 例收缩功能差, 22 例不显影, 5 例收缩功能良好。

二、探查方法:

1. 仪器: 使用日本 ALOKA SSD-256 实时线阵超声诊断仪, 探头频率 3.5MHz, 及直流电 G7503 耳穴探测治疗仪。

2. 方法: 被检者禁食 8 小时以上, 探查时取仰卧位, 探头平行放置于右肋缘下, 与胆囊长轴保持平行, 以胆囊长轴最大断面为准, 嘱被检者屏气, 将图像冻结, 利用仪器上的装置直接测得胆囊面积 cm^2 , 这时将耳穴探

测治疗仪两根线, 一根线接在被检右手指或左手指上。另一根线接在探针上(探针头应是圆钝), 将探针头放置于同侧耳胆穴上(胰胆区)稍加压, 打开电源开关, 频率调到 3500 次/分, 输出脉冲电流 25mA。按照上述方法连续电刺激五分钟后分别在 1、3、5 分钟各探测胆囊面积一次。

结 果

一、电刺激耳胆穴前后胆囊面积测值结果: 见附表。

附表 电刺激耳胆穴前后胆囊面积(cm^2) $M \pm SD$

	例数	电刺激前胆囊平均面积	电刺激后胆囊平均面积		
			1 分钟	3 分钟	5 分钟
健康组	100	10.29 ± 0.37	$5.97 \pm 0.05\Delta$	$4.58 \pm 0.17\Delta\Delta$	$3.65 \pm 0.23^*$
异常组	100	9.13 ± 0.44	$7.73 \pm 0.54\Delta$	$7.09 \pm 0.39\Delta\Delta$	$6.7 \pm 0.34^*$
P 值		>0.05	<0.01	<0.01	<0.01

注: Δ 与电刺激前比, $P < 0.01$; $\Delta\Delta$ 与第 1 分钟比, $P < 0.01$; * 与第 3 分钟比, $P < 0.01$ 。

由附表可见, 电刺激前健康组与异常组胆囊平均面积探值虽然有所区别, 但无统计学意义, $P > 0.05$ 。电刺激后健康组及异常组胆囊平均面积第一次探值与电刺激前比有统计学意义, $P < 0.01$, 各次之间探值也均有非常显著性差异, $P < 0.01$ 。电刺激后健康组与异常组各次探值相比有非常显著性差异, $P < 0.01$, 说明健康组胆囊收缩程度明显高于异常组。

二、本文根据 100 例健康人及 100 例胆系疾

患的空腹胆囊电刺激前后探值对比,结合有关文献报道^[2~4],诊断胆囊收缩功能标准(按电刺激后五分钟内胆囊面积测值):(1)收缩功能良好,面积收缩应大于50%以上;(2)收缩功能较差,面积收缩在35~49%之间;(3)收缩功能差,面积收缩小于34%以下;(4)无收缩功能,电刺激前后面积无变化。

三、健康组与异常组胆囊收缩功能对照:根据上述标准,健康组:胆囊收缩功能良好91例(91%);收缩功能较差6例(6%);收缩功能差3例(3%)。异常组:胆囊收缩功能良好11例(11%);收缩功能较差19例(19%);收缩功能差61例(61%);无收缩功能9例(9%)。正常组与异常组胆囊收缩功能有明显区别,经统计学处理,均有非常显著性差异, $P<0.01$ 。异常组有9例无收缩功能,健康组却无1例。

讨 论

一、本文结果表明,电刺激耳胆穴对胆囊非常敏感。据健康组与异常组胆囊面积探测值,电刺激前两组之间无统计学意义。电刺激后在五分钟内,健康组胆囊平均面积收缩 6.64cm^2 (64.5%),与电刺激前相比有非常显著性差异。从第1、第3、第5分钟值看,胆囊呈递减性缩小,各次之间的探测值同样有非常显著性差异。异常组胆囊平均面积收缩 2.43cm^2 (26.6%),与电刺激前相比有非常显著性差异。第1、第3、第5分钟探测值表明,胆囊也呈递减性缩小,各次之间的探测值也有非常显著性差异,但胆囊收缩的程度仍小于健康组。两组各次探测值相比均有非常显著性差异,

说明有胆系疾病的胆囊收缩功能明显减退。从健康组与异常组胆囊收缩功能对照结果,健康组胆囊收缩功能良好率明显高于异常组,无一例无收缩功能,而异常组胆囊收缩功能差者明显大于健康组,其中有9例无收缩功能。

二、本法对检查胆囊收缩功能的特异性及可靠性:本方法简单方便,无痛苦,通过电刺激耳胆穴在五分钟内即可迅速获得胆囊收缩功能,并能通过监视器屏幕直接观看到胆囊收缩动态性变化,对检查胆囊收缩功能有相对的特异性。本法与脂餐法、硫酸镁法及X线造影比较,缩短了检查时间,弥补了部分胆囊X线造影不显影的缺陷。为了检验此法的可靠性,我们对异常组部分胆囊收缩功能差的患者加大了频率(4000次/分)及输出脉冲电流(30mA)刺激穴位,胆囊收缩仍弛缓。用同样的频率及脉冲电流刺激无收缩功能胆囊患者耳胆穴,胆囊仍无收缩的反应,说明此法对检查胆囊收缩功能有相对的可靠性。为胆道系统疾病诊断提供了客观依据,可在较短时间内加速胆囊收缩,为胆石症患者排石创造了良好的机会。

(本文承蒙本院王伯荣医师作统计学处理,谨此致谢)

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• 消息 •

中国中西医结合研究会辽宁分会肿瘤专业学术会议在沈阳召开

中国中西医结合研究会辽宁分会肿瘤专业学术会议于1986年12月22~23日在沈阳召开。到会代表78人,收到论文46篇。会议期间代表们对论文进行了广泛交流和充分的讨论。如鸭胆子油治疗晚期肺癌脑转移,安瘤乳、复方木鸡冲剂治疗原发性肝癌,龙胆泻

肝汤治疗真性红细胞性白血病等,用中西医结合的方法治疗恶性肿瘤收到了良好的治疗效果。对降低化疗、放疗的毒副作用,为用中西医结合的方法在攻克肿瘤的过程中闯出一条新路。会议期间成立了肺癌、肝癌等九个专项协作组。

(蒋淑媛)

Observation with Real-Time Ultrasound on Gallbladder Contractive Effects with Electric Stimulus of Erdan Point (耳胆穴)

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Gallbladder contractive effects with electric stimulation of Erdan point (an auricular acupuncture point) were observed with real-time ultrasound in 100 normal subjects and 100 biliary disease patients. Gallbladders were very sensitive to electric stimulation at Erdan point. In normal group, the mean area of gallbladder contraction was 6.64 cm² (64.5%) within five minutes' electric stimulation of Erdan point, which was significantly different from that of pre-electric stimulation, $P < 0.01$. The gallbladder contracted well in 91 subjects (91%), rather poor in 6 persons (6%) and poor in 3 persons (3%). In patients, the mean area of gallbladder contraction was 2.43 cm² (26.6%) within five minutes' electric stimulation of Erdan point, which was also significantly different from that of pre-electric stimulation, $P < 0.01$, but it was less than that of normal subject, $P < 0.01$. The gallbladder contracted well in 11 patients (11%), rather poor in 19 patients (19%), poor in 61 patients (61%) and had no contractive function at all in 9 patients (9%), which was significantly different from that of normal subject ($P < 0.01$). The results indicated that this method may provide a new approach to the examination of gallbladder contractive function. (Original article on page 273)

Use of "SRRS" Recipe on Treatment of Late Stage Liver Cancer Patients and Their Experimental Investigations

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Clinical and experimental investigations of "strengthening the spleen, regulating the flow of vital energy, removing the toxic heat, softening the hard lumps and resolving the phlegm (SRRS)" recipe* in treating late stage liver cancer were made in our hospital. According to the theory of "different diseases be treated with same method" of the traditional Chinese medicine, this recipe in treating some cases of liver cancer was used. Results: (1) The survival rate (1 year) of the primary carcinoma of the liver: SRRS group was 31% (control 4.5%, $P < 0.05$). (2) The survival rate (1 year) of secondary carcinoma of the liver: SRRS group was 33.8% (control 16%, $P < 0.05$).

In the experimental investigation, the mutation assay (V₇₉ cell) for initiation model and metabolic cooperation for promotion model were chosen to answer whether the multi-stage concept of carcinogenesis (initiation and promotion) could be influenced by traditional Chinese drugs of this recipe used. Experimental results showed that some traditional Chinese drugs do have anti-mutation and other drugs have anti-promotion effects. It suggests that the incidence of malignant tumors could be reduced and the liver cancer be treated by using these Chinese drugs. In addition to the anti-mutation and anti-promotion effects, the experimental results also showed that some Chinese drugs of SRRS recipe had the cytotoxicity in human liver cancer cell (7402), which also arrested metastatic effect of the Lewis lung carcinoma in the C₅₇ BL mouse strain.

*SRRS recipe: Jianpi Liqui (健脾理气), Qingre Jiedu (清热解毒), Ruanjian Huatan (软坚化痰).

(Original article on page 275)

Preliminary Report on Anti-Rejection of Traditional Drugs in Allo-transplantation of Kidney

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Eighteen cases of allo-transplantation of kidney have been operated since 1978. They were divided into two groups. One group received the Western drugs only for the management of anti-rejection after operations, while the other group accepted the method of combined TCM-WM therapy for anti-rejection. It was emphasized that in this article the therapeutic result of the latter group was better than that of former. According to the author's experience, *Panax ginseng* should be administered after using steroid for anti-rejection. The report showed that *Panax ginseng* was effective in reversing the postoperative rejection, increasing the resistance of the body against infection, and prolonging the survival time of the allo-grafted kidney.

(Original article on page 278)