

36 名健康人辰酉时进餐前后胃电图观察

天津中医学院实验针灸教研室

府 强* 程 震* 汤德安 徐汤革 曹一鸣

内容摘要 36名健康人辰酉时进餐前后体表胃电图的观察表明：餐前胃电参数辰时低于酉时，振幅有显著差异 ($P < 0.001$)；辰时餐后胃电振幅变化小于酉时，差异显著 ($P < 0.05$)，频率变化大于酉时，但无统计学意义 ($P > 0.05$)。实验结果提示利用胃电诊断疾病，须考虑时间节律的影响，也为子午流注这一古典的时间医学理论提供了客观佐证。

人体几乎全部生理机能都具有周期为24小时的节律性变动^①，研究胃电的时间变化规律，不仅对临床更好地利用这一指标来诊治疾病有一定意义，而且能为进一步探讨针灸子午流注学说打下基础。本工作对36名健康青年学生辰酉两时辰进餐前后胃窦及胃体部的胃电图进行了初步观察。

对象与方法

本组观察对象为无胃肠疾患的健康学生，男女各 18 人，年龄均在 20~30 岁之间。用 EGG-1A 型胃电图仪的 I、II 导联分别固定于胃窦、胃体的体表投影处^②，记录参数、电极固定方法如周氏等报告^③。受试者静卧 5~10 分钟后，以 I、II 导联顺序各记录 5 分钟空腹胃电图。仍取检查时仰卧位，在不饮水或其它饮料的情况下进食中等质量蛋糕 50g，待全部吞咽动作完成后 3 分钟，再如餐前顺序记录两导联各 5 分钟。同一受试者实验限在当天辰时(7~9 点)与酉时(17~19 点)或当天酉时与次日辰时内完成(两者各半)。试验前空腹时间均在 5 小时以上，第一次试验完后，四个电极固定部位均以圆珠笔标记，第二次试验时先用酒精棉球擦净，然后在该处固定电极，使两次试验的电极部位一致。记录过程中如因咳嗽、欠身等异常情况干扰胃电波形者，做出标记，予以剔除。

实验结果

一、辰酉时餐前胃电参数比较：36 例两时辰胃电振幅比较，胃窦、胃体部辰时均低于酉时，有非常显著性差异 ($P < 0.001$)；频率辰时略低于酉时，差异无统计学意义 ($P > 0.2$)，见表 1。

表 1 辰酉时餐前胃电参数 ($M \pm SD$)

组别 例数	振 幅 (μV)		频 率 次/min
	I	II	
辰时 36	156.78 \pm 65.05	123.71 \pm 62.15	2.88 \pm 0.21
酉时 36	222.97 \pm 97.82	180.06 \pm 83.56	2.92 \pm 0.15
P 值	<0.001	<0.001	>0.2

二、辰酉时进餐对胃电影响程度的比较：将两时辰进餐前后胃电参数差的绝对值进行比较(餐后胃电有完整记录的 34 例)，结果餐后胃电振幅的变化程度辰时小于酉时，有显著性差异 ($P < 0.05$)，而频率的变化程度辰时大于酉时，但无统计学意义 ($P > 0.05$)，见表 2。

表 2 辰酉时餐后即刻胃电变化程度 ($M \pm SD$)

组别 例数	振 幅 (μV)		频 率 (次/min)
	I	II	
辰时 34	47.15 \pm 35.97	44.26 \pm 31.94	0.16 \pm 0.13
酉时 34	71.47 \pm 59.81	70.56 \pm 62.01	0.10 \pm 0.13
P 值	<0.05	<0.05	>0.05

以上说明辰酉时餐前胃电水平不同，对同一进餐刺激的即刻反应程度也有差异。

讨 论

胃电反映了胃的机能状态, 正常人空腹胃电的基本节律是频率 3 次/min、振幅 150 μ V 左右的慢波^[2]。本实验结果表明, 这种基本节律反映的胃的机能在一天不同时辰内存在着极为显著的差异。有关研究在欧美人身上一日 10 次测定胃酸度, 结果有明显的昼夜节律, 峰值在午后 7 时, 认为与唾液一样和晚上饱餐一顿的饮食习惯有关^[3]。我们现在一般晚餐的质量优于早餐, 胃电活动在晚餐时间酉时强于早餐时间辰时, 或许与此有关。以上可见, 看待胃电参数还必须有时间动态观念, 并提示临床以此作为胃部疾患诊断和疗效观察指标时, 应该注意不同检测时间对胃电参数的影响。

生命现象以近似 24 小时的周期变动着, 已为越来越多的事实所证明^[4]。针灸子午流注学说早就认为, 脏腑经络的功能活动随着一日十二时辰中气血循环流注而呈现出周期性盛衰的

变化规律, 在这一点上, 现代时间生物医学与古老的“子午流注”找到了共同之处, 用时间动态的观点来看待胃电等生理指标, 这与子午流注之理是若合符节的。诚然, 胃电与中医所指“胃”的机能及胃经气血的活动不能完全等同, 但通过观察胃电的时辰差异, 在一定程度上能间接地为针灸子午流注、胃经气血流注的时间特性提供客观佐证。本实验只是以胃电为指标探讨子午流注等时间针灸法的基础工作, 研究尚待深入。

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参 考 文 献

1. 伊藤真次(吴今义译). 人体昼夜节律. 第 1 版. 重庆: 重庆出版社, 1983: 5, 9, 110.
2. 许冠荪, 等. 100 名健康人胃电图的分析. 生理学报 1980; 32(3): 277.
3. 周夕林, 等. 胃病辨证分型与胃电图变化的规律初探. 中医杂志 1985; 3: 63.

双赤煎剂治疗乳房囊性增生病 117 例

山西省临汾地区卫生学校附属医院 白敬申 张殿武

本文以清热解毒、活血化瘀为主, 自拟双赤煎剂治疗乳房囊性增生病 117 例, 疗效较好。报告如下。

一般资料 本组 117 例皆为已婚妇女, 年龄 32~56 岁, 平均 40.5 岁。主要临床表现为: 乳房内胀痛, 能触及椭圆形或梭形扁平状物, 与皮肤及基底无粘连, 可活动, 质地韧而不硬; 无急性炎症表现, 腋下淋巴结不大; 肿块有经前增大、经后缩小的现象, 钼靶 X 线摄片显示乳房导管增生征象。本组左侧发病者 30 例 (25.6%), 右侧发病者 39 例 (33.3%), 两侧同时患病者 48 例 (41%)。

治疗方法 均以自拟中药方剂内服, 极个别患者辅以穿心莲片和胎盘组织糖衣片。方剂: 双花、连翘、蒲公英各 9~30g, 赤芍、桃仁、川楝子各 3~9g, 元胡、木香各 3~6g, 陈皮 6~12g, 炒枣仁 9~15g,

生甘草 3~6g。水煎服, 每日一剂。根据病情随证加减: 食欲欠佳加焦三仙, 结节或条索状物消散迟缓加三棱、莪术或穿山甲、皂角刺。本组患者服药最少者 5 剂, 最多者 18 剂。

结 果 疗效标准: 显效: 自觉症状(指乳房胀痛, 上臂牵扯痛, 睡眠不好等)消失, 体检乳房内结节或条索物软化、消散, 经随访一年以上病情稳定, 无复发。好转: 自觉症状好转, 体检结节或条索状物有所软化。无效: 自觉症状、体检乳房内结节或条索状物无变化甚或有增大。本组显效者 87 例 (74.4%), 经随访 4~9 年, 未见复发, 好转者 28 例 (23.9%), 无效者 2 例 (1.7%), 总有效率达 98.3%。

本疗法效果明显, 无副作用, 不行手术, 方法简便, 患者易于接受。

Observation of Electrogastrogram at Chen Shi(辰时)and You Shi(酉时) before and after Meal on 36 Healthy Persons

Fu Qiang(府 强), et al

Acupuncture Dept., Tianjin College of TCM, Tianjin

To research the different time-relevant pattern of gastric electricity could provide evidence to utilize it better in diagnosing and treating diseases, and to lay a foundation for exploring "Zi Wu Liu Zhu"(子午流注, to select certain acupoints in matching with "Heavenly stem and earthly branch"). The electrogastrogram (EGG) of gastric corpus and antrum of 36 healthy young students have been observed by means of checking from body's surface both at "Chen Shi" (CS, from 7 to 9 am) and "You Shi" (YS, from 5 to 7 pm), before and after meal. The results were: Before meal, the parameter of gastric electricity at CS was lower than that at YS, but only the amplitude had a significant difference ($P < 0.001$); and after meal, the variation of amplitude of gastric electricity at CS was smaller than that at YS, the difference was also remarkable ($P < 0.05$). While the variation of frequency at CS was greater than that at YS, but there was no statistic significance ($P > 0.05$). The above-mentioned results indicated that the gastric electricity level at CS and YS before meal was different, thus the extent of immediate response to the stimulation of food was also different. It was suggested that in clinical practice, when the EGG was used to make the diagnosis of gastric diseases and evaluate the therapeutic effect, the various time of examination may exert influence on the parameters of gastric electricity. Furthermore, this result to a certain degree also provides us with an objective evidence indirectly for "Zi Wu Liu Zhu" of acupuncture and for the time character of Qi (气) and blood circulation in stomach channel.

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Observation of TCM and WM Therapy in Treating 330 Cases of Upper GI Tract Bleeding

Li Shunbao(李顺保), Gu Wenqing(顾文卿), Qu Zhixian(瞿治先)

The Hospital of Lanzhou Chemical Industry Corporation, Lanzhou

In order to evaluate effects of *Rheum officinale*—*Bleilla striata* powder (RBP), Sihuang decoction (四黄汤 *Rheum officinale*, *Rehmannia glutinosa*, *Coptis chinensis* and *Astragalus membranaceus*), cimetidine and PAMBA, 330 patients with upper GI tract hemorrhage randomized into four groups were observed. The effective rate and the average time of negative conversion of occult blood in feces of RBP, Sihuang decoction, cimetidine and PAMBA were 97.1% (68/70) and 4.13 ± 3.0 days, 90% (90/100) and 3.51 ± 1.54 days, 98.9% (90/91) and 7.58 ± 4.75 days, and 94.2% (65/69) and 6.66 ± 3.79 days respectively. The differences in effective rates among 4 groups were not statistically significant ($P > 0.05$). The differences of the time of negative conversion of occult blood between the two TCM groups (RBP and Sihuang decoction) or between the two WM groups (cimetidine and PAMBA) were also not statistically significant ($P > 0.05$), but between TCM and WM groups, the differences were statistically significant ($P < 0.01$). The effective rate of TCM groups were better than that of WM groups, and the side effect of the TCM therapy was fewer. Therefore these Chinese herbs could be used to treat upper GI tract bleeding, but when the GI bleeding was caused by gastric cancer, esophageal varix of liver cirrhosis and arteriosclerosis, etc. it should be treated carefully.

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Alcohol Extract Preparation of *Leontopodium* in Treating 45 Chronic Nephritis Patients

Chang Guirong(常桂荣)

Jilin Academy of TCM, Changchun

The alcohol extracted *Leontopodium* was used to treat chronic nephritis. The oral dose of 600mg per day was equivalent to *Leontopodium* 50.8 g. The clearance rate of urine protein was 87%, and the recovery rate of renal function was 53~58%. The hematuria recovered to normal. Three-year follow-up showed that the total effective rate was 77.8%, including the marked effective rate 17.8% and the effective rate 60%. The pharmacological study indicated that the active ingredients were protocathechuic aldehyde, 3, 4-dihydroxycinnamic acid and vanillic acid, etc. The principal effects were anti-allergic and anti-inflammatory action, inhibition of emigration of polymorphous leucocyte, lysosome, histamine, 5-HT induced inflammatory reaction and capillary permeability.

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