



Observation on 4-lead electrogastrogram feature of gastric carcinoma

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Abstract

AIM: We observed 4-lead electrogastrographic characters in chronic gastritis, gastric ulcer, and gastric cancer on fast and aftermeal condition and found that the body surface electrogastrogram has practical value to diagnose gastric cancer.

METHODS: We used YWC-4 type gastrointestinal electric detector and NEC-361 8 lead physiologic recorder to simultaneously record bipolar electrogastrogram and unipolar electrogastrogram respectively before and after meal 130 cases were progressive gastric cancer, 136 cases gastric ulcer, 120 cases were chronic gastritis.

RESULTS: The electrogastrogram in progressive gastric cancer patients showed: High amplitude of 700-1000 uV. Electrogastric

frequency > 4 cpm over 10 min; Bradygastria; Low amplitude of below 50 uV. In 130 progressive gastric cancer patients, 107 cases showed abnormal electrogastric waves, the incidence was 82.31%; In 250 patients without gastric wave, the incidence was 26.95% ($P < 0.001$). In gastric cancer patients, high amplitude incidence was 44.62%, in 107 cases of gastric cancer, 32 cases had abnormal electrogastric waves, the incidence was 29.91%. Among 130 gastric cancer patients, there were 63 cases showed abnormal electrogastric wave. In 71 cases of gastric antrum and pyloric the incidence was 88.73%. In 59 cases with corpus cancer the incidence was 74.58%. According to Borrmann classification, 130 progressive gastric cancer patients were divided into 4 types by gastroscope, their incidence of abnormal electrogastric wave had no significant difference.

CONCLUSION: The abnormal electrogastric wave of gastric cancer patients is a significant indication through analysis of surface body electrogastrogram come gastric cancer patients abnormal electrogastric wave can be evoked meal so the surface body electrogastrogram can screen gastric cancer.

Key words: 4-lead electrogastrogram feature; Gastric carcinoma

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