



## Study on clinical application of electrogastrogram

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### Abstract

**AIM:** Perspective survey for nonulcer dyspepsia (NUD) group (20 cases), gastrointestinal operation group (20 cases), non operation group (20 cases) and normal control group (20 cases) by electrogastrogram (EGG).

**METHODS:** The non operation group and normal control group was routinely examined by EGG. The patients in operation group were examined both before operation and three days after operation, in each patient, the basic EGG took for about 15 min in the X-rays room with better environment of sound proof, the patients took 45% barium sulfate 150 mL by mouth in 5 min, and then EGG was recorded for 15 to 30 min under fluorescent screen of X-rays, at the

same time, gastric peristaltic was continuously reexamined for 60 to 90 s.

**RESULTS:** Frequencies of EGG at fasting and after meal of normal control group were  $2.96 \pm 0.4$  cycles/min and  $3.04 \pm 0.3$  respectively; Amplitudes of that were  $199.1 \pm 22 \mu\text{V}$  and  $263.3 \pm 28.8 \mu\text{V}$  respectively; While no marked difference was found between nonoperation group and control ( $P > 0.05$ ). Frequencies and amplitudes of NUD group were  $2.95 \pm 0.5$  and  $2.82 \pm 0.1$  cycles/min at fasting,  $124.0 \pm 25.6$  and  $89.2 \pm 13.5 \mu\text{V}$  after meal, respectively; In gastrointestinal operation group, the amplitude before operation ( $164.6 \pm 32$  and  $258.8 \pm 54 \mu\text{V}$ ) exceeded greatly to that after operation ( $118.1 \pm 44.6 \mu\text{V}$  and  $119.5 \pm 37.2 \mu\text{V}$ ) ( $P < 0.05$ ).

**CONCLUSION:** EGG reflects the state of gastric motility and tension. Operation, especially gastrointestinal operation may interfere gastric motility. EGG may be used for clinical diagnosis and evaluation of curative effect in gastric dysfunction disease.

**Key words:** Non-ulcer dyspepsia; Electrogastrogram; Gastric motility

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