



## Research on electrogastrogram in diagnosis of duodenal ulcer

Hui-Zhu Zhang, Hong-Jie Wang, Yan Li, Yan-Ping Wang

Hui-Zhu Zhang, Hong-Jie Wang, Yan Li, Yan-Ping Wang, Keyi Medical Clinic, Shengyang, Liaoning Province, China

Author contributions: All authors contributed equally to the work.

Original title: *China National Journal of New Gastroenterology* (1995-1997) renamed *World Journal of Gastroenterology* (1998-).

Received: August 11, 1995

Revised: January 31, 1996

Accepted: August 1, 1996

Published online: September 15, 1996

### Abstract

**AIM:** By using Electrogastrogram, we checked total 68 patients with duodenal ulcer.

**RESULTS:** The electrical frequency in patients with duodenal ulcer showed no obvious change after meal ( $P > 0.05$ ); In active duodenal ulcer with gastritis the frequency is much higher; In chronic duodenal ulcer the frequency is relatively lower. The Electrogastrogram amplitude and waveform had different characteristics in different

kinds of duodenal ulcer. The active duodenal ulcer showed an irregular waveform and high amplitude wave. The electrogastrogram amplitude in 56% of patients was increased obviously after meal ( $P < 0.001$ ); The Electrogastrogram of duodenal ulcer with gastritis had low wave in 59% of patients and the Electrogastrogram amplitude was increased after meal ( $P < 0.001$ ); And in chronic duodenal ulcer the electrogastrogram all showed low wave before and after meal.

**CONCLUSIONS:** (1) The Electrogastrogram showed the following 2 characters: the frequency is above 3.5 cpm and irregular and the amplitude is high ( $> 200 \mu V$ ); and (2) a frequency above 3.5 cpm with low wave ( $< 100 \mu V$ ) can be diagnosed as duodenal ulcer in combination with clinical manifestation.

**Key words:** Electrogastrogram; Duodenal ulcer

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Zhang HZ, Wang HJ, Li Y, Wang YP. Research on electrogastrogram in diagnosis of duodenal ulcer. *World J Gastroenterol* 1996; 2(Suppl1): 86 Available from: URL: <http://www.wjgnet.com/1007-9327/full/v2/iSuppl1/86.htm> DOI: <http://dx.doi.org/10.3748/wjg.v2.iSuppl1.86>

E- Editor: Liu WX



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