

The experience and perspective of Taiwanese-European collaboration

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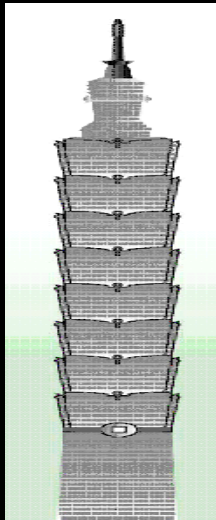


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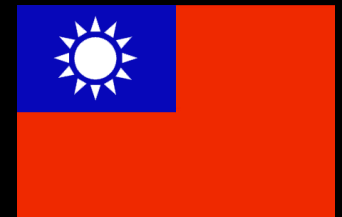
- The experience of Taiwanese-Latvia collaboration for gastric cancer screening
- The experience of Latvia-European collaboration for gastric cancer screening
- The perspective of Taiwanese-Latvia-European collaboration for gastric cancer screening

Serological detection of atrophic gastritis and its evolution following *H.pylori* eradication therapy in areas with high prevalence of *H.pylori* infection

(2003/08-2007/07)



Trilateral Collaborative Study
supported by
National Science Council, Taiwan





The 1st International Digestive Diseases Workshop of Taiwan and the Baltic States

May 31st, 2004

Riga, Latvia



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Dr. Aiga Rūrane (WHO office in Latvia)
Mārcis Leja, Dr. med. (Latvian Association of Gastroenterologists, Digestive Diseases Centre GASTRO, hospital LINEZERS)

The organizers

Latvian Association of Physicians
Latvian Association of Gastroenterologists
National Taiwan University hospital
Kaunas Medical Academy, Lithuania
Hospital LINEZERS
Digestive Diseases centre GASTRO



Comparative cancer incidence

2004	Latvia	Lithuania	Taiwan
Stomach	36.86	35.73	16.07
Esophagus	8.04	6.97	7.08
Liver	3.98	3.66	47.58
Colorectal	34.68	32.15	31.88

2005 Taipei Forum of Gastroenterology

2005 Taipei Forum of Gastroenterology

- Autumn Convention of Gastroenterological Society of Taiwan
- International Forum of Gastroenterology and Health Care



Articles on *H.pylori* research published in international ISI indexed journals (2002-2007)

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2. Leif.Percival Andersen, Susanne Holck, Limas Kupcinkas, et al Gastric inflammatory markers and interleukins in patients with functional dyspepsia treated with astaxanthin. *FEMS Immunol Med Microbiol*. 2007 (accepted).
3. Kupcinskas L. Malthertheiner P. Helicobacter pylori and non-malignant diseases. *Helicobacter*, 2005;10 Suppl 1:26-33.
4. Andersen LP, Holck S, Janulaityte-Gunther D, Kupcinskas L, et al Gastric inflammatory markers and interleukins in patients with functional dyspepsia, with and without Helicobacter pylori infection. *FEMS Immunol Med Microbiol*. 2005 May 1;44(2):233-238.
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XXIst International Workshop
on *Helicobacter* and related bacteria
in chronic digestive inflammation
and gastric cancer
September 18 – 20, 2008
Riga, Latvia

European *Helicobacter* Study Group (EHSg)



First Announcement - www.helicobacter.org

The relationship of interleukin-1B and IL-1 receptor antagonist polymorphisms with premalignant gastric conditions

L. Kupcinskas, T. Wex, M. Leja, J. Kupcinskas, K. Funka, A. Ivanauskas, L. Jonaitis, G. Kiudelis, D. Janciauskas, A. Sudraba, I. Tolmanis, A. Vanags, D. Stirna, A. Krams, H. Chiu, J. Lin, P. Malfertheiner

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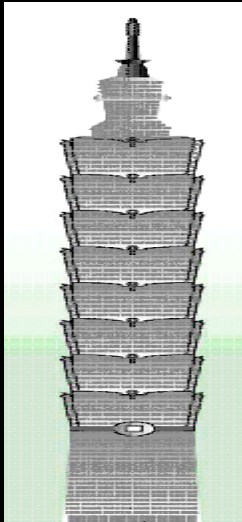
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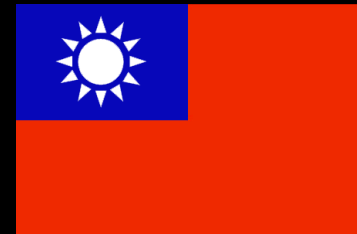
National Taiwan University Hospital, Taipei, Taiwan

Riga, Latvia, September

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Biomarkers for gastric atrophy

2009

Dig Dis Sci
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ORIGINAL ARTICLE

The Validity of a Biomarker Method for Indirect Detection of Gastric Mucosal Atrophy Versus Standard Histopathology

Marcis Leja · Limas Kupcinskas · Konrads Funka · Agnese Sudraba ·
Laimas Jonaitis · Audrius Ivanauskas · Dainius Janciauskas ·
Gediminas Kiudelis · Han-Mo Chiu · Jaw-Town Lin

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Abstract

Background Atrophy of the stomach mucosa is considered to be premalignant lesion for gastric cancer development; easy identification of this condition from a blood-sample would allow identifying the group of individuals at increased risk for cancer development.

Aims The objective of the current study was to validate a biomarker method (pepsinogen I/II ratio and gastrin-17) for indirect detection of atrophy of the stomach mucosa versus standard histopathology in Caucasian and Asian populations.

Methods Altogether, 241 patients aged 55 and above referred for upper endoscopy due to dyspeptic symptoms (125 from Latvia, 76 from Lithuania, and 40 from Taiwan) were enrolled.

Pepsinogen I, pepsinogen II, gastrin-17 (the latter after stimulation with protein-rich meal) and IgG/IgA antibodies to *Helicobacter pylori* infection were determined by ELISA method; standard histopathology according to the updated Sydney classification read by two independent expert pathologists was used for the comparison.

Results Pepsinogen I/II ratio below 3 was well related to atrophy (moderate to severe) in the corpus part of the stomach ($P < 0.0001$) with 83.3% sensitivity and 87.1% specificity. Gastrin-17 below 5 pmol/L was related to atrophy in the antral part ($P = 0.007$) with 36.8% sensitivity and 86.5% specificity.

Conclusions Decreased pepsinogen I/II ratio is a reliable marker for atrophy in the corpus, and may be recommended for identification of individuals with this type of

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