

Assessment of Gastritis and Gastric Cancer Risk in the Chilean Population Using the OLGA System

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Gastric cancer (GC) is the first cancer-related cause of death in Chile; however, no plan for GC early detection has been implemented in this country. The OLGA system characterizes gastritis from stages 0 to IV according to the risk of developing GC based on H. pylori infection, atrophy, metaplasia and GC. In this study, the performance of the OLGA system was evaluated in 485 Chilean patients receiving routine endoscopy to improve the detection of early GC or preneoplastic lesions. The results showed that OLGA scores, atrophy, metaplasia and GC increased significantly with age ($p < 0.001$). Conversely, H. pylori infection was higher in younger groups ($p < 0.05$). All gastric lesions were more frequent in men than women. The majority of patients with atrophy also had metaplasia (99%, $p < 0.0001$). Patients with H. pylori infection had more gastric atrophy and metaplasia than those without infection ($p < 0.05$). Of the 485 patients, 21 (4.3%) had GC, being 2.3 times more frequent among men than women and about 2/3 (14) were in OLGA stage ?2. In addition, 19 (90%) GC patients had atrophy and 18 (85%) had metaplasia ($p < 0.001$). In conclusion, the OLGA system facilitated the evaluation of GC precursor lesions particularly in patients with an OLGA score > 2 between 45 and 56 years old, because this group showed atrophy and intestinal metaplasia more frequently. Therefore, biennial endoscopic surveillance of patients with an OLGA

>2 can be an important health policy in Chile for diagnosing GC in its early stages and reducing mortality over the next two decades. © 2018, Arányi Lajos Foundation.

Chilean population

Gastric atrophy

Gastric cancer

Helicobacter pylori infection

Metaplasia

The OLGA system

adolescent

adult

age

aged

Article

cancer diagnosis

cancer patient

cancer risk

cancer staging

Chilean

cohort analysis

controlled study

cross-sectional study

descriptive research

disease severity

early cancer

endoscopy

female

gastritis

Helicobacter infection

histopathology

human

human cell

human tissue

major clinical study

male

metaplasia

middle aged

nonhuman

OLGA system

precancer

risk assessment

scoring system

sex difference

stomach atrophy

stomach cancer

young adult

complication

early cancer diagnosis

follow up

gastritis

Helicobacter infection

Helicobacter pylori

isolation and purification

metaplasia

pathology

precancer

procedures

prognosis

risk factor

severity of illness index

stomach tumor

very elderly

virology

Adolescent

Adult

Aged

Aged, 80 and over

Cross-Sectional Studies

Early Detection of Cancer

Female

Follow-Up Studies

Gastritis

Helicobacter Infections

Helicobacter pylori

Humans

Male

Metaplasia

Middle Aged

Precancerous Conditions

Prognosis

Risk Factors

Severity of Illness Index

Stomach Neoplasms

Young Adult