Exacerbation of Chronic Gastritis by Mycoplasma Infection through Inducing Inflammation

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Mycoplasmas resemble *H. pylori* in production of ammonia and induction of inflammatory cytokines from immune and non-immne cells. In Republic of Korea infection rate of *H. pylori* is relatively high but only a proportion of them invite additional inflammation and progress into gastric cancers. Therefore, additional risk factors cannot be excluded. The presence and identification of mycoplasma were confirmed by semi-nested PCR and sequencing and the results were compared with pathological data. Fifty-six samples collected from Korean chronic gastritis patients were used for the study. Twenty-three (41.1%) were positive to mycoplasmas and all of them were identified as human mycoplasmas, *M. faucium*, *M. fermentans*, *M. orale*, *M. salivarium* and *M. spermatophilum*. Mycoplasma-infected chronic gastritis samples showed more severe, additional infiltration of neutrophils than non-infected samples and the difference was significant (P < 0.05). In conclusion human mycoplasma infection may play a role in progression of chronic gastritis to metaplasia by inducing additional inflammation.