# *HELICOBACTER PYLORI CAGA*, *VACA* AND *ICEA* GENOTYPES IN NORTHERN THAI PATIENTS WITH GASTRIC DISEASE

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Abstract. *Helicobacter pylori*, a common infectious bacterium, has been linked to chronic gastritis, peptic ulcer and gastric cancer. Gastric biopsy specimens were obtained from 58 northern Thai patients with gastritis, 28 with gastric ulcer, 45 with duodenal ulcer and 4 with gastric cancer. *cagA*, *vacA* s1 and *iceA* gene was found in 88, 98, and 89% of the specimens, respectively. For *vacA*, the frequency of subtype s1a, s1c and combined s1a and s1c was 40, 16, and 41%, respectively. The frequency of subtype s1a/m1 and s1a/s1c/m1 was 27 and 20%, respectively. Fifty-three patients (39%) were infected with multiple *vacA* genotypes but there was no association with clinical outcome. *cagA* positive and mixed *vacA* s1a and s1c strains were found in significantly more cases of duodenal ulcer than gastritis ($p<0.05$). For *iceA*, subtype *iceA*1 reached a frequency of 60%, whereas subtype *iceA*2 was only 24%.

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