

**Eradication of Helicobacter pylori significantly
reduced gastric damage in nonsteroidal
anti-inflammatory drug-treated Mongolian gerbils**

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摘要

Abstract

AIM: To examine the effect of eradication of Helicobacter pylori prior to usage of NSAIDs, by investigating gastric inflammatory activity, myeloperoxidase (MPO) activity, prostaglandin (PG) E2 synthesis in H pylori-infected, and H pylori-eradicated gerbils followed by administration of indomethacin and rofecoxib. METHODS: Six-week-old male gerbils were orally inoculated with H pylori. Seven weeks later, anti-H pylori triple therapy and vehicle were given to gerbils respectively and followed for 2 wk. We examined the area of lesions, gastric inflammatory activity, PGE2 synthesis and MPO activity in the stomach. RESULTS: In indomethacin and rofecoxib-treated gerbils, the following results were obtained in H pylori-infected group vs H pylori-eradicated group respectively: hyperplasia area of the stomach (mm²): 82.4±9.2 vs 13.9±3.5 (P<0.05), 30.5±5.1 vs 1.3±0.6 (P<0.05); erosion and ulcer area (mm²): 14.4±4.9 vs 0.86±0.5 (P<0.05), 1.3±0.6 vs 0.4±0.3 (P<0.05); score of gastritis: 7.0±0.0 vs 3.6±0.5 (P<0.05), 7.0±0.0 vs 2.7±0.5 (P<0.05); MPO activity (μ mol H₂O₂/min/g tissue): 104.7±9.2 vs 9.0±2.3 (P<0.05), 133.5±15.0 vs 2.9±0.7 (P<0.05); PGE2 synthesis (pg/mg wet weight/min): 299.2±81.5 vs 102.8±26.2 (P<0.05), 321.4±30.3 vs 11.9±4.8 (P<0.05). CONCLUSION: Eradication of H pylori reduced gastric damage of NSAID-treated Mongolian gerbils. Rofecoxib caused less severe gastric damage than indomethacin in H pylori-eradicated gerbils..

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