

A RANDOMISED CONTROLLED STUDY COMPARING THE EFFICACY OF ONCE-DAILY TRIPLE THERAPY WITH TWICE-DAILY TRIPLE THERAPY IN THE ERADICATION OF HELICOBACTER PYLORI.

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Introduction. With the introduction of sustained release preparation of various antibiotics, simplified drug regimens for *H. pylori* eradication, which may improve drug compliance, can be available. We aimed to compare the efficacy of once-daily triple therapy regimen with twice-daily triple regimen in the eradication of *H. pylori*.

Method. Patients with documented *H. pylori* infection were randomised to receive (a) Omeprazole 20mg, Clarithromycin 500 mg and Metronidazole 400 mg twice daily for 7 days (TD) or (b) Omeprazole 40 mg, Clarithromycin sustained release 1 gm and Metronidazole extended release 750 mg daily for 7 days (OD). Gastroscopy was performed 4-5 weeks after the finish of treatment. Eradication of *H. pylori* was defined as absence of *H. pylori* in urease test, histology, culture and C13-urea breath test.

Results. 26 patients and 30 patients were recruited in the OD and the TD groups. The 2 groups were similar in baseline characteristics. Mean age 51.9+/-16.8 in OD and 46.8+/-16.1 in TD; 14 male/12 female in OD, 16/14 in TD; 3 smokers (11.5%) in OD, 2 (6.7%) in TD; 2 (7.6%) NSAID use in OD, 2 (6.7%) in TD. The diagnoses were 21 gastritis, 3DU and 2GU in the OD group and 23/5/2 in the TD group. 69.2% (18/26) of patients in OD group compared with 93.3% (28/30) of patients in the TD group had the *H. pylori* eradicated ($p=0.03$). There was no difference in the overall side effects between the OD and TD (19.2% vs 13.3%, $p>0.05$).

Conclusion. The conventional twice-daily antibiotic regimen was significantly better than the present once-daily antibiotic regimen in *H. pylori* eradication using the same total amount of drugs. Further studies to define the optimum drug dosage are required before once-daily formulation can be recommended as treatment for *H. pylori*.

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Proliferation characteristics and histogenesis of human colonic polyps - a microdissection study

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BACKGROUND: In the adenoma-carcinoma model of colonic carcinogenesis, there is gradual transition from normal mucosa to adenomatous polyps and then to carcinomas. Details of the morphological changes and the possible mechanisms are not well studied.

METHOD: Colonic polyps and normal colonic mucosa (FAP and HNPCC patients were excluded) were obtained by endoscopic means during colonoscopy, and microdissected into individual crypts. Detailed morphology, proliferation characteristics include mitotic counting and crypt fission index were studied.

RESULTS: Colonic crypts isolated from colonic polyps were 6 to 7 times larger than crypts from normal mucosa and of a bizarre shape. Crypt fission was an uncommon event in normal colonic mucosa but common in crypts from polyps. Crypt fission in the polyps was asymmetrical and aberrant. Preliminary analysis of the distribution of mitosis showed an expansion of the proliferation compartment to the surface of the crypt in adenomatous polyps, and no reversal of proliferating cells as has previously been described.

CONCLUSION: Sporadic colonic polyps grow by the process of crypt fission and crypt fission is aberrant and asymmetrical. Expansion of proliferation compartment is demonstrated in crypts from adenomatous polyps, consistent with de-regulation of cell cycle control.