

***FOUR-DRUG “CONCOMITANT THERAPY” VERSUS “STANDARD
TRIPLE THERAPY” FOR HELICOBACTER PYLORI ERADICATION.***

Thesis

*For partial fulfillment of master degree in internal
medicine*

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا عَلَّمْتَنَا إِنَّكَ
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<i>CONCOMITANT</i>	<i>OCAT</i>	<i>THERA-</i>
<i>PY.....</i>		

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INTRODUCTION & AIM OF THE WORK

INTRODUCTION

Helicobacter pylori is a microaerophilic, gram-negative bacterium that generally exists in a spiral or corkscrew shape (Marshall 1984)(Goodwin 1989). It is a neutrophilic organism, despite its ability to thrive in an acid milieu (Sachs 2003). In humans, the gastric mucosa is the only niche for *H. pylori* (Blaser 2004)(Kusters 2006). *H. pylori* exists primarily deep within the gastric mucosal layer (Blaser 2005)(Atherton 2006), although a small number can be attached to the mucosal epithelial cells via adhesion proteins (Clyne 2004)(Kim 2004). It is indigenous to humans and infects at least 80% of people in developing countries and 30-40% of people in Western nations (Taylor 1991)(Pounder 1995) (Parsonnet 1999)(Perez-Perez 2004). The incidence of *H. pylori* infection in developing countries is relatively stable, whereas it is declining significantly in Western nations (Genta 2002).

Typically, *H. pylori* infection occurs in early childhood and most likely develops as a result of vertical, direct human-human transmission within close family members (Goodman 2000)(Kivi 2003)(Raymond 2004)(Konno 2005)(Rowland 2006). Without treatment, it persists for a lifetime (Blaser 2005)(Atherton 2006) (Kusters 2006). The majority of individuals who acquire *H. pylori* do not develop acute symptomatology, although chronic, diffuse superficial gastritis commonly occurs (Blaser 2004)(Kusters 2006). Chronic infection with *H. pylori* is the primary cause of peptic and gastric ulcerations, distal gastric adenocarcinoma, and gastric lymphoma (Blaser 2005) (Atherton 2006) (Kusters 2006). It may also be associated with extra-gastrointestinal pathology including immune thrombocytopenia purpura (Jackson 2005) (Bohr 2007). In addition, it can alter the bioavailability of various agents such as iron, levodopa, and thyroxine (Pietrojusti 2008).

Untreated *H. pylori* infection causes increased morbidity and mortality worldwide. Given the increasing rate of eradication failure associated with standard triple regimens, estimated to be 15-30 % (Chey 2007), ef-

fective salvage therapies should be explored. The objective of this study is to describe efficacy of concomitant therapy as an alternative to standard triple therapy, for the eradication of *H. pylori* infection.



AIM OF THE WORK

Helicobacterpylori eradication rates with standard triple therapy have declined to unacceptable levels. The aim of this work is to compare four- drug “concomitant therapy” with standard triple therapy for *Helicobacter Pylori* Eradication.

REVIEW OF LITERATURE
