بسم الله الرحمن الرحيم

شبكة المعلومـــــات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

﴿ قـــســـم ﴾

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون آية تغيرات

يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

To be kept away from dust in dry cool place of
15 – 25c and relative humidity 20-40 %

بعض الوثائق الأصلية تالفة

بالرسالة صفحات

لم ترد بالأصـــل

Refractory nocturnal reflux in patients with gastroesophageal reflux disease

Thesis submitted for partial fulfillment of MD in Tropical Medicine

BY:

Yasser Mahrous Fouad

Assistant lecturer of Tropical Medicine
Faculty of Medicine
El-Minya University

Supervised by:

Dr. Donald O Castell

Professor and Chairman
Department of Medicine
Graduate Hospital
Allegheny University
Philadelphia PA, U.S.A

Dr. Esmat A Sheba

Professor of Medicine
Faculty of Medicine
Cairo University

Dr. Abdallah E Kilany

Professor of Medicine
Faculty of Medicine
Assiut University

Dr. Madeha M Makhlouf

Assistant prof. Of Tropical Medicine
Faculty of Medicine
El-Minya University

1999 (El-Minya)

Acknowledgement

Praise be to **ALLAH** who guided us to this.

I would like to thank ***Dr. Donald O Castell***: Professor and Chairman, Dept. of Medicine, Graduate Hospital, Allegheny University, Philadelphia, PA, U.S.A. for his continuous supervision, advice and support.

I am grateful to ***Dr. Madiha M A Makhlouf***: Ass. Professor of Tropical Medicine , Faculty of Medicine , El Minya University, for her supervision, guidance, follow up of the work and endless support.

So Many thanks to ***Dr. Esmat A Sheba***: Professor of Internal Medicine, Faculty of Medicine, Cairo University, for his valuable instructions, guidance and continuous support and help.

Many thanks to ***Dr. Abdallah E Kilany***: Professor of Internal Medicine, Faculty of Medicine, Assuit University for his helpful efforts at his motility laboratory at Assuit University Hospital.

Thanks to ***all doctors, technicians and nurses*** at the Esophageal Function Laboratory, Dept. of Medicine, Graduate Hospital, Allegheny University, Philadelphia, PA, U.S.A. for Their kind help.

Abbreviations:

AC	Before meals
BID:	Twice daily
DES:	Diffuse esophageal spasm
ECL:	Enterochromaffin like cells
Fig:	Figure
GER:	Gastroesophageal reflux
GERD:	Gastroesophageal reflux disease
HS:	At bedtime
IEM:	Ineffective esophageal motility
LES:	Lower esophageal sphincter
NE:	Nutcracker esophagus
PPI:	Proton pump inhibitors
UES:	Upper esophageal sphincter

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Introduction

Introduction and Aim of Work:-

Gastroesophageal reflux disease (GERD) is a common chronic disease with multifactorial pathogenesis and underestimated incidence (Castell and Johnston 1996). It is for most patients , life long problem that can impair the quality of life (Castell et al., 1998). Untreated GERD can be associated with considerable morbidity , including complications such as erosive esophagitis, stricture, hemorrhage and Barrett's esophagus with the risk of malignant transformation (DeVault and Castell, 1994)

Typical symptoms of GERD are heartburn and regurgitation. These symptoms are most noticeable after meals and when lying down and are relieved by antacids Atypical symptoms of GERD include angina like chest pain with or without an exertional component . chronic cough . chronic hoarseness , nocturnal asthma. Loss of dental enamel and chronic hiccups (. Sontag.1990. and Hewson et al., 1991 and Devault and Castell, 1994)

Diagnosis of GERD can be confirmed in several ways. Ambulatory pH monitoring is the gold standard of diagnosis of GER. Endoscopy is highly sensitive and specific for diagnosis of esophagitis since it permits direct visualization of the esophageal mucosa (Richter and Castell, 1982), however some patients may exhibit typical GERD symptoms as well as abnormal esophageal acid exposure shown by ambulatory pH monitoring without

endoscopic evidence of mucosal disease (Castell. 1994. and Devault and Castell. 1994). Barium studies are of limited values in the diagnosis of GERD (Castell et al., 1998)

Therapy for GERD involves either the prevention of gastric reflux or the reduction of the ability of reflux to injure the esophageal mucosa or both. Therapeutic goals in the management of GERD include symptom relief, healing of esophagitis when present and prevention of complications or recurrence. Effective maintenance therapy is a pivotal issue since a large percentage of patients require long term therapy (Castell and Johnston. 1996)

Life style modification should be the starting point for all strategies of GERD management. Clinical studies indicate that life style modification in combination with antacids may be sufficient to relieve symptoms in 20% of patients with GERD experiencing esophagitis and a large proportion of those with no mucosal damage (Liebermann. 1987; DeVault and Castell. 1994)

Prokinetic agents facilitate gastric emptying and improve esophageal peristalsis and sphincteric tone. Cisapride appears to be the most promising of the currently available prokinetic agents in the management of GERD. Cisapride provided symptomatic relief and healing of esophagitis with a comparable results to that obtained with standard doses of the H-2 blockers. However in severe GERD . high response rates have not been observed following treatment with

cisapride or other prokinetic agents (Castell and Johnston, 1996; Bell et al., 1992)

Currently, the most effective method of GERD symptom relief and healing of esophagitis is the reduction of acidity and volume of gastric reflux through suppression of acid secretion (Bell et al.,1992). Gastric acid suppression may be achieved by interfering with histamine stimulation of parietal cells (H-2 receptor antagonists) or by interfering with the final step of acid secretion by the parietal cells , the ATPase-deriven H+,K+ pump (proton pump inhibitors) (Castell,1996).

H-2 receptor antagonists (cimetidine, ranitidine, famotidine, and nizatidine) have short duration of action (less than 6-hours) and are effective in suppressing non-stimulated acid secretion but have difficulty in suppressing meal-stimulated acid secretion. Proton pump inhibitors such as omeprazole and lansoprazole have longer duration of action and better suppression of gastric acid secretion as they inhibit both meal stimulated and non stimulated gastric acid secretion (Bell et al., 1992; Devault and Castell, 1994)

Proton pump inhibitors (PPI) are the most effective medical treatment for patients with GERD. Those patients requiring more than a single daily dose of PPI should receive the medication twice daily before breakfast and before dinner (BID) as this results in superior 24-hour gastric acid control compared to giving a double dose of PPI once daily (Hatlebakk ,1998, Kuo and Castell, 1998,).

Recent studies show that approximately 70 % of patients with GERD will have nocturnal gastric acid breakthrough defined as >1-hour nocturnal gastric pH <4 despite PPI BID (Leite et al., 1998 . Peghini et al., 1998) and many of them have accompanying abnormal nocturnal esophageal acid exposure (Katz, 1998). Nighttime acid reflux has the potential for injury of esophageal mucosa and it may provide an explanation for patients with erosive esophagitis or extraesophageal manifestations who remain refractory to treatment . Nocturnal gastric acid breakthrough with accompanying reflux has important implications in patients with Barrett`s metaplasia because of decreased esophageal sensitivity to acid (Johnson et al., 1987). These patients may be asymptomatic despite the presence of continued esophageal acid exposure (Katzka and Castell,1994).

The pathogenesis of continued esophageal acid exposure in patients with nocturnal gastric acid breakthrough on proton pump inhibitors twice daily is not clear, in particular the role of esophageal motility abnormalities and low LES pressure in the genesis of GER during acid breakthrough has not been elucidated. These patients also need more aggressive antireflux therapy

Aim of the work :

1-To study the esophageal motility in patients with GERD on PPI BID and to compare patients with continued abnormal nocturnal GER on PPI BID to patients who have no nocturnal GER on PPI BID regarding their esophageal motility.

2-To compare different treatment modalities in patients with nocturnal GER refractory to PPI BID.