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الأصلية تالفة

Ain Shams University Institute of Postgraduate Childhood Studies (Medical Studies Department)

# UPPER GASTROINTESTINAL MORPHOLOGICAL CHANGES AND GUT CONTAMINATION IN CHILDHOOD CONSTIPATION

Thesis Submitted for Fulfillment of Ph.D. Degree in Medical Childhood Studies

> By Abdulla Mansour Bin El-Zoa M.B. B.Ch., M.Sc. (Pediatrics)

> > Under the Supervision of

Prof. Dr.

Mohamed Salah Mostafa

Prof. & Head of the Department of

Medical Studies Institute of Postgraduate

Childhood Studies, Ain Shams University

Assist. Prof. Dr.

Assist. Prof. of Clinical Pathoto

Arig Ali Seif

Faculty of Medicine.

Ain Shams University

Prof. Dr. Hamed Ahmed El-Khayat

> Professor of Pediatrics Faculty of Medicine Ain Shams University

> > Assist. Prof. Dr.

Moustafa Abdel Aziz El-Hodhod

Assist. Prof. of Pediatrics Faculty of Medicine.

Ain Shams University

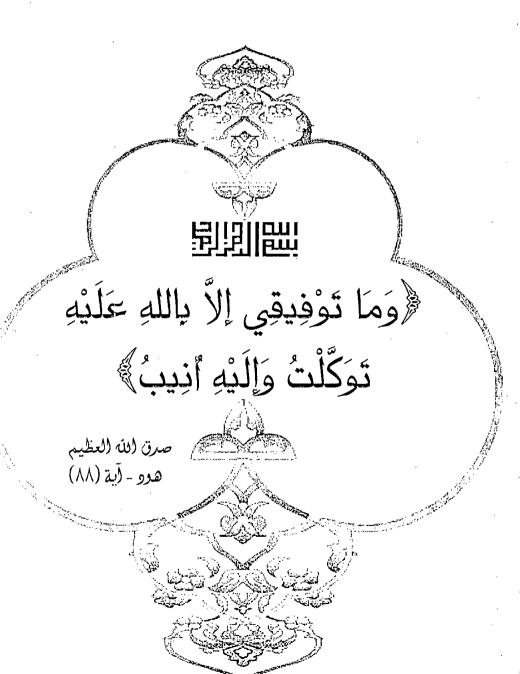
Dr.

Hanan Abd-Allah El-Gamal

Lecturer of Medical Childhood Studies Institute of Postgraduate Childhood Studies

Ain Shams University

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### **ABSTRACT**

# Upper Gastrointestinal Morphological Changes and Gut Contamination in Childhood Constipation

Background: Constipation, defined as passing infrequent of difficult hard stool, is a common pediatric problem. As upper G.I. symptoms are of common occurrence in constipated children, it was hypothesized that dysmotility and delayed gastric emptying, which were reported in constipated patients, may predispose to gut contamination which in turn may lead to morphological and functional disturbances of the upper G.I. Hence the aim of our study was to evaluate upper G.I. morphological changes, through upper G.I. endoscopy and searching for gut contamination and assessment of orocecal Transit Time (OCTT).

Methods: The study was conducted on 56 children having chronic constipation (34 males and 22 females, mean age 5.4±1.7 years) and age and sex matched 112 children served as controls. All children were subjected to lactulose breath hydrogen test (LBHT) for assessment of small bowel bacterial overgrowth (SBBO) and orocecal transit time (OCTT). Upper G.I. endoscopy was done for study cases to evaluate upper G.I. morphology. During upper G.I. endoscopy, an antral biopsy was taken for assessment of H. pylori by rapid urease test and also a sample of small intestinal aspirate was obtained and cultured for assessment of SBBO.

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## LIST OF ABBREVIATIONS

BHT Breath hydrogen test BMI Body mass index  $C_3b$ Complement 3 b. Cag Cytotoxin associated gene CCK Cholecystokinine CFU Colony forming unit **CRF** Corticotrophine-releasing factor External anal sphincter EAS Esophageal gastroduodenoscopy **EGD** Enzyme-linked immunosorbant assay **ELISA ERCP** Endoscopic retrograde cholangiopancreatograrphy Endoscopic ultrasonography **EUS** Fasting breath hydrogen FBH<sub>2</sub> G.I Gastrointestinal Glucose breath hydrogen test **GBHT** Gastro-oesophageal reflux disease GORD Gastrin releasing peptide GRP Internal anal sphincter IAS Ž **ICCs** Interstitial cells of Cajal *i*) Interleukin-1 IL-1 7 Lactulose breath hydrogen test **LBHT** 8 Lipopolysaccharide LPS: 0 MALToma Mucosa-associated lymphoid tissue lymphoma. / Multiple endocrine neoplasia MEN Non-adrenergic non-cholinergic NANC

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# INTRODUCTION AND AIM OF THE STUDY