شبكة المعلومات الجامعية

التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم

HANAA ALY

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جامعة عين شمس

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قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
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تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

HANAA ALY

Screening for Celiac Disease among Patients with Chronic Kidney Disease

Thesis

Submitted for partial Fulfillment of Master Degree in Pediatrics

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2019

سورة البقرة الآية: ٣٢

Acknowledgment

First and foremost, I feel always indebted to **ALLAH**, *the Most Kind and Most Merciful.*

I'd like to express my respectful thanks and profound gratitude to **Prof. Magid Ashraf Abdel Fattah Ibrahim,** *Professor of Pediatrics - Faculty of Medicine- Ain Shams University for his keen guidance, kind supervision, valuable advice and continuous encouragement, which made possible the completion of this work.*

I am also delighted to express my deepest gratitude and thanks to **Prof. Ahmed Mohamed Hamdy,** *Professor of Pediatrics, Faculty of Medicine, Ain Shams University, for his kind care, continuous supervision, valuable instructions, constant help and great assistance throughout this work.*

I am deeply thankful to **Dr. Ragia Marei Ali Said,** *Assistant Professor of Pediatrics, Faculty of Medicine, Ain Shams University, for her great help, active participation and guidance.*

I would like to express my hearty thanks to all my family for their support till this work was completed.

Last but not least my sincere thanks and appreciation to all patients participated in this study.

Doha Ahmad Anwar

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List of Abbreviations

Abb.	Full term
APCs	*Antigen-presenting cells.*
CAKUT	*Congenital anomalies of the kidney and urinary tract.*
CD	*Celiac disease.*
CKD	*Chronic kidney disease.*
CRF	*Chronic renal failure.*
CVD	*Cardiovascular disease.*
DGPA	*Deaminated gliadin peptides antibodies.*
EATL	*Enteropathy associated T-cell lymphoma.*
eGFR	*Estimated glomerular filtration rate.*
EMA	*Endomysial antibodies.*
ESRD	*End-stage renal disease.*
GFD	*Gluten-free diet.*
GFR	*Glomerular filtration rate.*
GI	*Gastrointestinal.*
HLA	*Human leukocyte antigen.*
HTN	*Hypertension.*
IEL	*Intraepithelial lymphocytes.*
IgA	*Immunoglobulin A.*
NKF/KDOQI	*National Kidney Foundation/Kidney Disease and Outcome Quality Initiative.*
PD	*Peritoneal dialysis.*
RAAS	*Renin angiotensin aldosterone system.*
RCD	*Refractory celiac disease.*
ROD	*Renal osteodystrophy.*
tTG	*Tissue transglutaminase.*

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INTRODUCTION

The terms chronic renal failure (CRF) and chronic renal insufficiency have been replaced by the term chronic kidney disease (CKD) which was proposed by National Kidney Foundation/Kidney Disease and Outcome Quality Initiative (NKF /KDOQI) group in 2002 for any patient who has kidney damage lasting for at least 3 months with or without a decreased GFR or any patient who has a GFR of<60 mL/min/1.73 m^2 lasting for 3 months with or without kidney damage. CKD refers to a multi-systemic clinical condition characterized by an irreversible deterioration of renal function that can further progress to end-stage renal disease (ESRD) ***(Oliveira and Mak, 2018).***

Celiac disease (CD) is one of the most common lifelong food-related disorders worldwide. CD is a permanent intolerance to ingested gluten present in wheat, rye and barley resulting in immune- mediated enteropathy in individuals who are genetically susceptible to the disease ***(Lindfors et al., 2019).***

Until the mid-1970s, CD was described as a malabsorption syndrome during childhood. However, more studies have shown that the disease can arise at any age and affect any organ in the body ***(Tersigni et al., 2014).***

CD is thought to be underdiagnosed owing to the fact that its extra intestinal manifestations can misdirect the diagnosis and in some cases they are the only clinical manifestations. Some of these manifestations are direct consequences of autoimmunity, whereas others are indirectly related to inflammation and/or malabsorption ***(Leffler et al., 2015).***

The key to CD diagnosis is increased awareness of the wide spectrum of symptoms and screening in risk groups ***(Lindfors et al., 2019).***

Although intestinal biopsy remains the gold standard for the definite diagnosis of CD, highly sensitive and specific serological tests, such as tissue transglutaminase (tTG), endomysial IgA (EMA) and deamidated gliadin peptide antibodies, have become more important in the screening of large populations. Serological tests are widely used to facilitate selection of patients for diagnostic endoscopy and small bowel biopsy ***(Caio et al., 2019).***

CD is a lifelong disease and complete avoidance of gluten-containing food products is the only known effective treatment for it. There are challenges in maintaining a good compliance to gluten free diet (GFD), therefore it is essential that a reliable diagnosis of CD is made before instituting GFD in the patients ***(Bascuñán et al., 2017).***

Mass screening of CD by serology in the general population has been suggested as it fulfills many of the WHO criteria for mass screening as it is an important health problem,common, simple to diagnose, and treatment is available. There is evidence that screening at-risk groups for CD could be beneficial, but more studies are needed before large scale population screening can be recommended ***(Kivelä and Kurppa, 2018).***

Chronic kidney disease (CKD) and end-stage renal disease (ESRD) cause many organ complications including gastrointestinal (GI) tract (GIT).CKD affect whole GIT parts leading to multiple different lesions, GIT involvement in CKD manifests as uremic anorexia, gastroenteritis, nausea, vomiting, uremic fetor, idiopathic ascites, peptic ulcer disease, GIT bleeding, viral hepatitis, and peritonitis ***(Chillon et al., 2016).***

AIM OF THE WORK

The aim of this study is to:

1- Screening for celiac disease among pediatric patients with chronic kidney diseases.