

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

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Epidemiology of Chronic Renal Failure: Hospital Based Study

Thesis

*Submitted for Partial Fulfillment of the
M.Sc. Degree of Internal Medicine*

By

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محضر

اجتماع لجنة الحكم على الرسالة المقدمة من
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توطئة للحصول على درجة الماجستير / الدكتوراه
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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

الْمَ ذَلِكِ الْكِتَابِ لَا رَيْبَ فِيهِ

هُدًى لِلْمُتَّقِينَ

صدق الله العظيم

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Abstract

Unknown etiology is the commonest etiology of CRF in urban group and this can be explained by: presence of risk factors.

Hypertension: is a common cause of CRF but is the first risk factor in most cases.

Schistosomal diseases: still constitutes a health burden in rural areas.

D.M. is a common cause of CRF especially in urban and semiurban groups.

Chronic pyelonephritis and obstructive uropathy, are more common in rural areas and may be due to a role for bilharziasis.

Kidney biopsy, may resolve some of the undiagnosed cases and should be done early before ESRD.

Anemia: is a common association in different groups.

Key word

Epidemiology of Chronic Renal Failure: Hospital Based Study

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TO MY PARENTS
TO MY WIFE
TO KHADEGA & AHMED

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INTRODUCTION

Chronic renal failure (CRF) is irreversible and progressive failure of glomerular and tubular functions leading to retention of waste products and disturbance of the body internal environment (Strutz and Muller, 1995).

About 1 of every 1,000 Americans receive treatment for end-stage renal disease, for a total of nearly 300,000 affected individual. The prevalence of treated end-stage renal disease is increasing at a rate of about 8% per year. It is unclear how many patients with end-stage renal disease are untreated (and die as a result) (U.S. Renal Data System, 1998).

Similarly the population requiring regular renal replacement therapy has been continuously growing in Egypt (Letarte, 1996).

In the last three decades, it has expanded from less than 10 per million of the general population in 1974 (Barsoum et al., 1974). To about 165 per million in 1995 (Barsoum, 1995), by the year 2000, the prevalence of

dialysis patients in Egypt became 31A per million (Egyptian Renal Registry, 5th Annual Report, 2000].

Many causes were incriminated in the etiology of CRF. It was found that most of renal diseases can eventually lead to significant reduction in function (Elnahas and Winears, 1996).

Many patients present very late in their illness with small, shrunken kidneys from which no informative renal tissue can be obtained by biopsy and so they are classified as being of unknown etiology (Elnahas et al., 1991).

AIM OF THE WORK:

The *aim* of the work is to get a profile of the possible risk and etiological factors that are associated with chronic renal failure with emphasis on rural / urban differential.

CHAPTER I

CHRONIC RENAL FAILURE

DEFINITION:

Chronic renal failure (CRF) is defined as the irreversible, substantial, and usually long-standing loss of renal function causing ill-health, usually referred to as uremia. End-stage renal failure (ESRD) is the degree of chronic renal failure that without renal replacement treatment would result in death. Diminished renal reserve precedes chronic renal failure; plasma biochemistry is then normal and there are no clinical consequences of the reduction in the glomerular filtration rate below the normal range (El-Nahas and Winearls, 1999).

PATHOPHYSIOLOGY:

(A) Chronic Failure:

Approximately one million nephrons are present in each kidney, each contributing to the total glomerular filtration rate (GFR). Regardless of the etiology of renal injury, with progressive destruction of nephrons, the kidney has an innate ability to maintain GFR by hyperfiltration and compensatory hypertrophy of the remaining healthy nephrons. This nephron adaptability allows for continued normal clearance of plasma solutes such that substances such as urea and creatinine start to