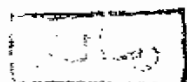


A STUDY OF PERICARDIAL DISEASE IN PATIENTS
ON CHRONIC HEMODIALYSIS IN AIN SHAMS UNIVERSITY
DIALYSIS CENTRE

THESIS

SUBMITTED IN PARTIAL FULFILLMENT FOR
THE MASTER DEGREE IN GENERAL MEDICINE



BY

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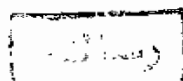
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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

" قالوا سبحانك لا علم لنا الا ما علمتنا

انك انت العليم الحكيم "

صدق الله العظيم

سورة البقرة : آية ٢٢

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INTRODUCTION & AIM OF THE WORK

Introduction

Uremic pericarditis is an important manifestation of uremia and appears to be a part of generalised involvement of serous membranes. (Ajjery et al., 1968).

The estimated incidence of clinical pericarditis ranged 5 % and 20 % in patients with chronic renal failure under regular hemodialysis. (Comty, 1983)

The etiology of pericarditis in uremia remains unknown despite attempts to find a causative factor (Comty et al., 1971).

Chest pain is the presenting symptom in 60-70% of patients, but fever, hypotension during dialysis and mental confusion are important manifestations of uremic pericarditis. (Ribot et al., 1974).

Echocardiography is a useful and highly accurate technique for diagnosing silent pericardial effusion (Comty, 1983), and for evaluating the prognosis of the disease and effectiveness of its management (Shapiro, 1983).

Aim of Work

The aim of this work was to study the incidence of pericardial disease among patients on regular hemodialysis therapy in the Dialysis Centre of Ain Shams University Hospitals, and to correlate the presence of pericardial disease with other clinical manifestations, biochemical parameters, radiological, electrocardiographic and echocardiographic examination.

We aim to study the prevalence of the disease and its course to define the outcome and prognosis.

REVIEW OF LITERATURE

Pathology of Uremic Pericarditis

The initial lesion in the typical case of uremic pericarditis is an aseptic inflammatory process with fibrin formation. The inflammatory process can be more severe with extensive thickening of parietal and visceral layers of the pericardium and areas of haemorrhage and fibrinous adhesions between both layers of the pericardium. (Comty 1983).

The histological appearance in active cases is that of acute inflammatory process which had fibrinous pericarditis showing prominent vascularization of the pericardium. But healed cases showed pericardial fibrosis with no fibrin present. (Beaudry et. al, 1966, Skov et.al, 1969).

Pericardial effusion is usually present and may be serous, serosanguinous or frankly haemorrhagic and frequently is loculated. (Baldwin and Edwards 1969), (Comty 1983).

Radel et.al, 1971 stated that subacute constrictive pericarditis resembles the relapsing seroconstrictive pericarditis seen in non uremic individuals representing a mid point in the spectrum of the pericardial disease extending from pericardial effusion with tamponade at one end to constrictive pericarditis at the other.

Chronic constrictive pericarditis is a rare

complication of uremic pericarditis where both layers of the pericardium are thickened by fibrosis and to the underlying epicardium. (Baldwin 1976)

So far calcification has not been reported in constrictive uremic pericarditis. As with pericarditis from other causes, myocarditis may occur. (Langendorf and pirani 1974).

INCIDENCE AND MORTATITY

Patients who develop uremic pericarditis can be divided into two groups. The first group are those who develop end-stage renal failure and present with pericarditis before initiation of dialysis.

The incidence in this group was high but there is a steady decline probably reflecting improved conservative management by diet therapy and earlier elective initiation of chronic haemodialysis. (Wray and Stone 1976).

The incidence of pericarditis in patients with chronic renal failure prior to the initiation of dialysis is shown in table I (Comty 1983).

Table I

Incidence of pericarditis in patients with chronic renal failure prior to the initiation of dialysis.

<u>Year of Study</u>	<u>Authors</u>	<u>Incidence</u>
1954	Wacker & Merrill	50 %
1960-1967	Bailey et al	41 %
1964-1971	Dreuke et al	15.4 %
1966-1970	Comty et al	13.1 %
1960-1974	Ribot et al	1.7 %
1971-1975	Comty et al	8.9 %
1971-1975	Wray & Stone	16.0 %
1972-1976	Dreuke et al	12.1 %
