A Study of Renovascular Affection in Coronary Artery Disease

THESIS

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INTRODUCTION

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TO MY FATHER, MOTHER, WIFE AND MY SON EMANUEL

ACKNOWLEDGMENT

Firstly, I am deeply thankful to God by the grace of whom, the present work was possible.

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LIST OF ABBREVIATIONS (key words)

CT connective tissue

CAD coronary artery disease

PTCA percutaneous transluminal coronary angioplasty

PTRA percutaneous transluminal renal angioplasty

PRA plasma renin activity

BP blood pressure

RVA renovascular affection

ECG electrocardiogram

ACE angiotensin converting enzyme

SIG significant

NS non significant

IVUS intravascular ultrasound

GFR glomerular filtration rate

PA posteroanterior

INTRODUCTION

The coexistence of different clinical syndromes due to atherosclerosis in different organs is not rare and emphasizes the diffuse nature of this vascular process.

Patients undergoing cardiac catheterization with documented coronary artery disease are a high risk population for renal artery stenosis particularly in the presence of other predictive factors such as hypertension(Tami et al.,1995).

It is not always justifiable to label hypertension in the presence of renal artery stenosis as renovascular hypertension as the two conditions simply may coexist. (Derlex et al.,1994).

Peripheral vascular disease is another predictive factor of high risk population.

Also cerebrovascular disease is a manifestation of atherosclerotic syndrome in central nervous system.

Arteriography is the only method of demonstrating precisely the presence of renovascular affection .

Although arteriography is some times less than hundred percent reliable in assessing the significance of such a lesion, it is a necessary preliminary to any more intensive search for the operable patient(Abrams1975).

It also discloses a significant group of other renal lesions in which ischemia may coexist with hypertension.

Renal angiography is the only method for direct visualization of renal arteries and is the gold standard for comparison with less invasive procedures (Tami et al., 1995).

With the application of newer methods of arteriography to a variety of vascular diseases it became apparent that many arterial stenosis were not of hemodynamic or clinical significance and that severe renal artery stenosis may exist without associated hypertension.