Papaverine versus Prostaglandin E1 evaluation by Penile Pharmacological Duplex Ultrasonography in Patients after Pelvic Surgery

Thesis Submitted for the Partial Fulfillment of the Master Degree in Urology

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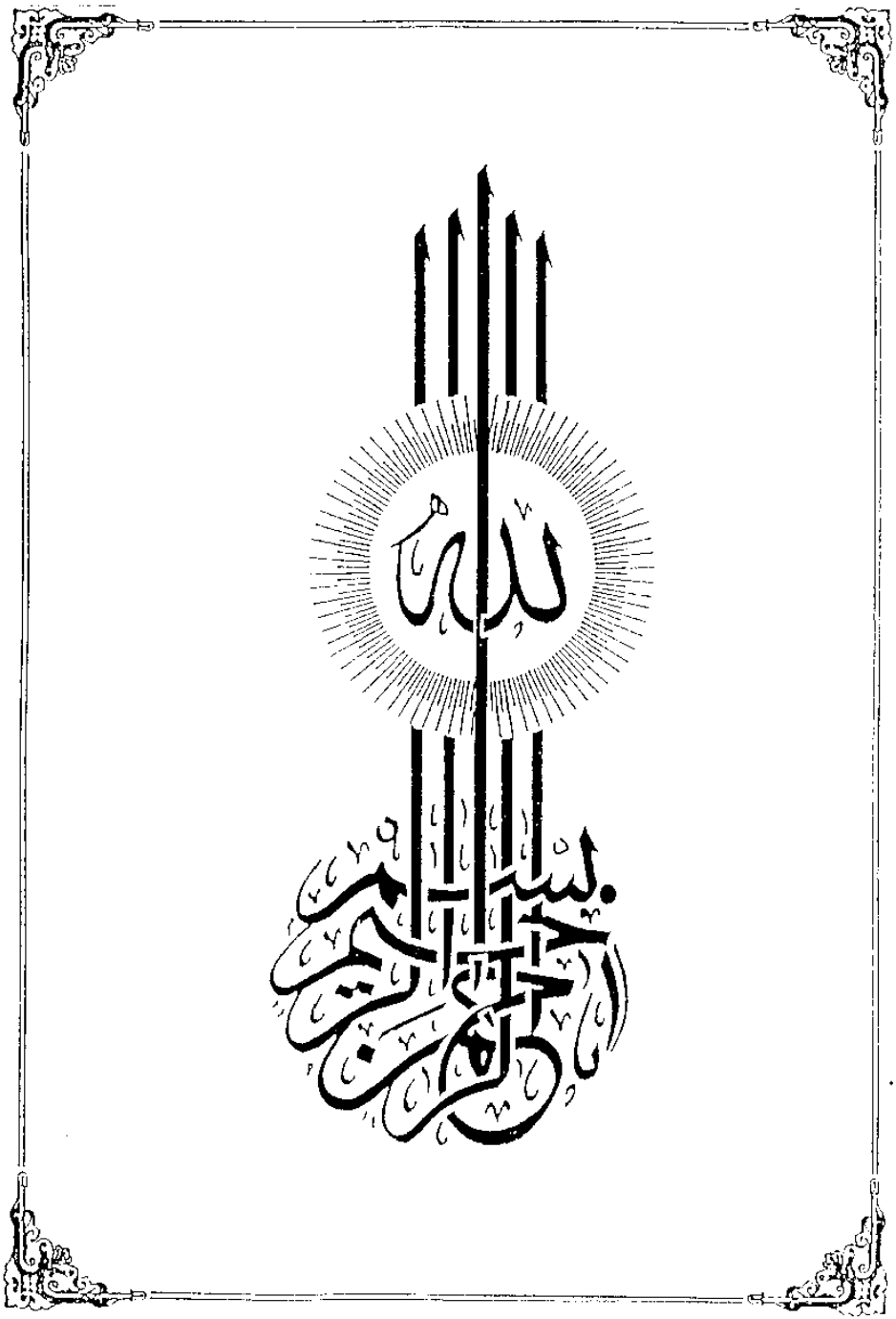

بسم الله الرحمن الرحيم

قالوا سبحانك لا علم لنا إلا ما علمتنا

إنك أنت العليم الحكيم

صدق الله العظيم

سورة البقرة الآية ٣٢

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Introduction and aim of the work

INTRODUCTION

Intracavernous injection of vasoactive agent is an accepted method for diagnosis and treatment of penile erectile dysfunction ***(Virag, 1982).***

A positive test, defined by a rigid erection, implies a normal vascular status. If only partial short-lived or no erection results, then haemodynamic impairment may be suspected ***(Lue and Tanagho, 1987).***

Recently, the introduction of pulsed Echo Doppler investigation produced new evaluation parameters, such as artery size increase, flow rate within the arteries and peripheral resistance evaluation ***(Lue et al., 1985).***

Penile Duplex ultrasonography is a subtle method to monitor cavernous haemodynamic responses to pharmacological stimulation ***(Benson, 1993).***

Several studies have been performed to standardize the diagnosis methodology, as well as parameters obtained ***(Shabsigh et al., 1989).***

The ideal agent for pharmacological erection testing would be one that would cause full erection in all men with normal cavernous vascular function without producing prolonged erection. Unfortunately to date the ideal drug is not available nor have the clinical criteria for erectile response been defined ***(Benson, 1993).***

Papaverine hydrochloride and phentolamine were first pharmacotherapeutic agents used for erectile dysfunction diagnosis and treatment by self injection *(Virag et al., 1984).*

Thereafter prostaglandin E1 was presented as an intracorporeal agent which produce erection in a greater percentage of patients than papaverine alone or combined with phentolamine *(Stakl et al., 1988).*

Aim of the work:

The aim of this work is to determine the diagnostic efficacy of papaverine and prostaglandin E1 by studying haemodynamic effects in 20 patients with erectile dysfunction after pelvic surgery using Duplex Ultra-sonography.