ENDOSCOPIC TREATMENT OF VESICOURETERAL REFLUX AND URINARY INCONTINENCE USING POLYTETRAFLUOROETHYLENE (TEFLON) PASTE INJECTION

Thesis
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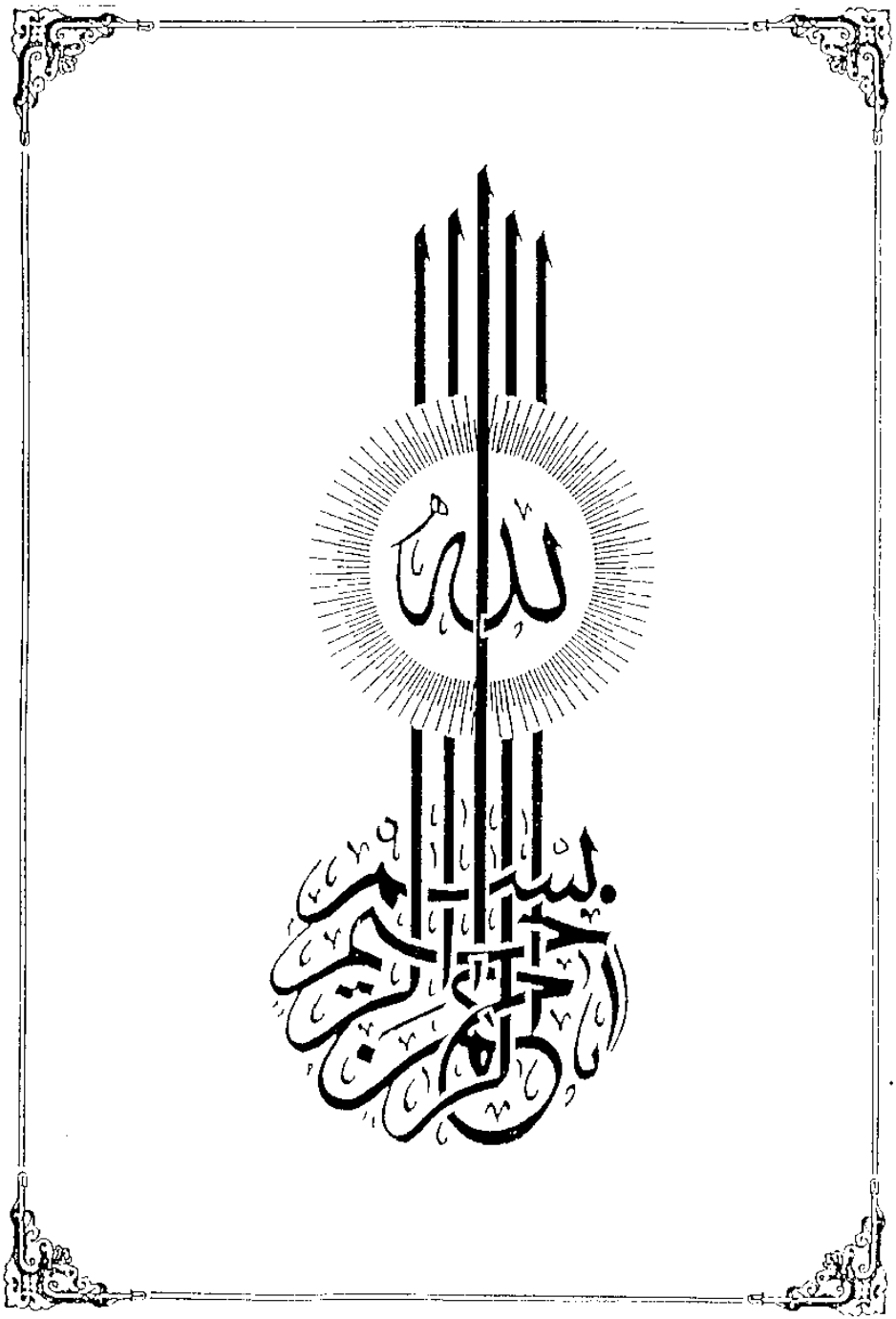

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Dedication

To the soul of my father

Contents

Introduction

Polytetrafluoroethylene (Teflon) is one of the most inert plastic materials that produces minimal inflammatory response in tissues.

Polytetrafluoroethylene particles have been injected for otolaryngological surgery for 25 years with no untoward effects (**Lewy,1983**).Its main application now-a-days is in the treatment of paralytic vocal dysphonia by intra-cordal injection (**Arnold ,1962**).

In urology Teflon has been used in the treatment of vesicoureteral reflux and urinary incontinence. The subureteric injection of Polytetrafluoroethylene (Teflon) for endoscopic correction of vesicoureteral reflux was first utilised in 1981 by Matouschek and was applied to both the bladder neck and periurethral tissues by Politano in 1982. It was later popularized by O'Donnell and Puri in 1984 for the treatment of vesicoureteral reflux.

Understanding of the causes,consequences, and natural history of vesico ureteral reflux, have narrowed the gap between the proponents of surgical and conservative (i.e.nonoperative) management of vesicoureteric reflux. Specific indications of anti - reflux surgery have been defined ,and surgical techniques have been improved to the point at which operative correction when necessary is relatively safe and reliable. Although recent open surgical techniques are increasingly more successful, less time consuming and associated with less morbidity, yet a reliable endoscopic technique to cure reflux is on appealing alternative. This procedure that takes no more than 15 minutes and the patient returns to full activity in the same day ,can correct 85 to 95% of cases **(O'Donnell and Puri ,1986).**

Urinary incontinence remains a major unresolved urologic problem. Many surgical procedures and devices have been developed and tried with varying degrees of success, including suspension procedures, plications, constrictive procedures and various combinations of these. In more recent years a variety of prosthetic devices based on the compression of the urethra at a given point, have become popular **(Scott,1973)**.

With the exception of urinary incontinence secondary to neurogenic disorders, incontinence occurs when resistance to urine flow has decreased excessively .

That is ,urethral resistance to urine outflow, from whatever cause, has been lowered to the point where it can no longer resist normal detrusor tone or increased intra-abdominal pressure. While this concept seem to be an oversimplification of the problem ,nearly all procedures developed to restore continence are designed on this basis.

The injection of Polytetrafluoroethylene paste into the urethral and periurethral tissues add bulk to these tissues and stimulate an ingrowth of fibroblasts at the injection site, which help hold the particles within the tissues as well as produce compression of the urethral lumen at the injection site **(Politano, 1982)**. Politano has reported a success rate of 75% in his attempts to produce continence in 165 patients (111 males and 54 females) with urinary incontinence from variety of causes using periurethral injection of polytetrafluoroethylene paste.

For both subureteric and periurethral Teflon injections ,the complications have been minimal and rare and injections do not contradict subsequent surgery should it become necessary **(Schulman et al,1987;Politano,1982).**

Aim of the work

The aim of our work is to evaluate the procedure of endoscopic Teflon injection for the treatment of both ,vesicoureteric reflux and urinary incontinence and to assess the effectivness of this procedure in terms of success, morbidity and complications.