

# **SEXUAL PROBLEMS IN THE DIABETIC MALE**

THESIS

Submitted for Partial Fulfillment of the Master  
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BY

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

وقتل  
اعملوا  
فسيبى الله  
عملكم ورسوله  
والمؤمنون

سورة التوبة الآية " ١٠٥ "

"صدق الله العظيم"



*To The Memory  
of  
My Mother & Brother,  
To  
My Father,  
My Wife and Sons.*

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***INTRODUCTION AND  
AIM OF THE WORK***

## INTRODUCTION

*Diabetes mellitus is a multisystemic disease and is the most common endocrinopathy that deserves mentioning in sexual medicine since an estimate of 50% of diabetics develop some sort of sexual dysfunction in their lives.*

*For almost two hundred years it has been recognized that diabetes mellitus is frequently associated with impotence, erectile disturbances and retrograde ejaculation.*

*It is generally claimed that 90% of sexual dysfunctions are psychogenic in origin. Recently the simultaneous presence of psychogenic and organic factors has become more fully appreciated. It is important to notice that the finding of an organic cause of sexual dysfunction does not exclude psychogenic impotence and vice versa.*

*Diabetic men are prone to a variety of sexual problems. It is probable that most of these difficulties are the result of a progressive physical disorder upon which a psychological reaction is superimposed.*

*Assessment needs to take account of both the physical and psychological components of the problem. The aim of the management is to help the patient and his partner to enjoy sexual function*

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to the full within whatever limits are set by irreversible factors. Management therefore involves correcting potentially reversible physical and psychological factors and helping the patient and his partner adapt to the remaining irreversible changes in sexual function.

Using this approach it may be possible to improve the prognosis of what in the past has been dismissed as an intractable clinical problem.

A chapter is written on andrological problems in Arabic medicine. Its aim is to study of the idea of Arab physicians concerning the practice of medical profession and to make a comparison between the Arab description of sexual dysfunctions mentioned in their works and that of modern medicine from both the clinical and remedial point of view.

In this review I should like to stress the point that this thesis is no more than a trial on such a wide subject as the sexual dysfunctions associated with diabetes mellitus that needs more scientific research.

### **AIM OF THE WORK**

*The aim of this work is to review the literature concerning the sexual problems of the diabetic male, their natural history, classification, pathogenesis, diagnosis, treatment and prognosis,*

*Since the subject covers a wide range of problems I have confined myself with the study of the most important sexual dysfunctions encountered by the diabetic male.*

## **CHAPTER II**

### **PHYSIOLOGY**

- \* Male Sexual Response**
- \* Hormones**
- \* Erection**
- \* Mechanism of Ejaculation**

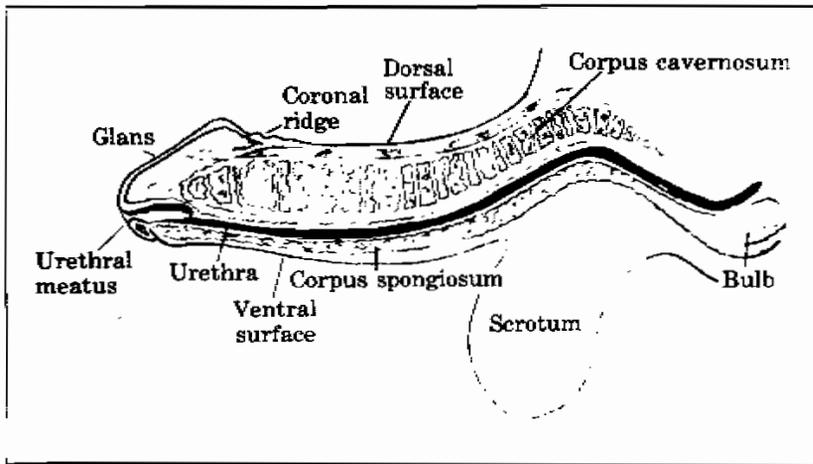
## THE MALE SEXUAL RESPONSE

The human sexual response is a highly rational and orderly sequence of physiological events, the object of which is to prepare the bodies of two mates for reproductive union. If the act of sexual intercourse is to be successful, the genital organs of each partner must undergo profound changes in shape and function from their basal state. It is literally impossible for coitus to occur when the penis is a flaccid appendage and the vagina is tight and dry (Kaplan, 1974) (Fig. 1, 2, 3).

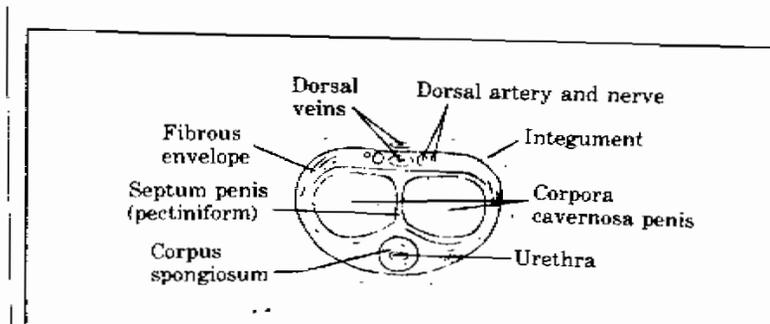
Distinctly different, but complementary, physiological changes occur in both sexes to prepare the unaroused individual for coitus. These changes are not limited to the genital area. Sexual stimulation elicits neurological, vascular, muscular, and hormonal reactions which affect the functioning of the entire body to some degree. The transformation of the genitals is brought about mainly by local vasocongestion. The reflex dilatation of penile blood vessels in response to sexual stimuli causes the genitals to become engorged and distended with blood. This produces erection in the male.

In their pioneer volume on sexual physiology, Masters and Johnson divided the male and female sexual response into four successive stages, excitement, plateau, orgasm and resolution (Kaplan, 1974). (Fig. 4, 5, 6, 7, 8).

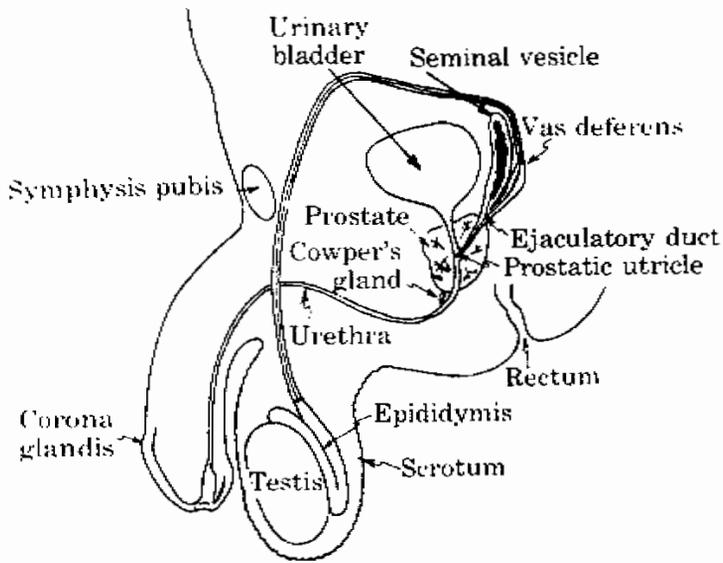
In the male the excitement stage is signaled by the attainment of penile erection, in addition, the scrotal sac flattens and thickens while



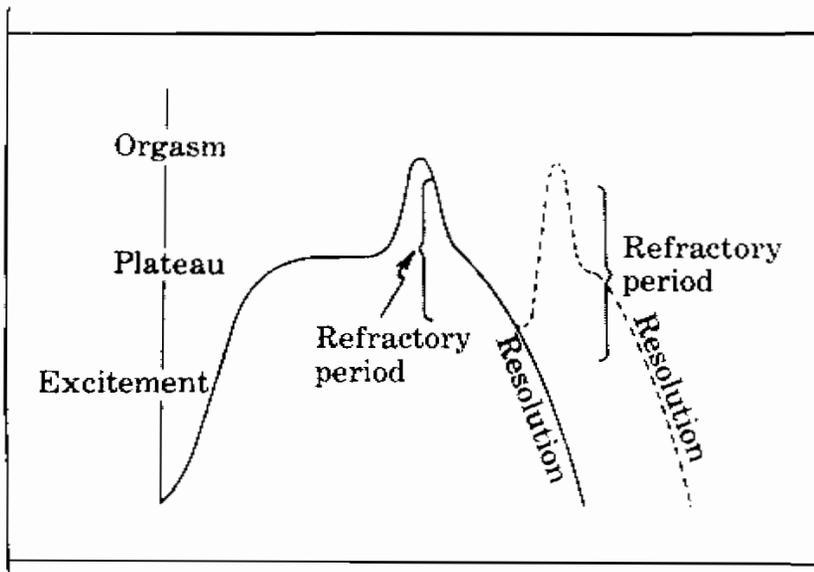
**Fig.( 1 ):** The penis:Normal anatomy (Lateral view)from Masters and Johnson(1966).



**Fig.( 2 ):** The penis:Normal anatomy(Transverse section)from Masters and Johnson(1966).



**Fig.( 3 ):** Male pelvis: Normal anatomy (Lateral View),from Masters and Johnson(1966).



**Fig.( 4 ):** The male sexual response cycle from Masters and Johnson(1966).

the testes begin to elevate due to shortening of spermatic cord.

*Masters and Johnson plateau stage is essentially a more advanced state of arousal, which occurs immediately prior to orgasm. During plateau the local vasocongestive response of the primary sex organs is at its peak in both genders. In the male the penis is filled with blood to the limits of its capacity, the erection is firm and the shaft is extended to its maximum size. The testicles have become engorged with blood and are now larger than their basal size. ( Fig.6.) In addition the reflex contraction of the cremasteric muscles and of the spermatic cords has elevated the testicles, and lifted them into close opposition against the perineum.*

*During orgasm(Fig 7), which is considered the most intensely pleasurable of the sexual sensations, semen spurts out of the erect penis in three to seven ejaculatory spurts at 0.8 seconds intervals (Kaplan ,1974).*

*Masters and Johnson (1970) have described the dual components of the male orgasm: the first consists of contractions of the internal organs and signal the sensation of ejaculatory inevitability . The rhythmic contractions of the penile urethra and the muscles which follow immediately thereafter constitute the second component and are experienced as the orgasm proper. After orgasm the male is refractory to sexual stimulation.*