CRYPTORCHIDISM

Thesis
Submitted in Partial Fulfilment of the
Requirement of The Master Degree in
Dermatology and Venereology

By

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(M.B. , B.Ch.)

Under The Supervision of

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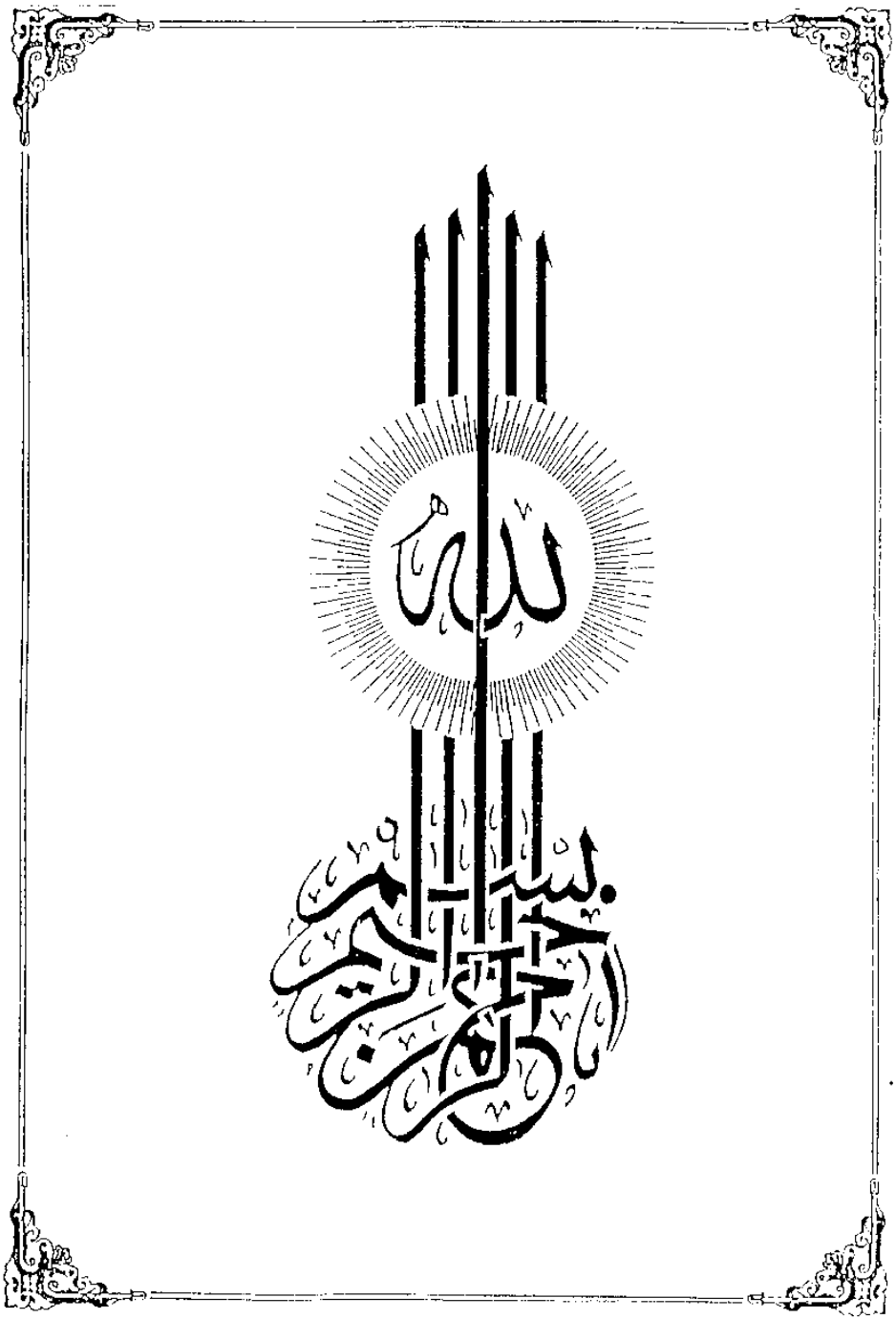

بسم الله الرحمن الرحيم

"قالوا سبحانك لا علم لنا إلا ما علمتنا
إنك أنت العليم الحكيم"

صدق الله العظيم

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INTRODUCTION

INTRODUCTION AND DEFINITION

Cryptorchidism "hidden testis" is considered as one of the most common disorders of sexual differntiation and can have a profound effect on male fertility. According to Bourne, (1984) cryptorchidism is classified into four types : Undescended, ectopic, retractile and congenitally abscent testicle (Anorchism).

1- Undescended Testicle :-

In this type the testicle has simply been arrested in the normal course of descent and may be located intra abdominally, in the inguinal canal, or just outside the inguinal ring too high in the scrotum.

2- Ectopic Testicle :-

In this type the testicle has migrated outside its normal route of descent and may be perineal, suprapubic, penile or in the thigh.

3- Retractile Testicle :-

This may be due to hyperactive cremasteric

reflex. It can be located in the scrotum at times and undescended at other times, Bourne (1984).

4- Anorchism :-

This includes the abscence of one or both testes. The incidence of unilateral anorchism is 1 : 5,000 males in the general population, while the incidence of bilateral testicular abscence is 1 : 20,000 males in the general population.

The cause of anorchism varried and is difficult to be established in each case. Many factors have been employed in the etiology :

a- Intrinsic gonadal disorders responsible for its precocious involution.

b- Pre-or postnatal gonadal atrophy caused by infection, trauma, or torsion.

c- Pre-natal gonadal atrophy induced by hormones, when either an increase in androgen production occurs during gestation or hormones are administered during gestation (Das and Amar, 1980).

Nistal and Paniagua (1984) : Reported that undescended testes may be classified into three categories :-

1- Retractile Testicle :-

The testes are not located in the scrotum when the child is examined, even though they are palpable in the inguinal area and can be manipulated into the scrotum by the examiner with a stroking movement. Due to cremasteric reflex, which is very active in children, these testes are easily withdrawn from the scrotum to a higher location.

2- Cryptorchid Testicle :-

Testes are retained somewhere along the normal pathway of the testicular descent in an abdominal, inguinal, or high scrotal position, these testes can not be manipulated into the scrotum and can be descended only through hormonal or surgical treatment.

3- Ectopic Testicle :-

The testes are lying outside the normal pathway of testicular descent and may be classified into

two groups :-

a- True ectopic testes, which are located behind the scrotum or in the perineum or on the inner surface of the thigh or, very rarely, on the dorsum of penis.

b- Obstructed testes which lies with a superficial inguinal pouch outside the external inguinal rings.

INCIDENCE

INCIDENCE OF CRYPTORCHIDISM

The incidence of cryptorchidism varies slightly with age. In newborn, it is related to body weight, 3.4 percent of newborns weighing three kgs have cryptorchidism, where only 0.8 percent of newborns weighing 3.5 kgs have cryptorchidism.

If the testis has not descended during the first year of life, it will never descend, and the frequency of cryptorchidism after the first year of life does not change, this frequency has been estimated between 0.7 - 0.8 of adult (Nistal and Paniagua, 1984).

At the same time, Bourne (1984) stated that, the incidence of cryptorchidism in full term male infant is 3.4 percent, but has been reported as high as 20-30 percent in premature male infant. The incidence then drops to 0.8 percent at one year of life, this is about the same as in adult male. He also postulated that if the testicle has not descended into the scrotum by the first year of life, it probably will not descend later on.

He also added that in ten percent of patients with cryptorchidism the defect is bilateral and about 90 percent the defect is unilateral-

On the other hand, Nistal and Paniagua (1984) reported that cryptorchidism is unilateral in 70 percent of cases, bilateral in 30 percent of cases and the right testis is affected more than the left one (60% and 40% respectively).

FACTORS REGULATING THE NORMAL DESCENT OF THE TESTIS