EXTRAGENITAL GONOCOCCAL MANIFESTATIONS

THESIS

Submitted in Partial Fulfilment of
Master Degree in
Dermatology and Venereology

BY

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(M.B., B.Ch.)

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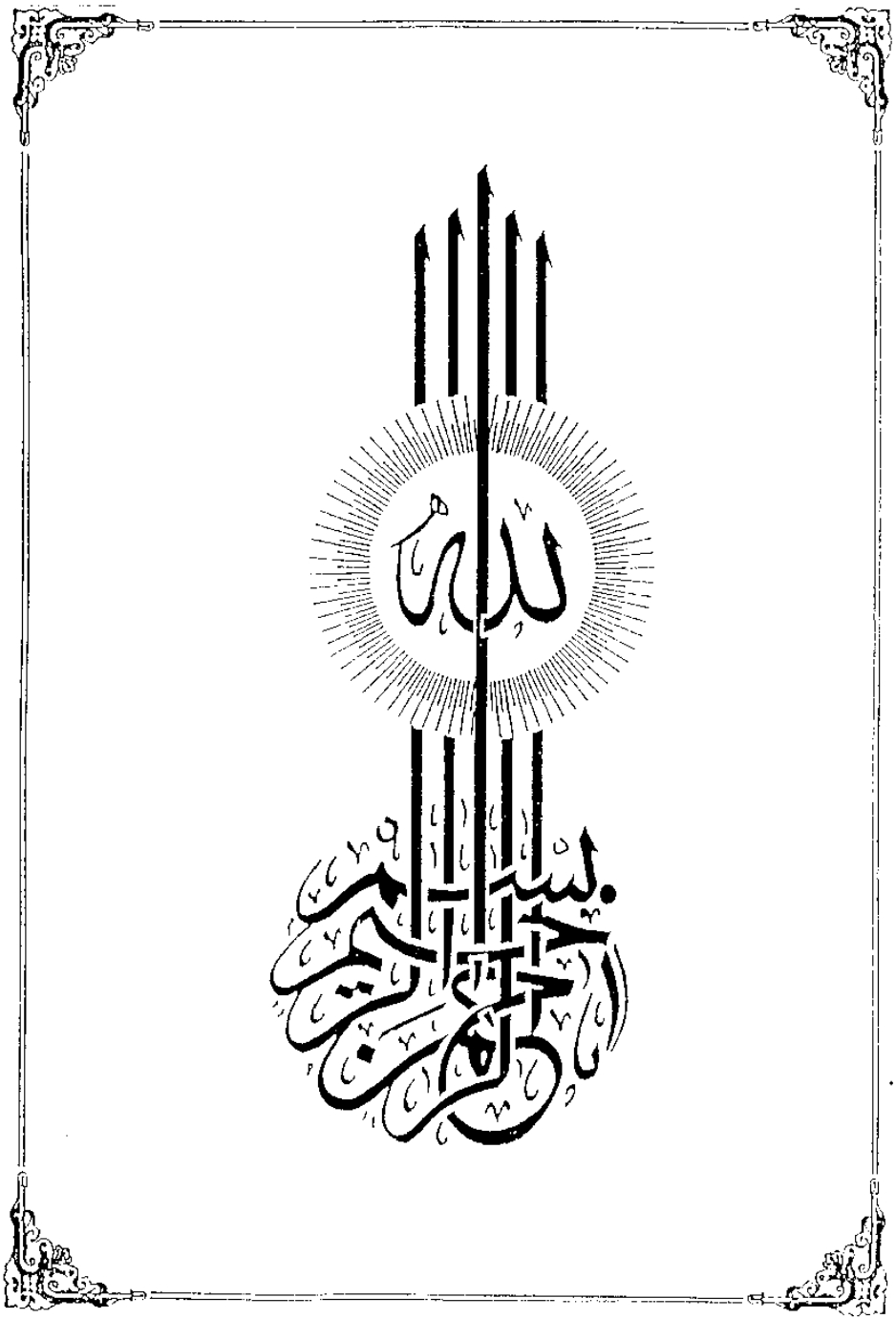

بسم الله الرحمن الرحيم

الحمد لله رب العالمين

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Nael Hatata

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Introduction

INTRODUCTION

Gonorrhoea is an acute infectious disease caused by the gram-negative organism Neisseria gonorrhoeae. The infection has a worldwide distribution, affects all socioeconomic classes and ranks high as a public health problem. Usually the male victim will have urethritis with or without discharge. In females the infection is often asymptomatic, however, urethritis and cervicitis can be symptomatic (Smith and Callen, 1981).

Although in the large majority of cases gonococcal infection is localised to urogenital tract, it can occur extragenitally. It is necessary to be alert to this possibility otherwise the condition may be missed. The main types of extragenital infection include rectal gonorrhoea, gonococcal infection of the eyes, gonococcal infection of the mouth and throat, metastatic gonorrhoea and gonococcal perihepatitis. One or more of these may occur together with or without urogenital involvement (Arya et al., 1980).

HISTORICAL REVIEW

Gonorrhoea in Earlier Times:

Since man began to write his history, gonorrhoea has been regarded as endemic in all countries. It has made its presence felt, often dramatically, in epidemics, which have been associated with the social disturbances that accompanied war, mass migration, widespread poverty and, in recent times, prosperity (Morton, 1977).

In Genesis, the Bible gives us the first plausible report of gonorrhoea, while the book of Leviticus gives us more substantial information (Farid, 1981). The book of Numbers, as well, represents more details about the widespread gonorrhoea among Israelites in the time of Moses (Morton, 1977).

The first scientific observations on gonorrhoea are attributed to Hippocrates, the "Father of Medicine, 460-355 B.C." (Farid, 1981). He dissected infected urethrae and observed their inflammation and discharges. He called acute gonorrhoea "strangury" and characterised it as occurring in youths and old men. He was in no doubt that strangury was the result of indulgence in the pleasures of venus.

Gonorrhoea was mentioned, as well, in the writings of other great Greeks of the Golden Age, such as Aristotle and Plato, and in Seneca's letters.

Celsus who lived in Rome in the time of Augustus (63 BC-AD 14) was the first to describe the four stages of inflammation. He confirmed the views of Hippocrates. He was the first doctor to catheterise patients suffering from its complications (Morton, 1977).

Gallen (130-200 AD) known as the (Prince of Physicians) gave us the word (gonorrhoea) by which he meant a (flow of semen). He also mentioned strangury by which he appeared to mean the inability to pass urine due to scarring or narrowing of the urethra (Farid, 1981).

Aretaeus of Cappadocia, in the second and third centuries AD. differentiated between spermatorrhoea and acute and chronic gonorrhoea, and gave a regime of treatment.

Soranus, an immigrant doctor in Rome, may well have had prevention of gonococcal ophthalmia neonatorum in mind when he recommended bathing the eyes of the newborn (Morton, 1977).

In the writings of Hoargey, an ancient chinese, an external disease was mentioned with symptoms affecting the urethra and vagina at the same time.

Sarouta, a Hindu physician (5th century AD) devoted in his book (Diseases of the Urinary Passages) a chapter to dysuria (Fessler, 1955).

Rhazes (560 AD) a Moslem of Persia who wrote many medical books and clearly differentiated smallpox from measles, gave a fuller account of urethral discharge than most. He noted that terminal haematuria occurred when the bladder became involved. For burning micturition he advocated urethral irrigation with warm vinegar or honeyed water. He advocated rose-water with opium by mouth, and by irrigation to the bladder when that organ was involved. He gave a clear description of the course and results of urethral strictures and advocated the immediate use of a catheter when they produce retention (Farid, 1981).

Avicenna, another Persian, a century later developed the views of Galen and Rhazes. Avicenna used irrigations to control urethral discharge (Morton, 1977).

The Middle ages 1000-1400 AD:

It was not until the approaching of the middle or Dark ages in Europe that the world again learned of gonorrhoea. The Germans and Scandinavians concentrated more on signs rather than symptoms in their terminology and called the disease "tripper" or "dripper". These terms frequently used even today by Anglo-Saxon seamen. In London we find another term "the hidden disease" (Morton, 1977).

During the Crusades, medical schools taught dermatology and venereology as a part of surgery. The principal expert in this field Roger of Salerno wrote his famous surgery in 1180, in which he mentioned that gonorrhoea is characterized by pain with scalding and difficult urination. The penis is described as red and swollen. Concomitant phimosis, or paraphimosis, was well recognised. Although he was surgically conservative, Roger bled men with gonorrhoea by applying leeches to the saphenous vein. He also gave urethral irrigations. His aim was to promote suppuration as devoted by Hippocrates. He was well acquainted with gonococcal epididymitis, which he called orchitis (Morton, 1977).

The Sixteenth Century:

The final five years of the fifteenth century saw the arrival in Europe of the Morbys Gallicus which later became known as great pox. It spread rapidly throughout the continent. It was clearly differentiated in professional and lay minds from gonorrhoea. The distinction was made clear enough in their writings. Marianus Sanctus was well acquainted with the long clinical course of gonorrhoea and its complications, particularly the agonies produced by strictures. It was he who first produced a pair of long curved forceps for their dilatation. The forceps were long enough to reach the bladder neck. He called the instrument "rostrum arcuatum" or beaked bow.

At that time gonorrhoea was a clinical entity well recognised by both lay people and professionals. Nevertheless the great Paracelsus (1493-1541) taught that gonorrhoea was an initial symptom of syphilis. This confusion was to persist in many minds for two and a half centuries (Roberts, 1969).

The Seventeenth Century:

With the arrival of syphilis in Europe at the end of the fifteenth century gonorrhoea disappeared, not in reality but because it became confused with the new disease. It is clear from the writings of that time that both conditions were so common as to appear often in the same patient. It is true that as the virulence of the Morbus Gallicus declined through the sixteenth century, gonorrhoea virulenta, as acute and early gonorrhoea became more apparent as a separate entity. It continued to be regarded as a stage of syphilis. This error was in the writings of both the seventeenth and eighteenth century (Fessler, 1955).

The Eighteenth Century:

The eighteenth century provides us with a rich harvest of books by both physicians and surgeons. Boerhoave a Dutch physician, pointed out that the symptomatology of syphilis changed and that gonorrhoea was seen more frequently without evidence of syphilis. He insisted on the separation of the two infections (Morton, 1977).

One of the most detailed professional books on the course and cure of gonorrhoea was that of Nicholas

Robinson 'A New Treatise on the Venereal Disease 1736". He divided gonorrhoea, which he called the most simple species of the french disease, into three stages: firstly the early acute stage with purulent discharge, the subsequent second stage with persistent discharge of 'Laudable' colour, and thirdly the stage of complications (MacGregor, 1955).

With the beginning of the second half of the eighteenth century, more and more doctors began to question whether "The Venereal" was one or two diseases. Frances Balfour of Edinburgh is said to have been the first to re-affirm the duality of gonorrhoea and syphilis. To test the single identity of gonorhoea and syphilis John Hunter (1767) carried out an auto inoculation experiment. Unfortunately he has chosen the inoculum from a patient suffering from both gonorrhoea and syphilis. As a result he re-declared the single identity view (Ober, 1969).

The Nineteenth Century:

One of the chief features of the nineteenth century in Europe, was the agreement on the need for care of