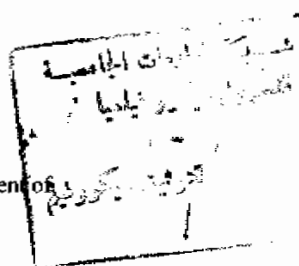
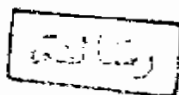


BLOOD SUPPLY
OF THE SKIN AND FASCIA OF THE PENIS



Thesis submitted for partial fulfilment of
M.D.degree in
PLASTIC SURGERY

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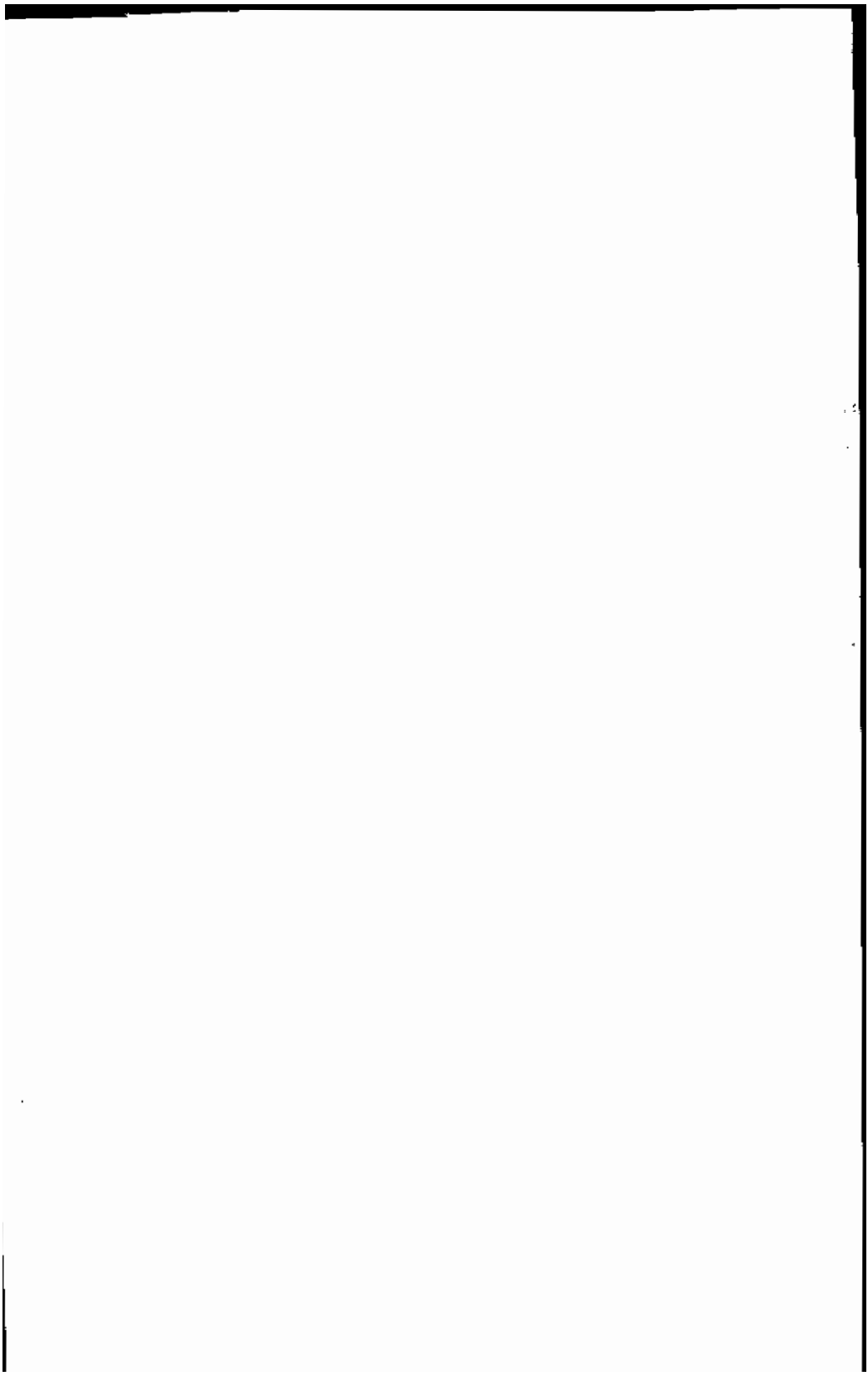
بسم الله الرحمن الرحيم

" سنريهم آيتنا في الآفاق وفي أنفسهم
حتى يتبين لهم أنه الحق .
أو لم يكفهم برك أنه على كل شيء شهيد "

صدق الله العظيم

سورة فصلت آية (٥٢)

To my dear professors
who taught me
the art of plastic surgery



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Finally , I am gratefull to my brother Eng. **Z.Abdel Rahman** for his great fort to produce this work in its present form.

the 1990s, the number of people in the UK who are employed in the public sector has increased by 1.5 million, from 2.5 million in 1980 to 4 million in 1995. The public sector has also become an important employer of women, with 50% of public sector employees being women in 1995.

There are a number of reasons why the public sector has become an important employer of women. One reason is that the public sector has a high proportion of women in the workforce. Another reason is that the public sector has a high proportion of women in the senior management positions. A third reason is that the public sector has a high proportion of women in the lower paid jobs.

The public sector has also become an important employer of women because of the increasing demand for public services. The demand for public services has increased in a number of areas, including health care, education, and social services. This has led to an increase in the number of people employed in the public sector.

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ABSTRACT

YAHIA MAHMOUD ABDEL RAHMAN : Blood supply of the skin and fascia of the penis. **M.D degree in Plastic Surgery** ,Ain Shams university ,1996.

The aim of this work is to study the blood supply of the penile skin and the prepuce as well as the fascia of the penis in order to understand the vascular basis of vascularized preputial or penile skin flaps designed for urethral repair in cases of hypospadias, epispadias and urethral stricture. In order to achieve these goals, sixty fresh cadavers were dissected and the detailed anatomy and cutaneous territories of the external pudendal and dorsal penile arteries were studied. The venous drainage as well as the different patterns of vascularization of the prepuce and the penile skin were investigated. Also, thirty clinical cases presented to demonstrate the different applications of vascularized preputial or penile skin flaps.

Key words :

Blood supply : prepuce, penile skin.

Vascularized preputial or penile skin flaps.



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INTRODUCTION

Urethral repair in cases of hypospadias , epispadias and in severe cases of urethral stricture is a great challenge for the plastic surgeon. Although a variety of donor sites have been described , the use of the prepuce or penile skin , continue to be the best source of flaps for urethral repair. Various pedicled preputial or penile skin flaps had been used for many years as random flaps till 1979 when true outer preputial island flap was introduced by Standoli for hypospadias repair. Then Duckette in 1980 introduced his transverse inner preputial island flap as a modification of Hodgson (1970) and Asopa (1971) flaps, depending on the observation of a pair of axial vessels within dartos fascia, but he could not define their nature.

There is great controversy about the blood supply of the penile skin and the prepuce. Anatomists like Grant (1971), Last (1984) and Williams et al (1989) claimed that the dorsal arteries of the penis vascularize the penile skin. Salmon (1936), Juskiewenski et al (1982), Cormack & Lamberty (1986) and Grossmen et al (1989) described the skin of the penis as being supplied by the deep external pudendal arteries. On the other hand Quartey (1983) claimed that the skin of the penis is supplied only from the superficial external pudendal arteries.

This work aimed at studying the blood supply of the penile skin and the prepuce as well as the fascia of the penis in order to understand the vascular basis of vascularized preputial or penile skin flaps. In order to achieve these goals , sixty fresh cadavers were dissected and the detailed anatomy and cutaneous territories of the external pudendal and dorsal penile arteries were studied. The venous drainage as well as the different patterns of vascularization of the prepuce and the penile skin were investigated. Also thirty clinical cases presented to demonstrate the different applications of vascularized preputial or penile skin flaps .

