بسم الله الرحمن الرحيم

شبكة المعلومـــــات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

﴿ قـــسـم ﴾

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بالرسالة صفحات

لم ترد بالأصـــل

CYTOGENETIC STUDY OF UTERINE LEIOMYOMATA

THESIS

Submitted to Partial fulfillment for the Degree of M.D

In

Obstetrics and Gynaecology

By

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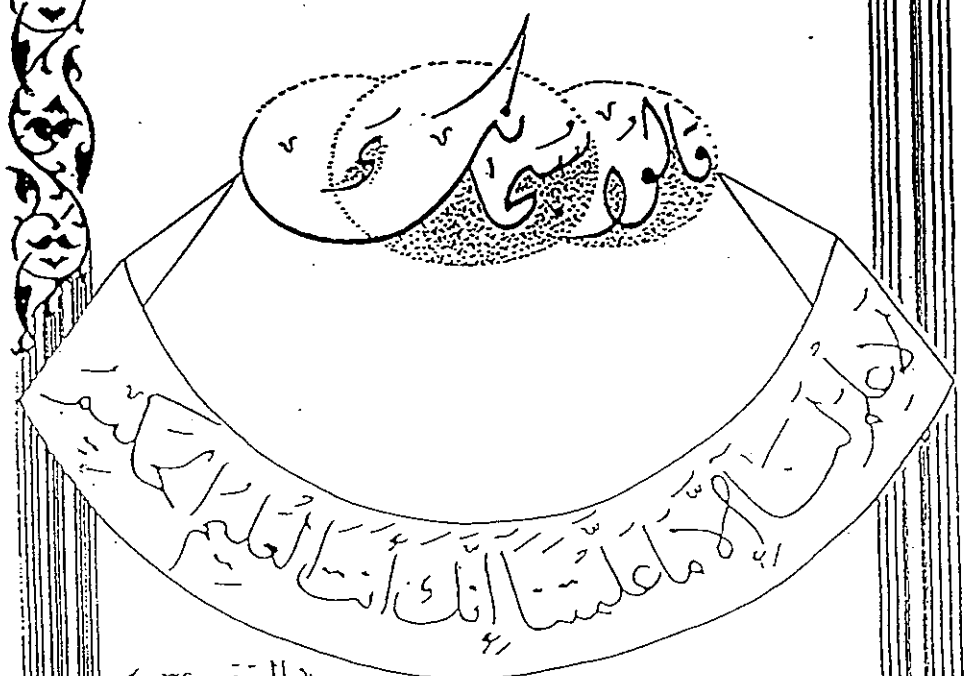

« البقرة ٣٢ »

صدق الله العظيم

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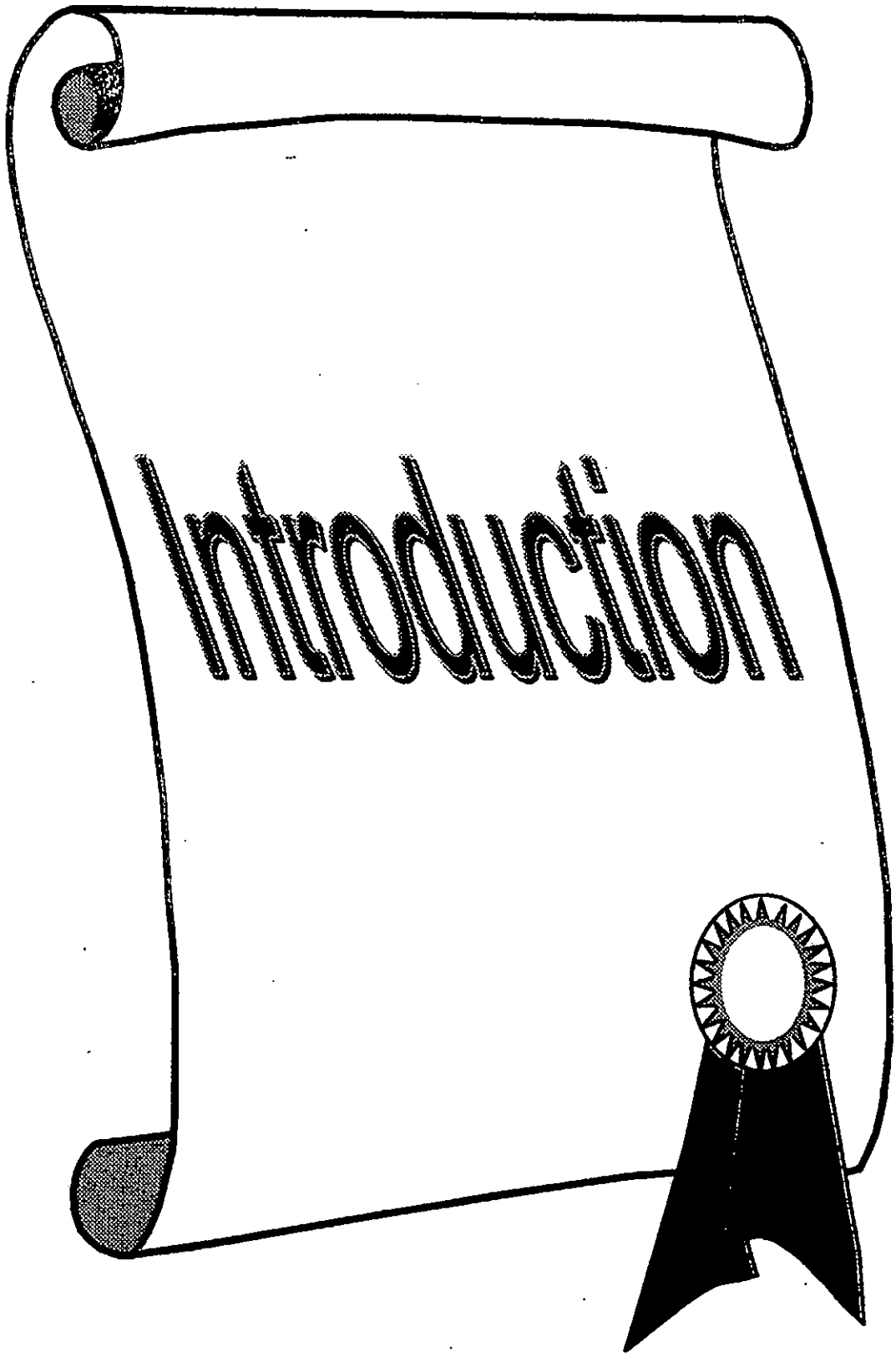
ABBREVIATION

A	:	Adenine.
add	:	Addition.
bp	:	Bas pair.
C	:	Cytosine
cen	:	Centromere.
CGH	:	Comparative genome hybridization.
cM	:	Centi Morgan.
del	:	Deletion.
der	:	Derivative.
DNA	:	Deoxy ribonucleic acid.
EGF	:	Epithelial growth factor
FISH	:	Fluorescence in situ hybridization.
G	:	Guanine.
GnRH	:	Gonadotropin releasing hormone.
H	:	Histone.
HGF	:	Hepatocyte growth factor.
HMG	:	High mobility group.
i	:	Isochromosome.
IGF-1	:	Insulin-like growth factor type 1
ins	:	Insertion.
inv	:	Invertion.
ISCN	:	International System for Human Cytogenetic Nomenclature.
IUCDs	:	Intra uterine contraceptive devices.
LOH	:	Loss of heterozygosity.
mar	:	Marker
MRI	:	Magnetic resonance imaging.

mRNA	:	Messenger Ribo nuclei acid.
p	:	The short arm of the chromosome.
PAI-1	:	Plasminogen activator inhibitor-1
q	:	The long arm of the chromosome.
r	:	Ring chromosome.
T	:	Thymine
t	:	Translocation.
ter	:	Telomere.
TGF	:	Transforming growth factor
TS	:	Tumour suppressor.
UV	:	Ultra violet.


Introduction

INTRODUCTION

Leiomyomata of the uterus, also called myomas or fibroids are extremely common benign mesenchymal tumors of the female reproductive tract. Although most leiomyomata are diagnosed in women in their 40s, the most frequently quoted prevalence is that they affect between 20%-25% of women above the age of 30. Leiomyomata may be single, but the vast majority are multiple[1].

Although uterine myomas are common and pose a significant health problem for women of reproductive age, the pathogenesis and natural evolution of these benign solid tumour remain poorly understood. A variety of growth factors [epithelial growth factor (EGF), insulin-like growth factor type I (IGF-1) or transforming growth factor alpha (TGF)] have been implicated in its evolution under the effect of certain growth regulators (oestrogen, progesterone and gonadotropin releasing hormones). Unopposed oestrogen secreation, obesity and genetic encodings are thought to be an underlying risk factors[2].

It is currently accepted that, leiomyomata arise from a unicellular mutation as demonstrated by electrophoresis study of the x-linked enzyme glucose-6- phosphate dehydrogenase[3].

Also, it is currently accepted that leiomyomata are endocrine dependent tumours whose size and growth are apparently influenced by estrogens and progesterone[2]. The finding that