سامية محمد مصطفى

شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

سامية محمد مصطفى

شبكة المعلومات الجامعية

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التوثيق الالكتروني والميكروفيلم

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سامية محمد مصطفى

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

سامية محمد مصطفى

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بعض الوثائق الأصلية تالفة

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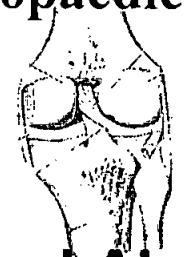
بالرسالة صفحات لم ترد بالأصل

ARTHRODIASTASIS WITH ILIZAROV EXTERNAL RING FIXATOR FOLLOWING DEBRIDMENT OF THE OSTEOARTHRITIC KNEE

Thesis

Submitted for Partial fulfillment of Master Degree in

Orthopaedic Surgery



By

Mahmoud Aly Elzoghby

(M.B.B.Ch.,)

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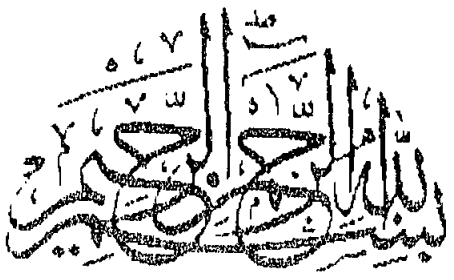

ربنا لا تزغ قلوبنا بعد إذ هديتنا
وهب لنا من لدنك رحمة إنك
أنت الوهاب

صدق الله العظيم

(آل عمران آيه8)

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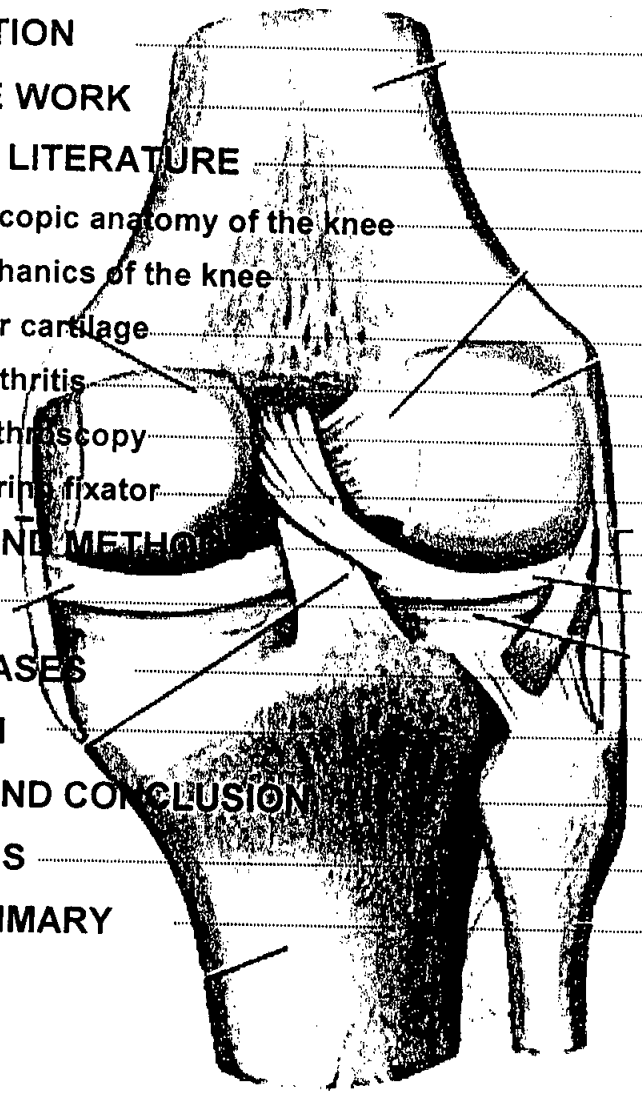
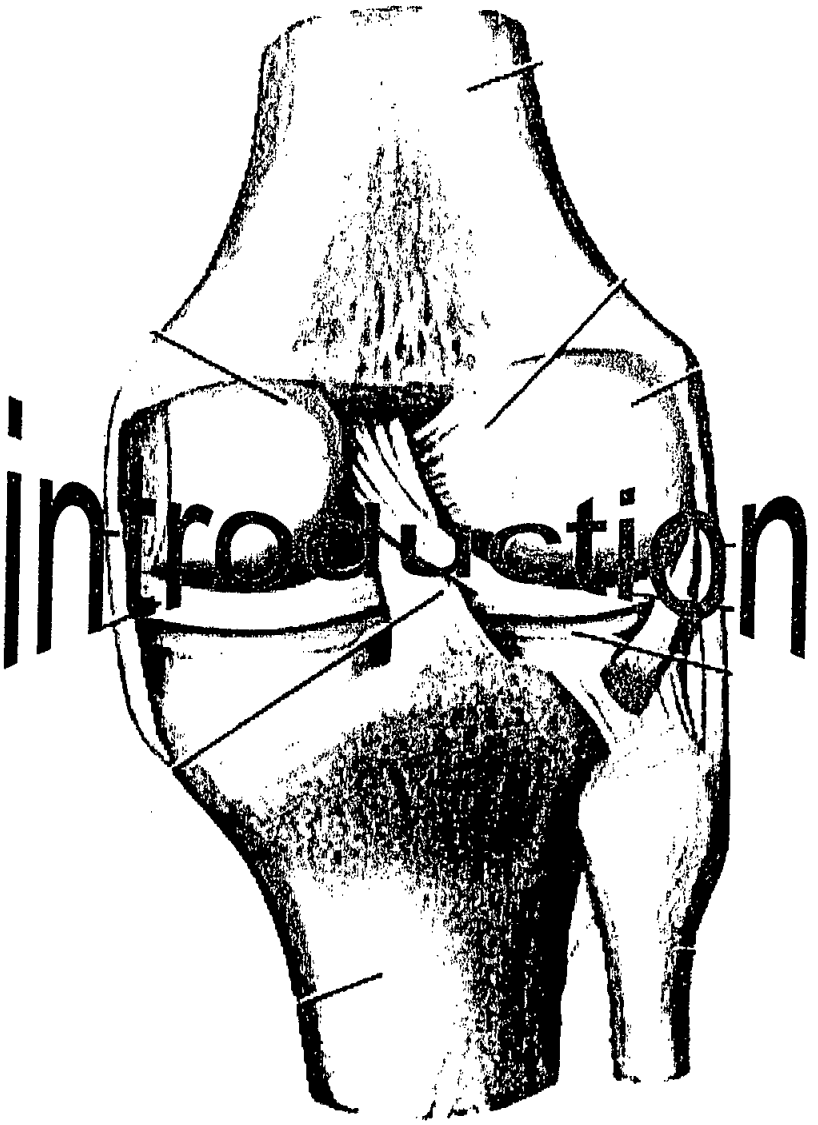
List of abbreviations

ACL : Anterior cruciate ligament
AL : anterolateral
AM : Anteromedial
AP : Anteroposterior
CS : Chondroitin sulphate
D.M. : Diabetes mellitus
DVT : Deep vein thrombosis
Fig : Figure
GAG : Glycosaminoglycan
HA : Hyaluronic acid
ICOR : Instant center of rotation
I.C.U. : Intencive care unit
IL-1 : Interleukin-1
IU : International unit
KS : Keratan sulphate
Lat. : Lateral
Lt. : Left
MCL : Medial collateral ligament
MMPs : Matrix metalloproteinases
MW : Molecular weight
NSAID : Non-steroidal anti-inflammatory drugs
OA : Osteoarthritis
PCL : Posterior cruciate ligament
PM : posteromedial
RA : Rheumatoid arthritis
ROM : Range of motion
Rt. : Right
S.C. : Subcutaneous
SD : Standard deviation
SL : Superolateral
TFA : Tibio-femoral angle
TIMPS : Tissue inhibitors of metalloproteinases
TNFa : Tumor necrosis factor a
TWC : Time walking capacity

CONTENTS



INTRODUCTION



Introduction

Osteoarthritis is a degenerative joint disease characterized by destruction of articular cartilage, subchondral sclerosis and frequently a mild degree of inflammation. [1]

Osteoarthritis causes joint stiffness and pain and in the long term may lead to severe restriction of activity and to disability. [2]

Adequate therapy to prevent or delay joint destruction in osteoarthritis is presently lacking. In a late stage of the disease, joint fusion (arthrodesis) and joint replacement (endoprosthesis) are frequently the treatment of choice. Arthrodesis is effective in relieving pain, but on the expense of joint motion which increases the risk of overloading adjacent or contralateral joints. [3] Moreover, failures of arthrodeses, leaving pain and secondary complaints, are reported frequently. Joint replacement is mainly used for osteoarthritis of the hip and knee joints. Results of these joint replacements are satisfactory, however, these implants have a limited life span and results of revision surgery are often disappointing. Joint distraction is a new approach in treatment of osteoarthritis. [4]

Hip and ankle osteoarthritis were treated with articulating joint distraction showing positive clinical results (long term absence of pain and improved joint function). [5]

A surprising finding was that after removal of the external fixator the radiographic joint space remained widened in 50% of the patients, even after prolonged follow-up. This could indicate a process of actual cartilage repair. [2]

AIM OF THE WORK

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The aim of this work is to evaluate the results of arthrodiastasis with Ilizarov external ring fixator following arthroscopic debridment of the osteoarthritic knee.