بسم الله الرحمن الرحيم

MONA MAGHRABY

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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شبكة المعلومات الجامعية

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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

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MONA MAGHRABY

Do the Commonly Used Contraceptive Methods Have a Role on the Activity of Rheumatoid Arthritis?

Thesis

Submitted for Partial Fulfillment of Master Degree in Physical Medicine, Rheumatology and Rehabilitation

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Lucy Wagih Alfred

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List of Abbreviations

Abb.	Full term
ACPA	Anti-citrullinated protein antigen
ACR	American College of Rheumatology
ALT	Alanine transaminases
AST	Aspartate transaminase
AZA	Azathioprine
BCL-2	B-cell lymphoma 2
BMI	Body mass index
BP	Blood pressure
BSR	British Society of Rheumatology
CHC	Combined hormonal contraceptives
CMC	Carpometacarpal
COCs	Current combination oral contraceptives
CRP	C - reactive protein
cu-IUD	Cupper intrauterine device
CVD	Cardiovascular disease
DIP	Distal interphalangeal
DMARDs	Disease-modifying antirheumatic drugs
DMPA	Depo-medroxyprogesterone acetate
DVT	Deep vein thrombosis
E1	Estrone
E2	Oestrogens
EDHS	Egypt Demographic and Health Survey
ELISA	Enzyme linked immunosorbent assay
ER	Oestrogen receptors
ESR	Erythrocyte sedimentation rate
EULAR	European League Against Rheumatism
Fc	Fragment crystallizable

List of Abbreviations Cont...

Abb.	Full term
EU/ml	Endotoxin unit per millimeter
FDA	Food and Drug Administration
gm/dl	Gram per deciliter
HCQ	Hydroxychloroquine
HRT	Hormone replacement therapy
IFCC	International Federation of. Clinical Chemistry and Laboratory Medicine
IFN-γ	Interferon gamma
IL-2	Interleukin 2
IU/ml	International unit per millimeter
IUD	Intra uterine device
LEF	Leflunomide
LNG IUD	Levonorgestrel releasing intrauterine device
LNG-IUS	Levonorgestrel-releasing intrauterine system
MCSF	Macrophage colony-stimulating factor
mg	Milligram
mg/L	Milligram per liter
MHC	Major histocompatibility complex
mm/h	Millimeter per hour
mm^3	Cubic millimeter
MMPs	Matrix metalloproteinase
MTP	Metatarsophalangeal joints
MTX	Methotrexate
NHS	Nurses' Health Study
NSAIDs	Nonsteroidal anti-inflammatory drugs
OC	Oral contraceptive pills

List of Abbreviations Cont...

Abb.	Full term
PCO	Poly cystic ovary
PE	Pulmonary embolism
PGs	Prostaglandin
PID	Pelvic inflammatory disease
PIP	Proximal interphalangeal
POP	Progesterone only pills
RA	Rheumatoid arthritis
RANK	Receptor activator of nuclear factor kappa beta
RANKL	receptor activator of nuclear factor kappa beta ligand
RASS	Rheumatoid Arthritis Severity Scale
SERA	Studies of the Etiology of rheumatoid arthritis
SF	Synovial fibroblasts
SJC	Swollen joints count
SSZ	Sulfasalazine
TH17	T helper 17
TJC	Tender joints count
TNF-α	Tumour necrotic factor alpha
U/L	Unit per liter
V-CAM-1	Vascular cell adhesion molecule 1
VEGF	Vascular endothelial growth factor
VTE	Venous thromboembolism

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INTRODUCTION

Rheumatoid arthritis (RA) is a chronic inflammatory disease characterized by cartilage and bone destruction, infiltration of lymphocytes into synovial tissue, and hyperproliferation of synovial fibroblasts (SF). They produce matrix-degrading enzymes and proinflammatory cytokines, which are an important propagator of RA ***(Lowin et al., 2015).***

Meta–estimates of regional RA prevalence rates for some countries were 0.40% for Southeast Asian, 0.37% for Eastern Mediterranean, 0.62% for European, 1.25% for American and 0.42% for Western Pacific regions ***(Rudan et al., 2015).***

The Role of Sex Hormone is a puzzling aspect of RA as the tendency to affect women more than men (the female to male ratio is around 3 to 1), which suggests that sex hormones may have an influence on disease ***(Oliver and Silman, 2009).***

Another line of evidence implicating the involvement of sex hormones in RA is the fact that pregnancy is usually associated with a reduction in disease activity, whilst the postpartum period is often accompanied by disease flare. There is also evidence of increased rate of onset of RA during the postpartum period, especially after the first pregnancy. During pregnancy, disease activity decreased in 50–75% of women, 16% even achieved complete remission, and many were able to stop all drugs by the last trimester ***(Hazes et al., 2011).***