



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم



MONA MAGHRABY



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شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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MONA MAGHRABY

**“Comparative study between the effect of Mesenchymal
Stem Cells and/or Platelet-rich Plasma on Bone
parameters in Ovariectomized mature Rats”**

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in Physiology

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قَالَ

سَبِّحْكَ لَا إِلَهَ إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ
الْعَلِيمُ الْعَظِيمُ

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List of Contents

<i>Subject</i>	<i>Page No.</i>
List of Abbreviations.....	i
List of Tables.....	iv
List of Figures	viii
Introduction	1
Aim of the Work.....	3
Review of Literature	
Overview on Osteoporosis	4
Stem Cell Therapy.....	19
Platelet-Rich Plasma	31
Materials and Methods	36
Results.....	66
Discussion	128
Summary and Conclusion	147
Recommendations	153
References	154
Arabic Summary	—

List of Abbreviations

Abbr.	Full-term
AF-MSCS-----	Amniotic fluid-derived mesenchymal stem cells
ALP-----	Alkaline phosphatase
Ang-1-----	Angiopoietin-1
AT-MSCs-----	adipose tissue-derived mesenchymal stem cells
Bcl-2-----	B-cell lymphoma 2
BLCs-----	Bone-lining cells
BMD-----	Bone mineral density
BMI-----	Body mass index
BM-MSCs-----	Bone marrow- derived mesenchymal stem cells
BMP-2-----	Bone morphogenetic protein-2
BW-----	Body weight
Ca-----	Calcium
CaCl ₂ -----	Calcium chloride
CCR-----	Chemokine receptor
CD -----	Cluster of Differentiation
CTX-1 -----	Cross linked C telopeptide of type-1 collagen
DEXA-----	Dual energy x-ray absorptiometry
DMEM-----	Dulbecco's modified Eagles medium
ECM-----	Extra cellular matrix
EDTA-----	Ethylene-diamine-tetracetic acid
EGF-----	Epidermal growth factor
EPCs-----	Endothelial progenitor cells
ESCs-----	Embryonic stem cells
FBS-----	Fetal bovine serum
FGF-----	Fibroblast growth factor
FITC-----	Fluorescein isothiocyanate
GIOP-----	Glucocorticoid induced osteoporosis
HGFs-----	Hepatocyte growth factors
HIF-1 α -----	hypoxia-inducible factor-1 alpha
HLA-DR-----	Human leukocyte antigen-antigen D related
HRT-----	Hormone replacement therapy
HSCs-----	Hematopoietic stem cells

IGF -----	Insulin-like growth factor
IGF-I -----	Insulin-like growth factor-I
IL-1 -----	Interlukin-1
IL-17 -----	Interlukin-17
IL-1b -----	Interlukin-1b
IL-6 -----	Interlukin-6
iPS -----	Induced pluripotent stem cells
ISCT -----	International Society for Cellular Therapy
LP-PRP -----	Leukocyte-poor platelet-rich plasma
LR-PRP -----	Leukocyte-rich platelet-rich plasma
MCP-1 -----	Monocyte chemoattractant protein one
M-CSF -----	Macrophage colony-stimulating factor
MDA -----	Malondialdehyde
MMPs -----	Matrix metalloproteinases
MSCs -----	Mesenchymal stem cells
OCN -----	Osteocalcin
OP -----	Osteoporosis
OPG -----	Osteo-protegerin
OPN -----	Osteopontin
OVX -----	Ovariectomized
OVX-MSCs -----	Ovariectomized-mesenchymal stem cells treated
OVX-MSCs/PRP ----	Ovariectomized-mesenchymal stem cells/platelet-rich plasma treated
OVX-PRP -----	Ovariectomized-platelet-rich plasma treated
PBS -----	Phosphate buffer solution
PDGF -----	platelet- derived growth factor
PD-MSCs -----	placental-derived mesenchymal stem cells
PGFs -----	Platelet growth factors
P -----	Phosphorus
PPAR-g2 -----	Peroxisome proliferator-activated receptor gamma 2
PPP -----	Platelet-poor plasma
PRP -----	Platelet-rich plasma
PTH -----	Parathyroid hormone
RANK -----	Receptor activator of nuclear factor-kappa B
RANKL -----	Receptor activator of nuclear factor-kappa B ligand

ROS -----	Reactive oxygen species
RUNX-2 -----	Runt-related transcription factor-2
SDF-1 -----	Stromal cell-derived factor 1
SEM -----	Standard error of the mean
SOD -----	Superoxide dismutase
TBT -----	Trabecular bone thickness
TBV -----	Trabecular bone volume
TGF- β1 -----	Transforming growth factor beta-1
Th1 -----	T Helper cell-1
Th17 -----	T Helper cell-17
Th2 -----	T Helper cell-2
TNF-α -----	Tumour necrosis factor alpha
UC-MSCs -----	Umbilical cord derived mesenchymal stem cells
VEGF -----	Vascular endothelial growth factor
WHI -----	Women's Health Initiative
WHO -----	World Health Organization
WJ-MSCs -----	Wharton's Jelly derived-mesenchymal stem cells

List of Tables

Table No.	Title	Page No.
Table (1):	Changes in initial and final body weights (BW _s , gm), and their percent of change (%change) in sham-operated control (Sham) rats.....	68
Table (2):	Changes in initial and final body weights (BW _s , gm), and their percent of change (%change) in Ovariectomized untreated (OVX) rats.	69
Table (3):	Changes in initial and final body weights (BW _s , gm), and their percent of change (%change) in Ovariectomized-MSCs treated (OVX-MSCs) rats.....	70
Table (4):	Changes in initial and final body weights (BW _s , gm), and their percent of change (%change) in Ovariectomized-PRP treated (OVX-PRP) rats.....	71
Table (5):	Changes in initial and final body weights (BW _s , gm), and their percent of change (%change) in Ovariectomized-MSCs/PRP treated (OVX-MSCs/PRP) rats.....	72
Table (6):	Cumulative data of changes of initial and final body weights (BW _s) and their percent of change (%change) in all the studied groups.	73
Table (7):	Changes in initial and final body mass index (BMI), and their percent of change (% change) in sham-operated control (Sham) rats.....	77

Table (8): Changes in initial and final body mass index (BMI), and their percent of change (% change) in Ovariectomized (OVX) untreated rats.....	78
Table (9): Changes in initial and final body mass index (BMI), and their percent of change (% change) in Ovariectomized-MSCs treated (OVX-MSCs) rats.....	79
Table (10): Changes in initial and final body mass index (BMI), and their percent of change (% change) in Ovariectomized-PRP treated (OVX-PRP) rats.....	80
Table (11): Changes in initial and final body mass index (BMI), and their percent of change (% change) in Ovariectomized-MSCs/PRP treated (OVX-MSCs/PRP) rats.....	81
Table (12): Cumulative data of changes of initial and final body mass index (BMI) and their percent of change (%change) in all the studied groups.....	82
Table (13): Serum levels of calcium (Ca^{2+}) (mg/dl), Phosphorus (P) (mg/dl), Alkaline Phosphatase (ALP) (U/L) and Cross-linked C-telopeptide of Type 1 collagen (CTX-1) (ng/dl) in sham-operated control (Sham) rats. ...	87
Table (14): Serum levels of calcium (Ca^{2+}) (mg/dl), Phosphorus (P) (mg/dl), Alkaline Phosphatase (ALP) (U/L) and Cross-linked C-telopeptide of Type 1 collagen (CTX-1) (ng/dl) in Ovariectomized (OVX) untreated rats.....	88

Table (15): Serum levels of calcium (Ca ²⁺) (mg/dl), Phosphorus (P) (mg/dl), Alkaline Phosphatase (ALP) (U/L) and Cross-linked C-telopeptide of Type 1 collagen (CTX-1) (ng/dl) in Ovariectomized-MSCs (OVX-MSCs) Treated rats.	89
Table (16): Serum levels of calcium (Ca ²⁺) (mg/dl), Phosphorus (P) (mg/dl), Alkaline Phosphatase (ALP) (U/L) and Cross-linked C-telopeptide of Type 1 collagen (CTX-1) (ng/dl) in Ovariectomized-PRP (OVX-PRP) Treated rats.	90
Table (17): Serum levels of calcium (Ca ²⁺) (mg/dl), Phosphorus (P) (mg/dl), Alkaline Phosphatase (ALP) (U/L) and Cross-linked C-telopeptide of Type 1 collagen (CTX-1) (ng/dl) in Ovariectomized-MSCs/PRP (OVX-MSCs/PRP) Treated rats.	91
Table (18): Serum levels of Malondialdehyde (MDA) (nmol/L) and Tumour Necrosis Factor-Alpha (TNF- α) (pg/ml) in sham-operated control (Sham) rats.	93
Table (19): Serum levels of Malondialdehyde (MDA) (nmol/L) and Tumour Necrosis Factor-Alpha (TNF- α) (pg/ml) in Ovariectomized (OVX) untreated rats.	94
Table (20): Serum levels of Malondialdehyde (MDA) (nmol/L) and Tumour Necrosis Factor-Alpha (TNF- α) (pg/ml) in Ovariectomized-MSCs (OVX-MSCs) treated rats.	95

Table (21): Serum levels of Malondialdehyde (MDA) (nmol/L) and Tumour Necrosis Factor-Alpha (TNF- α) (pg/ml) in Ovariectomized-PRP (OVX-PRP) treated rats.....	96
Table (22): Serum levels of Malondialdehyde (MDA) (nmol/L) and Tumour Necrosis Factor-Alpha (TNF- α) (pg/ml) in Ovariectomized-MSCs/PRP (OVX-MSCs/PRP) treated rats.	97
Table (23a): Cumulative data of changes of serum levels of Calcium (Ca ²⁺) (mg/dl), Phosphorus (P) (mg/dl) and Alkaline Phosphatase (ALP) (U/L) in all the studied groups.....	98
Table (23b): Cumulative data of changes of serum levels of Cross linked C-telopeptide of Type 1 collagen (CTX-1) (ng/ml), Malondialdehyde (MDA) (nmol/L) and Tumour Necrosis Factor-Alpha (TNF- α) (pg/ml) in all the studied groups.....	99
Table (24): Cumulative data of changes of trabecular bone thickness (TBT) (μ m) and trabecular bone volume (TBV) (%) in all the studied groups.	120
Table (25): Cumulative data of changes of mean area percentage (%) of osteopontin (OPN) expression in all the studied groups.....	126

List of Figures

Figure No.	Title	Page No.
Figure (1):	Initial and final body weights in the 5 studied groups.	74
Figure (2):	Body weight percentage of change in the 5 studied groups.	74
Figure (3):	Initial and final Body Mass Index in the 5 studied groups.	83
Figure (4):	Body Mass Index percentage of change in the 5 studied groups.	83
Figure (5):	Serum Calcium level (mg/dl) in the 5 studied groups.	100
Figure (6):	Serum Phosphorus level (mg/dl) in the 5 studied groups.	100
Figure (7):	Serum Alkaline Phosphatase level (U/L) in the 5 studied groups.	101
Figure (8):	Serum Cross linked C-telopeptide of Type 1 collagen level (ng/dl) in the 5 studied groups.	101
Figure (9):	Serum Malondialdehyde level (nmol/L) in the 5 studied groups.	102
Figure (10):	Serum Tumour Necrosis Factor-Alpha level (pg/ml) in the 5 studied groups.	102
Figure (11):	Phase contrast micrograph of rat bone marrow MSCs (BM-MSCs) twenty four hours from the primary culture	105