بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قال الله تعالى

تَبَارَكَ اسْمُ رَبِّكَ ذِي الْجَلَالِ وَالْإِكْرَامِ

صدق الله العظيم

سورة الرحمن الآية 78

Dedication:

To the tutor of this nation the meaning of patience and sacrifices , to whom he devoted his life for the sake of whole humanity ; our prophet blessing and peace of God be upon him .

To my kind mother and my family who always keep their fingers cross to me , to my kith and kin , and to all of my pals .

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her support and permission for samples collection from her clinic in modern medical center and academy hospital. Also I indebted to the Khartoum teaching hospital staff and Ribat national hospital places where samples were analyzed.

List of Abbreviations:

Anti-CCP	anti-cyclic citrullinated peptide
ACPAs	anti -citrullinated protein antibodies
Anti-MCV	antibodies against mutated citrullinated Vimentin
ANA	antinuclear antibody
ACR	American College of Rheumatology
CBC	complete blood count
CRP	c-reactive protein
2,3-DPG	2,3-diphosphoglycerate
EPO	erythropoietin
EBV	Epstein-Barr virus
EULAR	European League Against Rheumatism
ESR	erythrocyte sedimentation rate
HHV-6	Human Herpes Virus 6
MCH	Mean Corpuscular Hemoglobin
MCHC	Mean Corpuscular Hemoglobin Concentration
MCV	Mean Corpuscular Volume
MHC	Major histocompatibility complex
MRI	magnetic resonance imaging
RA	Rheumatoid arthritis
RBC	Red blood cell
RF	Rheumatoid Factor
TNF	Tumor Necrosis Factor
TIBC	Total iron binding capacity

Abstract :

This is a descriptive cross sectional study which was carried out to determine some immunological parameters (anti-cyclic citrullinated peptide anti-ccp and rheumatoid factor RF) and some hematological parameters (complete blood count and erythrocyte sedimentation rate) in patients with rheumatoid arthritis in Khartoum teaching hospital in the period from January to May 2011.

For this study the total of ninety four rheumatoid arthritis patient samples (n=94) have been used in this study , and ninety four samples (n=94) from normal control individuals were tested for anti-cyclic citrullinated peptides by ELISA, rheumatoid factor , complete blood count by Sysmex and erythrocyte sedimentation rate which can be divided as follows : fifty samples were tested for anti-ccp alongside with their fifty normal control individuals and forty four RA samples were tested for ESR ,CBC and RF along with their normal control individuals. The results showed that all the patients with rheumatoid arthritis (100%) were positive for anti-cyclic citrullinated peptides compared to normal control individuals, And forty two rheumatoid arthritis patients were positive for rheumatoid factor latex test and two were negative.Also in the present study the results of forty four patients of rheumatoid arthritis show a slight decrease in the hemoglobin concentration mean Hb (12.1 g/dl ±1.5 SD), red blood cells count mean RBCs (4.5×10^12/L±0.4SD) and packed cell volume mean PCV (37.9% ±4.0 SD) compared to normal control individuals and there were ten patients had their hemoglobin

below the normal range or anemic mean Hb (10.1g/dl),and some with lymphopenia mean lymphocyte count (22.7%) as one of the extra-articular complication of rheumatoid arthritis and the erythrocyte sedimentation rate was markedly (P.value=0.00) elevated mean ESR (57.4 mm/ 1hr ± 34.8 SD) in RA. Also female (76.59 %) were found to be predominantly more affected than male (23.15%) .

المستخلص:

اجريت هذه الدراسه المقطعية الوصفية في مستشفي الخرطوم التعليمي في الفتره من يناير الي مايو 2011 لتحديد بعض القياسات المناعيه (قياس الجسم المضاد للسترولين وعامل الروماتيزم) وتحديد بعض القياسات الدموية (حساب جميع خلايا الدم والترسيب) للمصابين بالروماتيزم .

ولهذا الغرض جمعت اربع وتسعون عينة من اشخاص مصابين بالروماتيزم وتم تحليلها جنبا الي جنب مع اربع وتسعون عينة تم اخذها من اشخاص اصحاءمن اجل مقارنتها مع عينات المرضي وتم تقسيمها كالاتي:

تم قياس الجسم المضاد للسترولين لخمسين من المرضي وخمسين من عينات الاصحاء وتم قياس عامل الروماتبزم , الترسيب وحساب جميع خلايا الدم لاربعة واربعون من المرضي واربعة واربعون من عينات الاصحاء. وقد خلصت الدراسة الي ان جميع الاشخاص المصابون بالروماتيزم ايجابيين للجسم المضاد للسترولين بنسبة(100%) مقارنة بالاشخاص الاصحاء الذين جميعهم سلبيين للجسم المضاد للسترولين , وان اثنين واربعون من المرضي ايجابيين لعامل الروماتيزم واثنين سلبيين من جملة اربعة واربعون مريضا وان بعض المرضي لديهم نقص في الخلايا الليمفية متوسط عدد الخلايا الليمفيةيساوي(22.7 في المائه) , وان عشرة منهم لديهم نقص في خضاب الدم المتوسط يساوي(10.1جرام للديسيليتر) دون الحد الطبيعي اي مصابون بفقر الدم نتيجة للروماتيزم المزمن , وايضا هنالك ارتفاع ملحوظ في الترسيب متوسط الترسيب يساوي(57 ملميترفي الساعه).

وقد خلصت الدراسة ايضا الي ان الغالبية العظمي من المصابين بالروماتيزم هم من النساء(76.5 %) دون الرجال (23.5 %).

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