

ACKNOWLEDGEMENT

In the name of Allah, the Most Gracious and the Most Merciful

Alhamdulillah, all praises to Allah for the strengths and His blessing in completing this thesis.

*Special appreciation goes to my supervisor, **Prof. Dr. Abd El-Azeim Mohammad AL-Hefny**, for his supervision and constant support. His invaluable help of constructive comments and suggestions throughout the experiment and thesis works have contributed to the success of this work.*

*I am also deeply indebted to **Prof. Dr. Samah Abd-AL Rahman EL-Bakry** for her great support throughout the whole work.*

*I would like to express my appreciation to **Dr. Noha Hussein Shedid** for the tremendous effort she has done in meticulous of revision of this work.*

Last but not least, my deepest gratitude goes to my parents and also to my wife for their endless love, prayers and encouragement.

Mohammed Al Azab

Appendix

Systemic Lupus Activity Measure (SLAM) Index (Liang et al., 1989)

parameter	Absent	1	2	3
Constitutional 1. Weight loss 2. Fatigue 3. Fever		$\leq 10\%$ BW no limit on activity 37.5 – 38.5	$> 10\%$ BW Limits normal activity	$> 38.5^{\circ}\text{C}$
Integument 4. Oral/nasal ulcers, periungual erythema, malar rash, photosensitive rash, or nailfold infarct 5. Alopecia 6. Erythematous, macular or papular rash, discoid lupus 7. Vasculitis		Present e trauma $< 20\%$ TBA $< 20\%$ TBA	 spontaneous 20 -50% TBA 20 -50% TBA	 $> 50\%$ TBA $> 50\%$ TBA $> 50\%$ TBA
Eye 8. Cytooid bodies 9. Hemorrhages 10. pappilitis or psudotimor		Present Present Present		
Reticuloendothelial 11. Lymphadenopathy 12. Hepato- or splenomegaly		Shotty Palpable with Inspiration	$>1\text{ cm} \times 1.5\text{ cm}$ Palpable e out inspiration	
Pulmonary 13. pleural effusion 14. Pneumonitis		Dyspnea or pain only X-ray infiltrates	Dyspnea e excersise Dyspnea e excersise	Dyspnea at rest Dyspnea at rest

Appendix

Gastrointestinal 15. Abdominal pain (serositis or ischemic bowel)		Complaint	Limiting pain	Peritoneal sign / ascites
Cardiovascular 16. Raynaud's 17. Hypertension 18. Carditis	< 90	Present 90 – 104 Pericarditis or effusion	105 – 114 chest pain e arrhythmia	> 115 Myocarditis
Neuromotor 19. Stroke 20. Seizure 21. Cortical dysfunction 22. Headache 23. Myalgia		TIA once 1-2/month Mild depression Transient complaint	Multiple TIA >2 months Severe depression, interfere activ limiting	CVS Status Psychosis incapaciating
JOINTS 24. Joint pain		Arthralgia	Objective synovitis	Limits function
LABORATORY 25. Hematocrit (mg/dL) 26. WBC (per mm ³) 27. Lymphocyte (per mm ³) 28. Platelet count (x 1000) 29. ESR (mm/hr) 30 S creatinine (mg/dL)	>35 3500 >150 <25 .5-1.3	30 – 35 3500-2000 1499-1000 100-150 25-50 1.4-2	25 – 29 2000-1000 999-500 99-50 51-75 2.1-4	< 25 <1000 <500 <50 >75 >4
31. Urine sediment RBCs or WBCs Casts Proteinuria 24 h urine protein		>5 <3 1-2+ <500mg/lt	>10 >3 3-4+ <3.5gm/lt	>25 >4 >4+ >3.5gm/lt

Adapted from (Liang et al., 1989)

Appendix

SLAM score

The SLAM includes 32 items, divided into 11 organ systems, and assigns a degree of severity of each item on a scale of 1–3, with < 6 being mild, 6 to 12 being moderate and > 12 most severe. The total possible score is 86 (*Liang et al., 1989*).

Appendix

SLICC /ACR Damage index for SLE (*Gladman et al., 1996*):

Items	score
Ocular (either eye, by clinical assessment)	
Any cataract ever	0,1
Retinal or optic atrophy	0,1
Neuropsychiatric	
-Cognitive impairment (e.g. memory deficit, difficult with calculation, poor concentration. difficulty in spoken or written language, impaired performance level)or major psychosis.	0,1
-Seizures requiring therapy for 6 months.	0,1
-Cerebrovascular accident ever (score 2 if >1).	0,1,2
-Cranial or peripheral neuropathy (excluding optic).	0,1
-Transverse myelitis.	0,1
Renal	
Estimated or measured glomerular filtration rate <50%	0,1
Proteinuria>3.5gm/24h	0,1
Or end stage renal disease (regardless of dialysis or transplantation)	0 r3
Pulmonary	
Pulmonary hypertension (right ventricular prominence, or loud p2)	0,1
Pulmonary fibrosis(physical and radiograph)	0,1
Shrinking lung(radiograph)	0,1
Pleural fibrosis(radiograph)	0,1
Pulmonary infarction(radiograph)	0,1
Cardiovascular	
Angina or coronary artery bypass.	0,1
Myocardial infarction ever(score 2 if > 1)	0,1
Cardiomyopathy (ventricular dysfunction)	0,1
Valvular disease(diastolic murmur, or systolic murmur >3/6)	0,1
Pericarditis for 6 months, or pericardiectomy.	0,1
Peripheral vascular	
Claudication for 6 months	0,1
Minor tissue loss(pulp space)	0,1
Significant tissue loss ever(e.g. loss of digit or limb)(score2if>1 site)	0,1,2
Venous thrombosis with swelling, ulceration, or venous stasis.	0,1

Appendix

Gastrointestinal	
Infarction or resection of bowel duodenum, spleen, liver or gallbladder ever, for cause any(score 2 if>1site)	0,1,2
Mesenteric insufficiency	0,1
Chronic peritonitis	0,1
Stricture or upper gastrointestinal tract surgery ever.	0,1
Chronic pancreatitis.	0,1
Musculoskeletal	
-Muscle atrophy or weakness.	0,1
-Deforming or erosive arthritis (including reducible deformities, excluding avascular necrosis).	0,1
-Osteoporosis with fracture or vertebral collapse (excluding avascular necrosis).	0,1
-Avascular necrosis (score 2 if>1).	0,1,2
-Osteomyelitis.	0,1
-Tendon rupture.	0,1
Skin	
Scarring chronic alopecia.	0,1
Extensive scarring of panniculus other than scalp and pulp space.	0,1
Skin ulceration (excluding thrombosis for>6months).	0,1
Premature gonadal failure.	0,1
Diabetes (regardless of treatment).	0,1
Malignancy (exclude dysplasia) (score2if>1site).	0,1,2

Adapted from (*Gladman et al., 1996*)

There are 41 items covering 12 systems. Some features may score 2 points if they occur more than once, so the maximum score is theoretically 47, but score above 12 is rare (*Gladman et al., 1996*).

The Quality of life index: Clinician Rating Version (*Spitzer et al., 1981*)

Daily living	During the last week, the patient	score
<ul style="list-style-type: none"> • Has been self-reliant in eating, washing, toileting and dressing; using public transport or driving own car. • Has been requiring assistance (another person or special equipment) for daily activities and transport but performing light tasks. • Has not been managing personal care nor light tasks and/or not leaving own home or institution at all. 		2
		1
		0
Health	During the last week, the patient	Score
<ul style="list-style-type: none"> • Has been appearing to feel well or reporting feeling “great” most of the time. • Has been lacking energy or not feeling entirely “up to par” more than just occasionally. • Has been feeling very ill or “lousy”. Seeming weak and washed out most of the time or was unconscious. 		2
		1
		0
Outlook	During the last week, the patient	score
<ul style="list-style-type: none"> • Has usually been appearing calm and positive in outlook, accepting and in control of personal circumstances, including surroundings. • Has sometimes been troubled because not fully in control of personal circumstances or has been having periods of obvious anxiety or depression. • Has been seriously confused or very frightened or consistently anxious and depressed or unconscious. 		2
		1
		0

Support	During the last week	score
<ul style="list-style-type: none">• Has been working or studying full time or nearly so, in usual occupation; or managing own household; or participating in unpaid or voluntary activities, whether retired or not.		2
<ul style="list-style-type: none">• Has been working or studying in usual occupation or managing own household or participating in unpaid or voluntary activities ;but requiring major assistance or a significant reduction in hours worked or a sheltered situation or was on sick leave.		1
<ul style="list-style-type: none">• Has not been working or studying in any capacity and not managing own household.		0

Support	During the last week	score
<ul style="list-style-type: none">• Has been working or studying full time or nearly so, in usual occupation; or managing own household; or participating in unpaid or voluntary activities, whether retired or not.		2
<ul style="list-style-type: none">• Has been working or studying in usual occupation or managing own household or participating in unpaid or voluntary activities ;but requiring major assistance or a significant reduction in hours worked or a sheltered situation or was on sick leave.		1
<ul style="list-style-type: none">• Has not been working or studying in any capacity and not managing own household.		0

Adapted from (*Spitzer et al., 1981*)

Pilot testing led to the selection of the five themes in the eventual index: activity level (including occupation), activities of daily living, feeling of healthiness, quality of social support, and psychological outlook. Score of 0, 1 or 2 for each category reflect increasing well-being and can be summed to give a total score ranging from 0 to 10 (*Spitzer et al., 1981*).

المخلص العربي

تعتبر السمنة من الأمراض المزمنة واسعة الانتشار، والتي ترتبط بالكثير من الأمراض التي تؤثر على الصحة، ومنها أمراض الجهاز المناعي .

حوالي 50٪ من النساء يعانين من السمنة المفرطة مع مرض الذئبة الحمراء، ولا يعرف سوى القليل عن تأثير السمنة في هؤلاء المرضى ، ولكنه يرتبط بشكل مستقل مع ضعف القدرة الوظيفية.

وقد أجريت بعض الأبحاث لدراسة مدى انتشار السمنة وزيادة الوزن وتأثيره ما على الجوانب المختلفة لمرضى الذئبة الحمراء بما في ذلك نشاط المرض ومضاعفاته وجودة حياة المريض. فعلى سبيل المثال تم فحص مؤشر كتلة الجسم في مائة مريض بالذئبة الحمراء فكانت مرتبطة بانخفاض جودة حياة المريض ولكن لم يكن لها ارتباط بنشاط المرض أو مضاعفاته

وفي دراسة حديثة وجد ان زيادة مؤشر كتلة الجسم ترتبط مع زيادة الدهون وانخفاض جودة حياة المريض، ولكن دورها غير واضح في

نشاط المرض، وقد وجد ان السمنة ترتبط مع زيادة المضاعفات في بعض مرضي الذئبة الحمراء خصوصا التهاب الكلى.

هذا البحث يهدف لدراسة تأثير السمنة علي نشاط المرض ومضاعفاته وجودة حياة مرضي الذئبة الحمراء.

وقد شملت الدراسة ستون مريضا من مرضي الذئبة الحمراء وقد تم تقسيم المرضي حسب مؤشر كتلة الجسم إلي ثلاث مجموعات كالآتي:

المجموعة الاولى: عشرون مريضا بالذئبة الحمراء مؤشر كتلة الجسم يتراوح من (18-24.9) (وزن طبيعي)

المجموعة الثانية: عشرون مريضا بالذئبة الحمراء مؤشر كتلة الجسم يتراوح من (25-29.9) (زيادة الوزن)

المجموعة الثالثة: عشرون مريضا بالذئبة الحمراء مؤشر كتلة الجسم أعلي من او يساوي 30 (سمنة)

وقد أوضحت الدراسة النتائج الآتية:

- زيادة معدلات السمنة مع تقدم السن وطول فترة المرض مع تأثير السمنة علي انخفاض جودة حياة مرضي الذئبة الحمراء.

- هناك علاقة واضحة بين السمنة وزيادة معدلات ضغط الدم والصداع ونقص الصفائح الدموية والتهابات الكلى في مرضي الذئبة الحمراء.

- هناك علاقة ايضا بين السمنة وزيادة معدلات الكوليستيرول والدهون الثلاثية في الدم في مرضي الذئبة الحمراء.

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