

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قال الله تعالى

(اللَّهُ نُورُ السَّمَاوَاتِ وَالْأَرْضِ مَثُلُ نُورِهِ كَمِشْكَاهٌ
فِيهَا مِصْبَاحٌ الْمِصْبَاحُ فِي رُجَاحَةِ الرُّجَاحَةِ كَانَهَا
كَوْكُبٌ دُرَّيْ يُوقَدُ مِنْ شَجَرَةِ مُبَارَكَةٍ رَّيْثُونَةٍ لَا
شَرْقِيَّةٌ وَلَا غَرْبِيَّةٌ يَكَادُ زِيَّنَهَا يُضِيءُ وَلَوْ لَمْ تَمْسَسْهُ
نَارٌ نُورٌ عَلَى نُورٍ يَهْدِي اللَّهُ لِنُورِهِ مَنْ يَشَاءُ وَيَصْرِبُ
اللَّهُ الْأَمْتَالَ لِلنَّاسِ وَاللَّهُ بِكُلِّ شَيْءٍ عَلِيمٌ)

صدق الله العظيم

سورة النور الآية 35

DEDICATION

To those who spend weeks months and years of their lives and saving

Ours life to my parent.....

Brothers especially Dr. mohammed khalel & Abd Alla salah

And sisters especially Ebtesam

To my husband

To those who taught me a letter

To my friends....

With my absolute love ...

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Abstract

This is retrospective descriptive study performed in Khartoum state, during period from March to July 2012. The study aimed to identify the expression MUM1 protein receptor among Sudanese with lymphoma's patients..

Thirty blocks were collected from patients with lymphoma attending to Radio Isotope Center in Khartoum by using simple random selection method. Samples were collected by surgical method then processed and sectioned using the standard techniques. Sections were stained using two method, histochemical methods using haematoxylin and eosin for histopathology diagnosis and immunohistochemical methods using polymer base technique for detection of MUM1 protein receptors. In addition the results of CD30, 15, and CD20 were collected from file.

The ages of the involved patients ranged between one year to 75 years with mean age 28 (± 23.3) years old. Most of the patients were aggregating at age ranges older than 41 years representing 18 (60%) and the remaining 12 (40%) were younger than 41 years. In this study 20 (66.7%) of the involved patients were males and 10 (33.3%) patients were females.

Out of 30 patients, histopathological diagnosis revealed diffuse large B-cell non Hodgkin's lymphoma's (NHL) in 18 (60%) patients, 5 (16.7) patients represented as mantle NHL and the remaining 7 (23.3%) patients were classical Hodgkin's lymphoma's (HL).

In this study MUM1 receptor status showed positive expression in 15 (50%) patients, and negative in 15 (50%) patients.

Among the study subjects CD30 and CD15 receptors were positive in 7 (23.3%) patients, and negative in 23 (76.7%) patients. CD20 receptor status was positive in 23 (76.7%) patients, and negative in 7 (23.3%) patients.

Among the study subjects 18 (60%) patients of the diagnosed samples with diffuse large B cell NHL, 10 (55.6%) patients were males and 8 (44.4%) patients were females. Mantle cell NHL was represented by 5 (16.7%) patients, 4 (80%) patients were male and 1 (20%) was female. 7 (23.3%) of the selected samples were classical HL, 6 (85.7%) were males and 1 (14.3%) was female with statistical significant association (P. value < 0.05).

Histopathological diagnosis and MUM1 receptor expression showed that positive in 10 (66.7%) patients and negative in 8 (53.3%) patients among diffuse large B-cell NHL. 5 (33.3%) positive patients and 2 (13.3%) negative patients were classical HL. 5 (33.3%) has no reaction with MUM1 protein represented as mantle cell NHL with statistical insignificant association (P. value > 0.05).

Among the study subjects, CD30 status showed positive expression in 7 (23.3%) patients and negative in 23 (76.6%) patients, among the 7 (23.3%) patients positive for CD30, MUM1 show positive expression in 5 (33.3%) patients with statistical insignificant association (P. value > 0.05).

Among the study subjects, CD15 status showed positive expression in 7 (23.3%) patients and negative in 23 (76.6%) patients, among the 7 (23.3%) patients positive for CD15, MUM1 show positive expression in 5 (33.3%) patients with statistical insignificant association (P. value > 0.05).

Among the study subjects, CD20 status showed positive expression in 23(76.6%) patients and negative in 7 (23.3%) patients, among the 23 (76.6%) patients positive for CD20, MUM1 show positive expression in 10 (66.7%) patients with statistical insignificant association (P. value > 0.05).

The histopathological diagnosis and CD30, CD15 and CD20 receptors status showed that 7 (23.3%) of demonstrated samples were positively expressed CD30 and CD15 marker, were CHL. 23 (76.7%) patients were CD20 positive were diffuse large B cell NHL and mantel cell NHL with statistical significant association (P. value < 0.05)

In this study we conclude that MUM1 receptor expression among Sudanese patients with lymphoma is associated with lymphomas type.

الخلاصة

اجريت هذه الدراسة الوصفية فى ولاية الخرطوم فى الفترة من شهر مارس الى شهر يوليو 2012. هدفت هذه الدراسة الى اكتشاف مستقبلات الـ MUM1 بروتين فى مرضي سرطان الغدد الليمفاوية باستخدام التقنية النسيجية الكيميائية والتقنية النسيجية المناعية الكيميائية .

ثم اخذ 30 عينة من اشخاص مصابين بسرطان الغدد الليمفاوية من مستشفى العلاج بالأشعة والطب النووي باستخدام الطريقة العشوائية للجمع.

ثم اخذ العينات بطريقة جراحية ومن ثم تمت معالجتها وقطعها ومن ثم صبغها بطريقة ' طريقة كيميائية باستخدام صبغة الهيماتوكسيلين للتشخيص المبدئي ' والطريقة المناعية البولمر بيز للكشف عن مستقبلات الـ MUM1 بروتين.

كانت اعمار المرضى تتراوح بين 1-75 سنة بمتوسط اعمار 28 سنة وأظهرت الدراسة ان معظم المصابين كانت اعمارهم من 40 الى 60 وكان عددهم 13 مريضا (43.3%).

اظهرت الدراسة ان اكثرا المصابين من الرجال وبلغ عددهم 20 مريض (66.7%) مقارنة بالنساء اللاتى كان عددهن 10 مريضات (33.3%).

اظهر التشخيص لنك العينيات أن 23 من المرضى من النوع non hodgkin lymphomas و يضم هذا النوع الـ diffuse larg B.cell وهم 18 مريضا والـ mantle cell وهم 5 من المرضى والمتبقي من النوع الـ hodgkin lymphoma و تضم الـ classical وكانت فى 7 من المرضى.

فى هذه الدراسة وجد ان مستقبلات الـ MUM1 بروتين كانت موجبة الظهور فى 15 مريض بنسبة بلغت (50%) بينما كانت سالبة الظهور فى 15 مريض بنسبة (50%).

وجد فى هذه الدراسة ان مستقبلات الـ CD30 و CD15 كانت موجبة الظهور فى 7 مرضى (16.7%) بينما كانت سالبة الظهور فى 23 مريضا (76.6%)

ووجد ايضا ان مستقبلات الـ CD20 كانت موجبة الظهور فى 23 مريضا (76.6%) بينما كانت سالبة الظهور فى 7 مرضى (16.7%)

فى هذه الدراسة وجد ان مستقبلات الـ MUM1 بروتين كانت موجبة الظهور فى 15 مريض (50%) وكانت كالاتى فى الـ DLB2 كانت موجبة فى 10 مرضى (66.7%) وفى نوع الـ classical كانت

موجبة فى 5 مرضى (33%) ، بينما كانت سالبة الظهور فى 15 مريض (50%) موزعة كالتى فى الـ DLB2 فى 8 مرضى بنسبة بلغت (53.3%) وفى الـ CHL فى 2 مريض بنسبة بلغت (3.13%) ، بينما لم تظهر اى استجابة لمست قبلات الـ *mum1* بروتين (القيمه الاحتمالية اكبر من 0.05) . فى هذه الدراسة وجد ان هناك علاقه بين مسـة قـبلات الـ *MUM1* بـروـتـين وـبيـن مـسـة قـبلـات (CD30,CD15) ، حيث اظهرت الدراسة ان 7 من العـيـنـات كانت موجـبة الـظـهـورـلـ (CD30,CD15) بنسبة (23.3%) ، وكانت 5 من تلك العـيـنـات موجـبة لـمسـة قـبلـات الـ *MUM1* بنسبة بلـغـت (33.3%) (الـقيـمه الـاحـتمـالـيـة اـكـبـرـ من 0.05) .

اظهرت الدراسة ان مـسـة قـبلـات الـ *CD20* كانت موجـبة الـظـهـورـلـ 23 من العـيـنـات بنسبة بلـغـت (76.6%) ، 10 من تلك العـيـنـات كانت موجـبة الـظـهـورـلـ *MUM1* بـروـتـين بنسبة (66.7%) (الـقيـمه الـاحـتمـالـيـة اـكـبـرـ من 0.05) .

اظهرت الدراسة ان 7 (23.3%) من العـيـنـات كانت موجـبة الـظـهـورـلـ مـسـة قـبلـات الـ *CD30* وـ*CD15* وـجـمـيـعـهـ اـكـانتـ منـ ذـنـوـعـ تـالـ *CD20* (76.6%) من العـيـنـاتـ كـلـتـ مـوجـبةـ الـظـهـورـلـ *Mantel cell NHL* وـ*diffuse large B cell NHL* وـهـذـهـ كـانـتـ منـ ذـنـوـعـ الـ*HL*ـ (classical *HL*) .

خلصت الدراسة الي ان استجابة مـسـة قـبلـات الـ *MUM1* بـروـتـين لـديـ المـرـضـيـ السـوـدـانـيـنـ بـسـرـطـانـ الـغـدـدـ الـلـيـمـفـاـوـيـةـ مـرـتـبـطـةـ بـنـوـعـ السـرـطـانـ الـلـيـمـفـيـ .

List of abbreviations:

HL	Hodgkins Lymphomas
NHL	Non- Hodgkins Lymphomas
DLBCL	Diffuse Large Cell B-Cell Lymphoma
CHL	Classical Hodgkin's Lymphoma
GC	Germinal Center
CD	Cluster of Differentiation
IDRC	Interdigitating Reticulum Cells
EBV	Epstein-Barr virus
NLPHD	Nodular Lymphocyte-Predominant Hodgkin's Disease
HLA	Human Leukocyte Antigen
HIV	Human Immunodeficiency Virus
IRF	Interferon Regulatory Factor
HTLV-1	Human T-cell Leukemia Virus type 1
FUT4	Fucosyltransferase 4

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