

لعونك بالله - من - للشيطان - الرجيم -

بسم - الله - الرحمن - الرحيم -

وَذَا النُّونِ إِذْ ذَهَبَ مُغَاضِبًا فَظَنَّ
أَنْ لَنْ نَقْدِرَ عَلَيْهِ فَنَادَى فِي
الظُّلُمَاتِ أَنْ لَا إِلَهَ إِلَّا أَنْتَ سُبْحَانَكَ
(إِنِّي كُنْتُ مِنَ الظَّالِمِينَ)

صدق - الله - العظيم -

سوره - الانبياء - - الآية -

DEDICATION

To my father who taught me love to learn...

To my mother who took my hand through harsh roads...

To all my family whom support make me succeed...

To my colleagues who shared my journey with love...

To my sunshine who bright my way with all love and

Encouragement my sincere lovely aunt "Saida"...

Acknowledgment

I give my infinite thanks to my supervisor Dr Abu Algasim Abass Awad Alkareem for being such a wonderful supervisor.

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Abstract

Eumycetoma is a chronic granulomatous fungal disease which is mainly caused by *Madurella mycetomatis* and treated by ketoconazole .This quasi experimental study aimed to assess the effect of long term ketoconazole therapy CD1a expression as label for epidermal dendritic cells in eumycetoma lesions.

The study carried out in Soba University hospital, Sudan from January to September 2015.Sixty formalin fixed - paraffin embedded blocks (FFPB) were selected from *Madurella mycetomatis* eumycetoma patients, (30 of them were selected before ketoconazole therapy), then the remaining 30 blocks after ketoconazole therapy. FFPB were cut and stained with CD1a immunohistochemical method (new indirect method) for detection of Cd1a in epidermal dendritic cells then the expression was quantified and compared.

Patients age range between 18 and 69 year, 22 (73.3%) patients were less than 40 years and 8 (26.7 %) patients were more than 40 years.

In this study, males were 24 (80%) of the participants, and females were 6 (20%) of the participants with ratio 4:1.

About mycetoma locations, 30 (100%) patients developed mycetoma in their feet.

After quantification, pre treatment sections showed positive results with mean 62.33 ± 33.446 , on the other hand the post treatment sections showed positive results with mean 17.63 ± 20.184 . Based on these findings there is significant statistical

association between treatment with KCZ and numerical reduction in CD1a expression (P.value = 0.000.)

The study concludes that KCZ causes CD1a deficiency and this is compiling with need for more studies with larger sample size.

مستخلص- للدراسة-

تعرف المايستوما علي انها ورم فطري حبيبي تسببه المادوريللا مايستوماتس ويعالج بعقار الكيتوكونازول . كان هدف الدراسة تقييم تاثير الاستخدام المستمر لعقار الكيتوكونازول علي معدل ظهور الصبغه المناعيه لسي دي 1 اي كعلامه للخلايا الجذعية.

اجريت هذه الدراسة شبه التجريبية في مستشفى سوبا الجامعي - السودان في الفترة مابين شهر يناير الي سبتمبر 2015. تتضمن الدراسة 60 قالب لمرضي المايستوما 30 قبل و 30 بعد الخضوع لعلاج الكيتوكونازول. تم قطع القوالب وصبغ الشرايح مناعيا بالسي دي 1 اي ومن ثم حصر ظهور الصبغه ومقارنتها قبل وبعد العلاج كعلامة للخلايا الجذعية.

كانت اعمار المرضي تتراوح ما بين 18 سنة و 69 سنة ، و وجد ان 22 (73.3%) من المرضي كانوا اقل من 40 سنه و 8 (26.7%) كانوا اكثر من 40 سنه

.في هذه الدراسة ، وجد ان هناك 24 (80%) هم من الذكور وان 6 (20%) هن من الاناث

(%). ووجد ان عدد المصابين باقدمهم كانوا 30(100)

ولقد اظهرت العينات التي اخذت من المرضي قبل استخدام عقار الكيتوكونازول ال سي دي 1 اي ايجابيا بوسط حسابي 62.33 وانحراف معياري 33.446 ؛بينما اظهرت العينات مابعد العلاج

وسط حسابي 17.63 وانحراف معياري 20.184. ماادي الي ظهور فرق معنوي في العينات قبل

.وبعد الخضوع لعلاج الكيتوكونازول

خلصت هذه الدراسة الي ان عقار الكيتوكونازول يتسبب بنقص ظهور ال سي دي 1 اي كما

.ننصح بضرورة اجراء دراسات اخري باستخدام حجم عينات كبير

Abbreviation

CD : Cluster of differentiation.

dDC: Dermal dendritic cells.

EUM: Eumycetoma

Hpfs : High power fields

KCZ: Ketoconazole.

IL-1 : Interleukin-1

IL-8 : Interleukin-8

L C : Langerhans cells

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