

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قال تعالى :
قُلْ هَلْ يَسْتَوِي {
الَّذِينَ يَعْلَمُونَ
} وَالَّذِينَ لَا يَعْلَمُونَ
سورة الزمر الآية (9)

Dedication

**Without you I could
not go left or right and
life would be darkness
,world has no hope no
:light**

(My parent)

**To whom those who
made my life
: colorful**

**My brothers and my)
(sisters**

**To all special people in
my life**

. With all love



Acknowledgement

First of all thanks to ALMIGHTY ALLAH in helping me to complete this work.

I would like to acknowledge my supervisor Dr.Yousif Fadlalla ,Dr. Mogahid M. Elhassan and Dr.Elhaj Mansour for their great advice and guidance.

Special thanks and appreciation were also etended to Miss Suheir Ramadan -supervisor of Research Laboratory, Sudan University of Science and Technology for her technical assistance.

I would like to thank my friends Asma, Ahmed luay and Ahmed Khalifa for their great help.

Abstract

This study was carried out in Khartoum state during the period between February and August 2011. The main objective was to compare ZN staining method and PCR in diagnosis of tuberculosis.

Hundred sputum samples were collected from different TB centers in Khartoum state including Academic Charity Hospital, Abu Anga Hospital, The Reference Tuberculosis Laboratory and Elsha'ab Teaching Hospital.

Bacterial DNA was extracted from positive and negative ZN smears using chelex extraction method. PCR technique was performed to detect *M. tuberculosis* IS6110 gene in these specimens.

This study showed result that 35 samples were acid fast bacilli. 32 (91.4%) of ZN stain positive were PCR positive. While 6 (9.2%) of ZN stain negative showed PCR positive.

The study concluded that the sensitivity and specificity of ZN stain was poor comparable with those of PCR, which proved to be a better method for diagnosis of the disease.

النتائج

أُجريت هذه الدراسة لولاية الخرطوم في الفترة ما بين فبراير وأغسطس 2011 التي هدفت لمقارنة طريقة صبغة زيل نيلسون بتفاعل البلمرة المتسلسل لتشخيص مرض الدرن .

تم جمع 100 عينة من القشعة من عدة مستشفيات في ولاية الخرطوم مثل مستشفى الأكاديمية الخيري التعليمي، مستشفى أبو عنجة، مستشفى الشعب والمعمل المرجعي للدرن.

تم استخلاص الحمض النووي الرايبوزي من قوص الأوكسجين لكل عينة باستخدام طريقة الجلوس ثم استخدمت طريقة تفاعل البلمرة المتسلسل لاكتشاف جين **6110IS** لبكتريا المتفطرة السلية.

أظهرت الدراسة أن 35 عينة كانت موجبة صبغة زيل نيلسون. 32 (91.4%) منها كانت موجبة بتقنية تفاعل البلمرة المتسلسل بينما 6 (9.2%) من العينات سالبة صبغة زيل نيلسون كانت موجبة بتقنية تفاعل البلمرة المتسلسل.

استخلصت الدراسة أن حساسية وتخصصية صبغة زيل نيلسون ضعيفة عندما قُورنت بتفاعل البلمرة المتسلسل، مما يبرهن أن هذه التقنية أكثر جودة في تشخيص هذا المرض.

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