

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قال تعالى :

{ وَقُلْ رَبِّ زِدْنِي عِلْمًا }

صدق الله العظيم

سورة طه الآية 114

Dedication

To my parent's

To my teachers

To every one help me in my life

Acknowledgement

First of all I thank Allaha for give me the strength , I would like to thank my supervisor Dr\ELwaleed Hohammed Elamin who helped and supported me patiently to complete this work ,also I would thank my collages Ahamed Shaker, Alaa Ahmed for helped me in statistical analysis,my particular thanks extend to Hisham Mohammed Ahmed and staff of microbiology in ALRibat and Abu annja Hospital for their help me in collection of specimen .

ABSTRAT

Tuberculosis is a fatal disease that can affect almost any part of the body but mainly the lung. The disease is caused by Mycobacterium tuberculosis (MTB). This study aimed to exclude the highly toxic phenol from staining solution used for MTB detection and develop safer procedure. For this, selective lipophilic agent's fairy, Clorax and septol were selected and used. A known positive sputum and culture-smear prepared were stained by traditional ZN and selective lipophilic agents using heating either flame or water path at 60⁰c for 10 mins. The result were obtained a cid fast bacilli stained red colour with blue background.

The results of this method compared with traditional ZN stain showed no significant differences $P \leq 0.05$ between these methods and the original one. We recommended to use new selective agent as an alternative to phenol that is cheaper, safe and easy to handle.

خلاصة البحث

الدرن احدي الامراض القاتلة التي تصيب كل اجزاء الجسم والرئة بشكل خاص تسببه بكتريا سالبة الجرام. هدفت هذه الدراسة الي استبعاد مادة الفينول السامة من محلول صبغة زيل-نيلسون واستعيض عنه بالمنظفات المنزلية الاتية: الكلوركس, صابون فيرى وسبتول. تم صيغ عينات موجبة محضرة من بكتيريا مزرعة وأخرى عبارة عن قشع بصبغة الزيل نلسون والمنظفات المذكورة أعلاهوالنتيجة التي أخذت من هذه الدراسة ظهرت البكتيريا بلون أحمر البكتريا بهذه المواد وظهرت بلون احمر مع خلفية زرقاء عندما تمت مقارنتها مع صبغة زيل-نيلسون حيث لا يوجد اختلاف احصائي بينهما . نوصى باستخدام هذه المواد المستحثة كبديل للفينول لأنها امنة، رخيصه، سهلة التحضير.

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