بِشْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قال الله تعالى

وَقُلْ رَبِّ زَدْني عِلْمًا

صدق الله العظيم

سورة طه آية 114
Dedication

To my Parents who are `the source of love and care …

To my Husband for his support and frequent assistance…

To my Sisters and Brother who are found at the times of Need…

To my Teachers, friends and colleagues…

I dedicate this …research
Acknowledgement

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Abstract

This study was carried out in the period from May 2007 - March 2008 to detect the presence of *Serratia marcescens* in patients suffering from pneumonia. Forty six sputum specimens were collected from patients who attended Albangadid Hospital, Alshaab Hospital and National Health Laboratory.

Bacterial DNA was extracted from each sputum specimen using phenol chloroform method. Real Time PCR technique was adopted to detect the presence of *Serratia marcescens*.

The result revealed that only three (6.5%) specimens were positive and the rest (93.4%) were negative.

The study concluded that the Real-time PCR technique facilitates detection of bacterial pathogens without the need for bacteriological culture.
أجريت هذه الدراسة في الفترة ما بين مايو 2007 إلى مارس 2008 لتحديد وجود بكتريا السرائية الذابلة في مرضى الالتهاب الرئوي تم جمع ست واربعون عينة قشع من مرضى مستشفى البان جديد التعليمي ومستشفى الشعب التعليمي والمعامل القومي الصحي . تم استخلاص الحمض النووي لكل عينة قشع باستخدام طريقة الفينول كلورفورم ثم استخدمت تقنية تفاعل البلمرة المتسلسل الزمني لتحديد بكتريا السرائية الذابلة . أظهرت النتائج أن 6.5% من العينات كانت نتيجتها إيجابية و93.4% كانت سلبية . خلصت الدراسة إلى أن تفاعل البلمرة المتسلسل الزمني يسهل اكتشاف البكتريا بدون اللجوء للاستراع البكتيري .
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