

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قال الله تعالى

قَالَ رَبِّ أَوْزِعْنِي أَنْ أَشْكُرَ نِعْمَتَكَ الَّتِي
أَنْعَمْتَ عَلَيَّ وَعَلَىٰ وَالِدَيَّ وَأَنْ أَعْمَلَ صَالِحًا
تَرْضَاهُ وَأَصْلِحْ لِي فِي ذُرِّيَّتِي إِنِّي تُبْتُ إِلَيْكَ
وَإِنِّي مِنَ الْمُسْلِمِينَ

صدق الله العظيم

سورة الأحقاف الآية 15

Dedication

**I would like to dedicate this
dissertation to my family, friends,
and colleagues
In addition, to all who help me to
go ahead.**

Aknowledgment

First, I would like to thank Allah for giving me knowledge and patience. Words cannot express the special appreciation and deepest gratitude I feel to my supervisor Dr. Humodi Ahmed Saeed, DEAN, College of Medical Laboratory Science, Sudan University for Science & Technology for his continuous significant encouragement and support through out this dissertation. My best regards and thanks To the Sudan University of Science and Technology, College of Medical Laboratory Science,

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Abstract

This study was carried out in Khartoum State during the period between May 2007 to March 2008, to detect *Providencia stuartii* from patients with urinary tract infection. Forty-six specimens of urine were collected from different hospitals in Khartoum State. Bacterial DNA was extracted from each urine specimen by using phenol chloroform method, and then the real time PCR technique was adopted to detect *P.stuartii* in these specimens. This study showed that the positive results were 4.3% and the negative results were 95.7% respectively. The study concluded that the real-time PCR is a good technique for fast identification of *Providencia stuartii* from urine specimens and may be used in a diagnostic microbiology laboratory.

الخلاصة

أجريت هذه الدراسة بولاية الخرطوم في الفترة من مايو 2007 وحتى مارس 2008. حيث تم جمع 46 عينة بول لمرضي التهابات المجاري البولية من عدة مستشفيات في ولاية الخرطوم وذلك للتعرف علي بكتيريا المقتصدة ستوارتي. تم استخلاص الحمض النووي الرايبوزي من قوص الاوكسجين لكل عينة بول بواسطة استخدام طريقة الفيزول كلوروفورم ثم استخدمت تقنية تفاعل البلمرة المتسلسل الزمني للكشف عن بكتيريا المقتصدة ستوارتي. اظهرت الدراسة ان 4.3% من العينات كانت موجبة، بينما 95.7% كانت سالبة. استخلصت الدراسة ان تقنية تفاعل البلمرة المتسلسلة الزمني تقنية فعالة بحيث يتم الكشف عن البكتيريا بصورة اسرع من تقنية الاستزراع المخبري ويمكن استخدامها في المعامل التشخيصية. للاحياء الدقيقة.