## **Dedication**

To the soul of my lovely Mother's ...

To my great Father ...

Who taught me

How I could be human

To my lovely sweet Kids Ahmad, Huam and Monia...

To my lovely Brother's...

Sister's Shama, Manal and Weisal for there support...

and kindness...

To my Husband Ustaz Abdelwahab for embracing me with an ever lasting emotion...

To my friend and my collogues...

To the people whom I love, respect and appreciate...

To every one from whom I learned

. . . .

# I dedicate this ...research

....The researcher

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#### **Abstract**

This study was designed to assess the Molecular technique in detection of *P.vulgaris* in urine taken from patients suffuring from urinary tract infection.

The study was done in the period from May 2007 to March 2008.

Forty seven specimens were collected from patients attenaed Khartoum Teaching Hospital, Ibrahim Malik Hospital and Bashair Hospital.

Bacterial DNAwas extract from each specimen by using chloroform-alcohol technique.

Quantica thermocycler was used to detect *P.vulgaris*. The results indicated that 10 (21%) DNA extracts were possitive for *P.vulgaris* and 37 (79%) was Negative.

The study concluded that the gene probe technique is more easy, sensitive and accurate for the detection of bacterial pathogens without bacterial culture which is time consuming and not highly sensitive.

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هذه الدراسة هدفت لدراسة مدى فعالية تقنية الاحياء الجزيئية فى تشخيص المتقلبة الاعتيادية المسببة لالتهابات المجارى البولية .

اجريت هذه الدراسة في الفترة مابين مايو 2007 الى مارس 2008.

جمعت 47 عينة من مستشفيات ولاية الخرطوم المختلفة وهي مستشفى الخرطوم التعليمي؛ مستشفى البراهيم مالك ومستشفى بشائر.

تم استخلاص الحمض النوؤى لكل عينة على حده بواسطة طريقة الكلوروفورم. ثم استخدمت طريقة تفاعل مسبار الجين المتسلسل الزمنى لاكتشاف 00000000 00000000.

اوضحت نتائج الدراسة ان 10عينات ايجابية مما يمثل (21%) بينما كانت النتائج السلبية 37 عينة مما يمثل (79%) للمت قلبة الاعتيادية.

تخلص هذه الدراسة ان مسبار الجين المتسلسل الزمنى اكثر سهولة وحساسية لاكتشاف البكتردا المرضية دون الحوجة للمزارع البكتيرية التى تستهلك الزمن واقل حساسية.

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