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قسم الميكروبيولوجي

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عنوان الرسالة : دراسات فسيولوجية وجزئية لعدوي بكتريا سيدوموناس إيرجينوزا

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كما أتقدم بشكري للجهات والمستشفيات التي تعاونت معي وهي :
- مستشفى الحلمية العسكري
- مستشفى القصر العيني

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رسالة

للحصول على درجة الماجستير في العلوم (الميكروبيولوجى)

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علما)



Abstract

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Physiological and molecular studying of *Pseudomonas aeruginosa* infection caused by tap water contamination

The objectives of the present investigation were:

Studying the association between *Pseudomonas aeruginosa* infection and faucet contamination in burn unit in El Helmaya military hospital and El Kasr el einy hospital.

These objectives were achieved by isolation and identification of some pathogenic bacteria of *Pseudomonas aeruginosa*. Also, studying the relationship between the presence of *Pseudomonas aeruginosa* isolates in patients and in tap water outlets.

The results of the present investigation showed that: water as a source of contamination plays a significant role in *Pseudomonas aeruginosa* infection.

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LIST OF ABBREVIATIONS

ICU	Intensive Care Unit
ERCP	Endoscopic retrograde cholangiopancreatography
SICU	Surgical Intensive Care Unit
NI	Nosocomial infection
Pa	<i>Pseudomonas aeruginosa</i>
PFGE	Pulsed-field gel electrophoresis
AIDS	Auto immune diseases
PIA	<i>Pseudomonas</i> Isolation Agar
BICUS	Burn intensive care units
CF	Cystic Fibrosis
PBI	Primary blood-stream infection
IV	Intravenous
CNS	Central nervous system
AERs	Automated endoscope preprocessors'
HAI	Hospital – acquired infection
NNIS	National Nosocomial Infection Surveillance System
TBSA	Total body surface area
PCR	Polymerase Chain Reaction
DNA	Deoxy ribonucleic acid
UV	Ultraviolet radiation
dNTPs	Deoxyribonucleotide triphosphates
CTAB	Hexa decyl trimethyl ammonium bromide
SDS	Sodium dodecyl sulphate
Pl	plasmid
Chr	Chromosomal DNA

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Dedication

To The Soul of My Father

To The Soul of My Brother

To My Great and Precious Mother

To My Kids Rwan and Omar