شبكة المعلومات الجامعية

بسم اللّه الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم باللّه العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار

Detection of five different periodontopathic bacteria in Egyptian and Yemeni periodontitis patients by using Real Time PCR

(Case Control study)

Thesis submitted in partial fulfillment of the requirements of
Master's degree in Periodontology

By

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List of Abbreviations

Abb.	Full term
A	*Adenine*
A.a	*Aggregatibacter actinomycetemcomitans*
Arg-x	*Arginine -specific gingipains*
BANA	*Benzoyl-DL-arginine-napthylamide*
BspA	*Bacteroides surface protein A*
C	*Cytosine*
CAL	*Clinical attachment level*
CD	*Cluster of differentiation*
CH3SH	*Methyl mercaptan*
CPS	*Capsule*
C.rectus	*Campylobacter rectus*
DFA	*Direct immunofluorescent assays*
DNA	*Deoxyribonucleic acid*
ELISA	*Enzyme-linked immunosorbent assay*
F. nucleatum	*Fusobacterium nucleatum*
G	*Guanine*
GCF	*Gingival Crevicular Fluid*
Ge	*Genome*
HLA	*Human Leukocyte Antigens*
HPDL	*Human periodontal ligment*
IFA	*Indirect immunofluorescent microscopy assays*
IFNγ	*Interferon gamma*
IgA	*Immunoglobulin A*
IgG	*Immunoglobulin G*
IgM	*Immunoglobulin M*
IL	*Interleukin*
IOPA	*Intaoral periapical radiograph*
KDa	*kilodaltons*
Lg	*Logarithm*
LPS	*Lipopolysaccharide*
Lys-x	*Lysine- specific gingipains*
Ml	*Milliliter*
Msp	*Major outer sheath protein*
P. gingivalis	*Porphyromonas gingivalis*

P. intermedia	*Prevotella intermedia*
P. micra	*Parvimonas micra*
P. tannerae	*Prevotella tannerae*
PAF	*Platelet-activating factor*
PCR	*Polymerase chain reaction*
PD	*pocket depth*
PMN	*Polymorphonuclear leukocyte*
rpm	*Revolutions per minute*
Rankl	*Receptor activator of nuclear factor kappa-B ligand*
SAM	*surface associated material*
SD	*Standard deviation*
S-layer	*Surface-layer associated glycoprotein*
SS	*Single-stranded*
SSP	*Specific sequence primer kit*
T	*Thymine*
T. denticola	*Treponema denticola*
T. forsythia	*Tannerella forsythia*
TLRs	*Toll like receptors*
TNF-a	*Tumor necrosis factor alph*

Abstract:

Background: Subgingival microbial profile associated with periodontitis has been reported to significantly differ by geographical location. The purpose of this study was to assess the detect the frequency of five putative periodontal bacterial pathogens in a group of Egyptian and Yemeni participants having periodontitis.

Methods: The present study was conducted on 80 participants, 40 participants were from the Egyptian population, and the other 40 participants were from the Yemeni population. Subgingival DNA samples were obtained from the deepest periodontal pocket in the Periodontitis group of participants. Whereas the mesiobuccal side of the permanent maxillary left first molar was chosen to collect the microbial sample in the healthy group. Five periopathogenic bacteria representative of the red, orange, and green complexes were determined using Real-Time PCR assays.

Results: The q-PCR assays showed a high detection frequency of periodontal pathogenic bacteria; P. *gingivalis, T. forsythia, T. denticola, P. intermedia, and A. actinomycetemcomitans* in periodontitis participants in both populations except for *T. denticola*, which was significantly more prevalent in the periodontitis participants in the Egyptian population. *T. forsythia* was the most frequently detected species among periodontitis participants in both populations.

Keywords:

Pathogens, Real-time PCR, Periodontitis, Egyptian, Yemeni